

# DISTRICT HISTORY

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

Columbia 9-1-1 Communications District is the sole public safety answering point and dispatch center for all public safety agencies based in Columbia County, Oregon. The District also serves small adjacent portions of Clatsop and Multnomah Counties. The District is an Oregon special district formed under Oregon Revised Statutes Chapters 198 and 401. The District is 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.



The Columbia 9-1-1 Communications District provides 9-1-1 calltaking, dispatching and non-emergency communications services for all seven law enforcement agencies and all five fire districts – including the emergency medical dispatch for four fire district owned ambulance services and one private ambulance. In addition, the District provides a variety of communications support activities for several other public and private entities in the county. The District owns and maintains the dispatch center facilities and the county wide public safety communications system, including the narrowband VHF voice radio system, UHF mobile data system, the microwave backbone and associated remote facilities. The Board hires an Administrator to manage the day-to-day operations of the District.

## 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 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 increasing user fees 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 within it. In 1995, the Board legally changed the District name to Columbia 9-1-1 Communications District.

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

The five member elected Board of Directors assumed governing responsibility and a tax base proposal

prepared by members of the Advisory Committee was defeated narrowly by voters in May 1990. A one year operations levy was passed for 1990-91. Voters passed a reduced tax base proposal 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 an administrator 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. Board, Personnel and Fiscal policy manuals were adopted and a new collective bargaining agreement was completed by 1992-1993.

The District established an ongoing prioritization and implementation process for urgent service and technical upgrades during this period. Changes included adding emergency medical prearrival instruction program, adding 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 to grades K-12, local chambers of commerce, service and social clubs, granges and local governing boards, some public service print ads and radio announcements were placed at least annually and an informational newsletter was developed for countywide distribution.

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, plus small user fees for certain services not intended to be funded by the permanent tax rate.

## **LONG RANGE PLAN IS DEVELOPED AND CARRIED OUT**

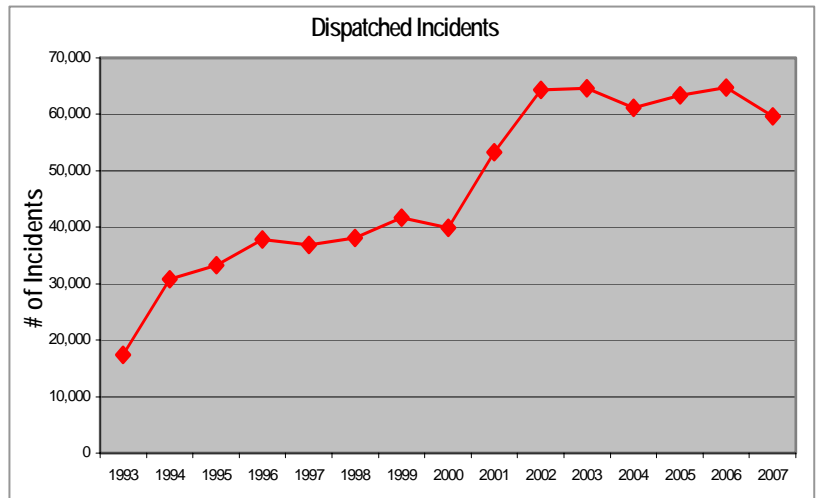
Fiscal year 1994-1995 brought a detailed assessment of service requirements for long-term effectiveness. A long range plan, developed in partnership with all public safety agencies in the county, was adopted in February 1995 by the Board of Directors and the 9-1-1 Advisory Committee. The plan included 3 major phases in the following priority: facility replacement, internal electronic replacement & enhancements, external radio system replacement. As a first action step, following extensive feasibility processes, the District purchased 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 and the system upgrades recommended in the long range plan, and proposed a \$1.04 million tax base upgrade needed 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 defeated in the November 1996 election.

In fiscal year 1997-98, due to voter approved changes ordered by Measure 47 and implemented under 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%. From the first year forward, each taxing district is 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 under the new system. 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.

## ACTIVITY LEVELS QUADRUPLE IN THE FIRST 14 YEARS

Use of the 9-1-1 system has steadily increased since the District was formed. District staff now process nearly 70,000 incidents annually – quadruple the number of incidents 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.



## VOTERS APPROVE FUNDING FOR A NEW FACILITY, INTERNAL ELECTRONIC UPGRADES AND CONTINUED OPERATIONS

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 new internal electronics. 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. The levy gained 57% approval by voters but was declared invalid for failing the 50% registered voter turnout requirement. In the November 1998 general election, voters reaffirmed 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 and 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 call takers the name and location of the phone belonging to the person who pays for the landline being used by the caller, 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 total 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 their new store across the creek from our property. 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 9-1-1 facility caused by the new development across the creek. It was discovered in this lengthy process 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 and approved by FEMA and the City of St. Helens, was carried out in March 2006. The post grading survey places all but one small corner outside the flood plain, the finished floor level of the District facility 3 feet above the 100 year flood plain and 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. It 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 system.

In spring 2007, the District began use of a CAD to CAD message switch that allows for computer aided call information transfer among the seven 9-1-1 call centers and the ODOT metro call center in the five county urban area surrounding Portland. This message switch is the first phase of data interoperability in the region, made possible through Urban Area Security Initiative (UASI) funding.

