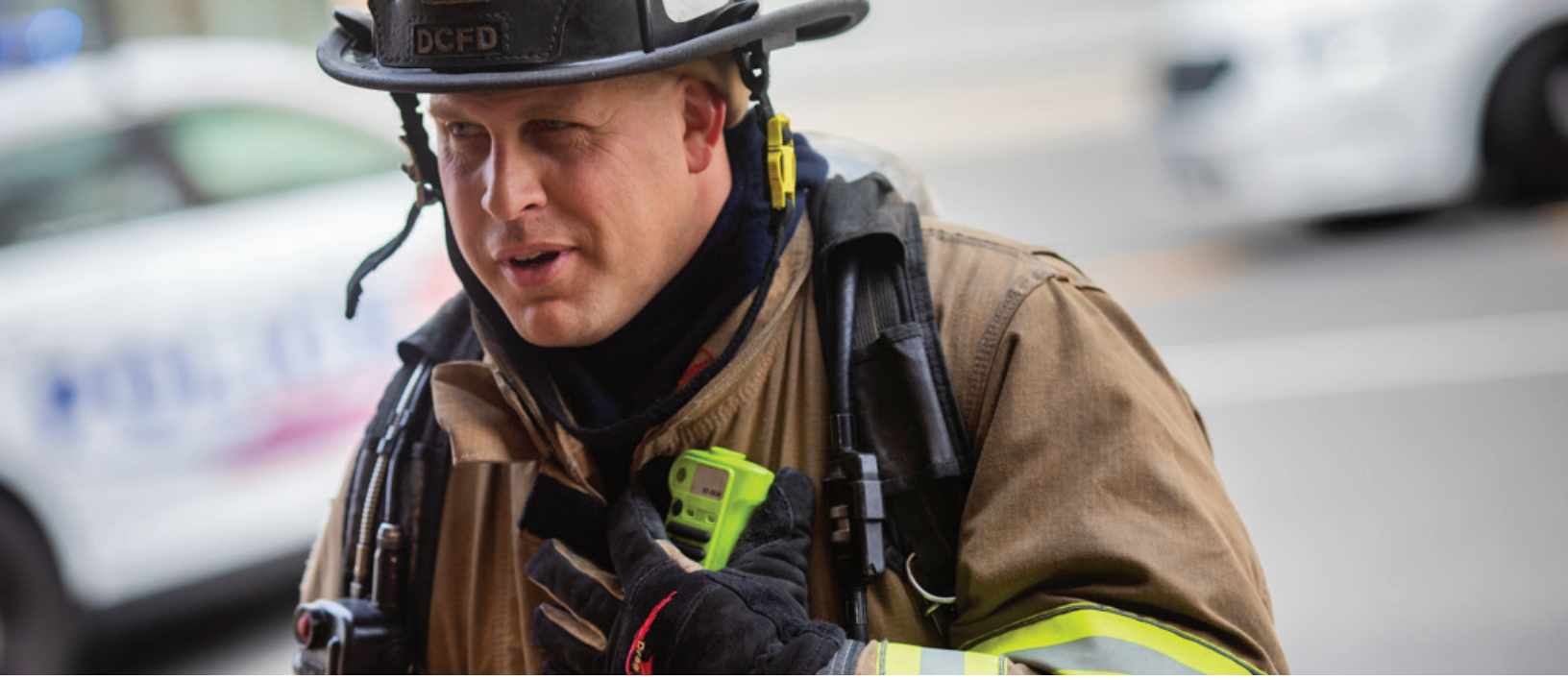


WASHINGTON D.C. UNIFIED COMMUNICATIONS TEAM SAVES LIVES

WITHOUT COMMUNICATIONS, IT'S JUST CHAOS.

Washington District of Columbia (D.C.) has many of the same challenges as other major cities but it also has the distinction of being the center of the US Federal Government, Capital of the United States, home to some of the largest US tourist attractions, center for major national protests; attracting on average 22 million visitors a year.

