



September 28, 2017

Dear Cuyahoga County PSAPs:

In 2012, Cuyahoga County contracted with Attevo to complete a detailed assessment of the then 48 PSAPs. The purpose of the PSAP study was to determine where overlaps between PSAPs existed and to develop a plan for efficiencies including PSAP consolidations. Overall, the study concluded that Cuyahoga County should work to significantly reduce the number of PSAPs countywide. Cuyahoga County made the reduction of PSAPs a priority while furthering the County's mission for regional collaboration in 2011; this priority has not changed.

In order to support these collaborations, Cuyahoga County invested over 15 million dollars to provide state of the art NG9-1-1 equipment with built-in redundancies such as dual connections to both the Cleveland and Columbus host. When ECW went live in 2015, 140 workstations were deployed to 37 Primary and 2 secondary PSAPS with the expectation that, as PSAPS consolidate, there would be a considerable reduction of workstations. To date, there are 30 Primary and 2 secondary PSAPS in Cuyahoga County and the number of workstations is currently 137.

In addition to the ECW E9-1-1 equipment and 10 year maintenance and support contract, Cuyahoga County entered into a 5 year contract with AT&T to supply the backend infrastructure to support network connectivity. The costs for both ECW and AT&T are supported by Cuyahoga County's portion of the Wireless Government Assistance Fund.

Initially, PSAPs were advised that they would be responsible for the network connections to the system. However, Cuyahoga County also assumed responsibility for these connections as well as other one-time and recurring (monthly) charges relating to the E9-1-1 network. Moving forward, Cuyahoga County will not assume costs for the installation of and/or monthly recurring circuits/services for any PSAP planning to form.

PSAPs pre paring to move, consolidate or form should also plan for other costs such as the replacement or addition of ECW hardware and a decommission fee charged to any PSAP with 6 or less ECW workstations.

The costs listed below are the approximate monthly charge Cuyahoga County pays in order to maintain 30 Primary and 2 secondary PSAPS:

ECW Product Support	\$70,230.31 (\$512.63 per workstation)
AT&T Wireless Phase I & II	\$10,191.00
AT&T MPLS Service	\$17,000.00
<u>AT&T IP Flex</u>	<u>\$ 6.99 5.20</u>
Total	\$104,416.51

The option to port 10-digit emergency numbers in order to receive calls via the 9-1-1 equipment was included in the AT&T contract at no cost to the PSAPs. The benefit to porting/routing calls through the same equipment is survivability, as 10-digit calls will follow the dispatcher's logins in the case of an evacuation.

Porting numbers also comes with some disadvantages. The cost for ported lines referred to above as AT&T IP Flex is considerable. Furthermore, if ECW or IP Flex loses connection/goes down, the PSAP loses all telephone communications, both 911 and administrative. Every Chief and/or PSAP Manager should fully understand by porting 10-digit numbers to ECW there are assumed risks:

1. A PSAP could lose ability to make or receive all calls, including calls to non-emergency 10-digit lines if the ECW system is down.
2. A PSAP could lose ability to make or receive all calls, including calls to non-emergency 10-digit lines if there is an AT&T failure such as an accidental fiber cut.
3. No quick resolution exists for one of these failures, a "Fast Reroute" can take up to 4 hours.

Proposed Solutions

Option 1

Purchase a gateway for administrative phone lines. This is currently in place at two sites. This option allows agencies to keep their administrative lines installed at their facility and connect them to the Cuyahoga County Emergency CallWorks system using onsite voice gateways. There is an additional charge to the PSAP for this service including the cost of the gateway. PSAP's interested in this option should contact ECW for pricing information. This is the preferred option.

Option 2

Take your ported numbers back and maintain redundant telephone equipment.

Agencies may want their current administrative lines connected to a customer owned telephone system (agency purchased and maintained). The Emergency CallWorks system would be a separate telephone for 9-1-1 calls only. The drawback is headsets will only work with one telephone system or the other, not both.

Option 3

Have two phone systems. The admin lines come in on the department owned system and the 911 calls come in on the ECW system. In order to only have one phone system, "call forward" the admin lines to the ECW system instead of porting lines. This way if ECW goes down, you turn off the call forwarding and the admin lines return to the department owned phone system.

Despite the initial and ongoing dedication and investments made to this project, there are still improvements to be made. It does not take a tornado or fire to disrupt a Communications Center. It can be a backhoe or a shovel. It can be a malfunctioning computer card or a power surge. No matter the cause, a Communications Center, *particularly* Regional Dispatch Centers, must be able to carry out their function as the first link in the chain of Public Safety. All PSAPS are urged to invest in and maintain their own redundancies, such as:

- Power generators; all generators should be load tested weekly and have maintenance performed quarterly
- UPS systems to ensure a constant power supply
- Dual internet connections from disparate providers
- An agency owned telephone system
- Additional landline & wireless phones for PSAP staff to use during an emergency
- Access to emergency alerting system(s) to notify citizens in the event that 9-1-1 is compromised or unavailable
- A primary CAD server with a back-up server located in a different building; the primary server should be backed up to the back-up server daily.
- Redundant radio connections; Ethernet circuit through local cable company, direct fiber connection to 800 MHz system, microwave link, etc.
- An up to date and tested Evacuation Procedure on file

Cuyahoga County will continue working to provide a robust 911 system and the support to maintain it. We look forward to working together with you to maintain this system and achieve efficiency and cost effectiveness as was originally planned. To that note, we will be reviewing each PSAP over the next year to evaluate call volume and staffing as it pertains to the number of workstations each has.

Additionally, laptops programmed with the ECW System are available to a PSAP to use during an emergency. Any PSAP that would like more information should contact Nancy Kolcan 440.403.3562 or CECOMS 216.771.1363.

Sincerely,

Cuyahoga County Technical Advisory Committee (TAC)