### **CEPA PARTNERSHIP PROVIDES COMMUNITY ALERT OUTCALL SYSTEM**

In 2000, the Columbia Emergency Planning Association (CEPA), made up of local industries and public safety agencies, 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, and Columbia County. Any local government or industry can initiate notifications through the 9-1-1 District. C911CD pays for the enhanced 9-1-1 data base, which includes non-published landline telephone numbers, to be used for the call notifications.

### **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 the Columbia Emergency Planning Association (CEPA), teamed up with Congressman David Wu, Senator Gordon Smith and Senator Ron Wyden to seek federal funding for replacement of the public safety radio system.



Replacement of the radio system 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 earmarked by Congress, had been signed into law by President Bush and would be administered through the Department of Justice COPS program. In spring 2002, Day Wireless Longview was selected to provide the new interoperable system for all 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 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 entire 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, 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 one-third modular section was added at the rear of the District facility to house the new radio technology. Back up 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 arraignments from remote offices.

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

The Major Incident Control and Training Center is the second phase of the 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 up to 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 when multiple agencies must coordinate effective response. It is also used by all 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. The additional parking area is provided by Columbia River Fire and Rescue.



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



The District applied for and received a grant of \$94,154 in FY2003-4 to assist in the installation of a mobile data backbone, a \$200,000 project that went on line in February 2005. This system supports mobile transmission and receipt of call and activity data by wireless transmission over the microwave backbone. The mobile data system provides a means of exchanging secure (non audible) information between dispatcher and field units and maximizes radio channel efficiency by reducing audible transmission congestion as activity levels grow.

Individual departments are responsible for purchase and maintenance of mobile units on the system, while the District maintains the backbone and data hardware and software. St. Helens Police Department, on behalf of all county agencies, plus several individual departments, applied for and received grants for equipment needed in patrol and fire apparatus to use the system. In 2006 the District added the capability for police vehicles to get drivers license photos over this system. Mapping was implemented in 2007 and automatic vehicle location is being implemented in 2008.

The District completed an intergovernmental agreement to share mobile data backbone use with public safety providers based in Cowlitz County, Washington for the purpose of promoting interoperability; maximizing use and sharing in maintenance and future upgrade costs.

## **RESOUNDING VOTE OF SUPPORT FOR OPERATING LEVY RENEWAL**

On the November 2003 ballot, the District proposed to renew its 5-year local option levy for the purpose of continuing current levels of operations, at a rate slightly lower than the expiring levy. The measure garnered a 69.8% yes vote, but failed to reach the required 50% turnout by 1%. An identical measure was passed in the May 18, 2004 election with a 70.3% yes vote and a 52.7% turnout. No major capital projects are planned for the current local option levy, which pays over half of District operating costs.

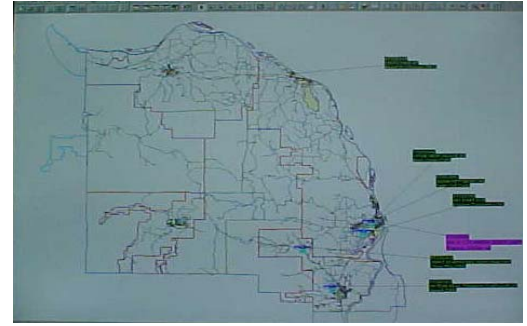
## **FACILITY SECURITY ENHANCEMENTS**

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 Urban Area Security Initiative 2006 grant program are providing for the installation of similar security upgrades to the remote radio site facilities used by the District.

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

By summer 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 in this important upgrade is a digital countywide mapping system that is used to identify the latitude/longitude location signal from cell phones that are equipped with this capability. The digitized base map is incorporated into the District computer aided dispatch system. The District is making the base map available at no fee through intergovernmental agreements to the county assessor and cartographer, to all cities and to all public safety agencies served by the District,. The map will be maintained through a partnership including the State of Oregon, Columbia County and its cities and districts and the Columbia 9-1-1 Communications District.



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

In 2005, the District participated in the development of a screening mechanism for new hires that tests for behavior characteristics identified in top performing communications specialists in five PSAPS in Oregon. The test development was done in partnership with Select, Inc., a national firm known for its effective screening development for firefighters and other career fields, using proven scientific processes and validation steps. This mechanism supplements the District's current screening processes which include minimum keyboard speed and accuracy testing, nationally validated aptitude testing, oral board and administrative interviews and thorough background investigation. We want to assure that we are hiring persons most likely to succeed as Communications Specialists, a job that requires the ability to work in a teamwork environment, requires extreme multi-tasking and split hearing capabilities, the ability to remain calm in repetitive high stress situations over the course of a career, the ability to work varying shift hours and maintain high levels of expertise in managing all critical incidents, some of which only rarely occur.

During 2005 District staff developed curriculum offered in a classroom setting for our newly hired Communications Specialists. The classroom curriculum lays a foundation for hands-on learning with a trained coach and supplements the curriculum provided at the Basic Telecommunicator Academy at the Department of Public Safety Standards and Training. The classroom training considerably shortens training time as well as provides focused and phased training that is proving to be quite effective.

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