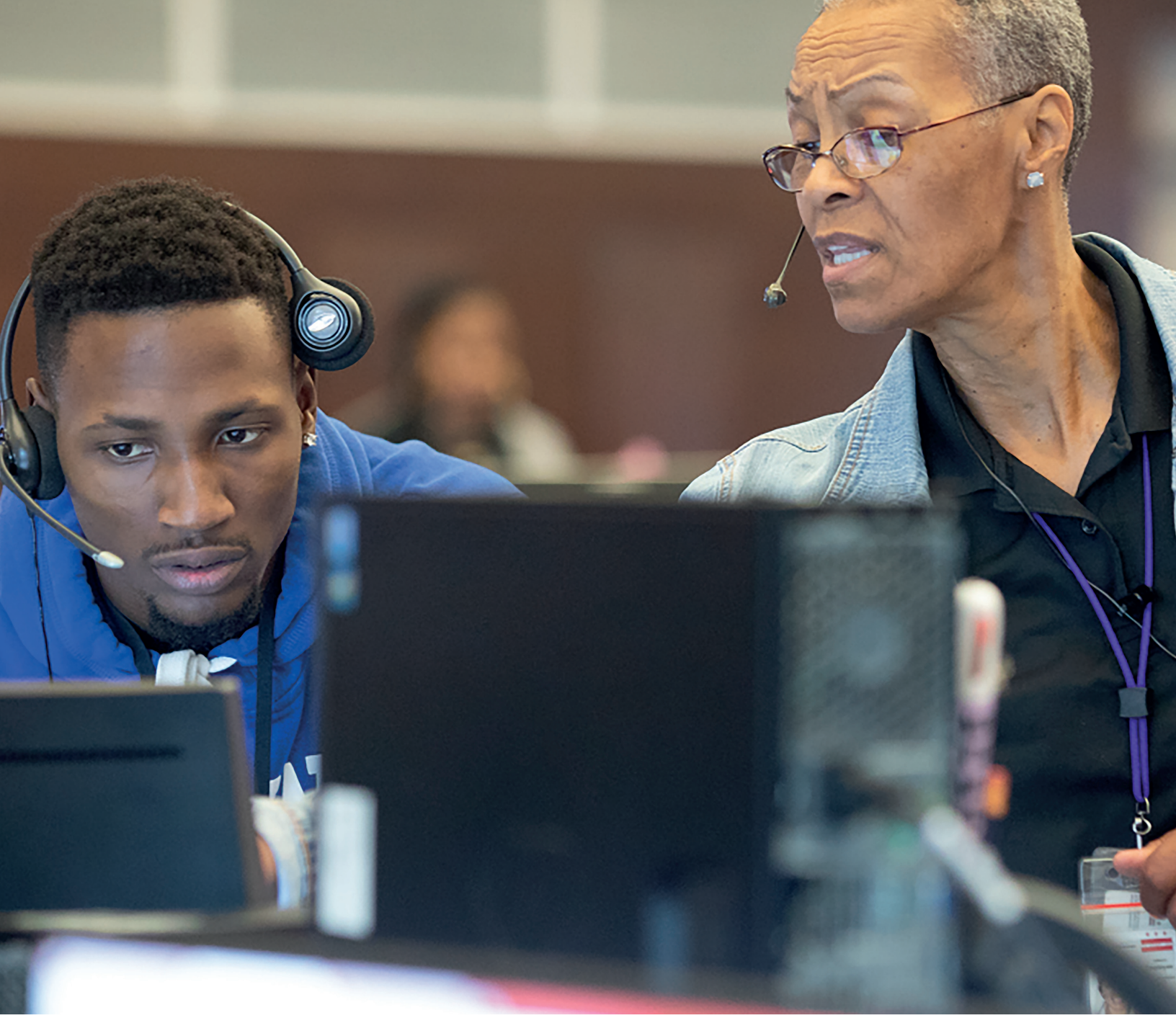
With a resident population of about 693,000 people, on most days the population swells to about 1 million with residents, workers from neighboring communities and visitors.

WASHINGTON D.C.

- 693,000 residents
- 22 million annual visitors
- On average 1,000,000 people are in the district every day

OFFICE OF UNIFIED COMMUNICATIONS

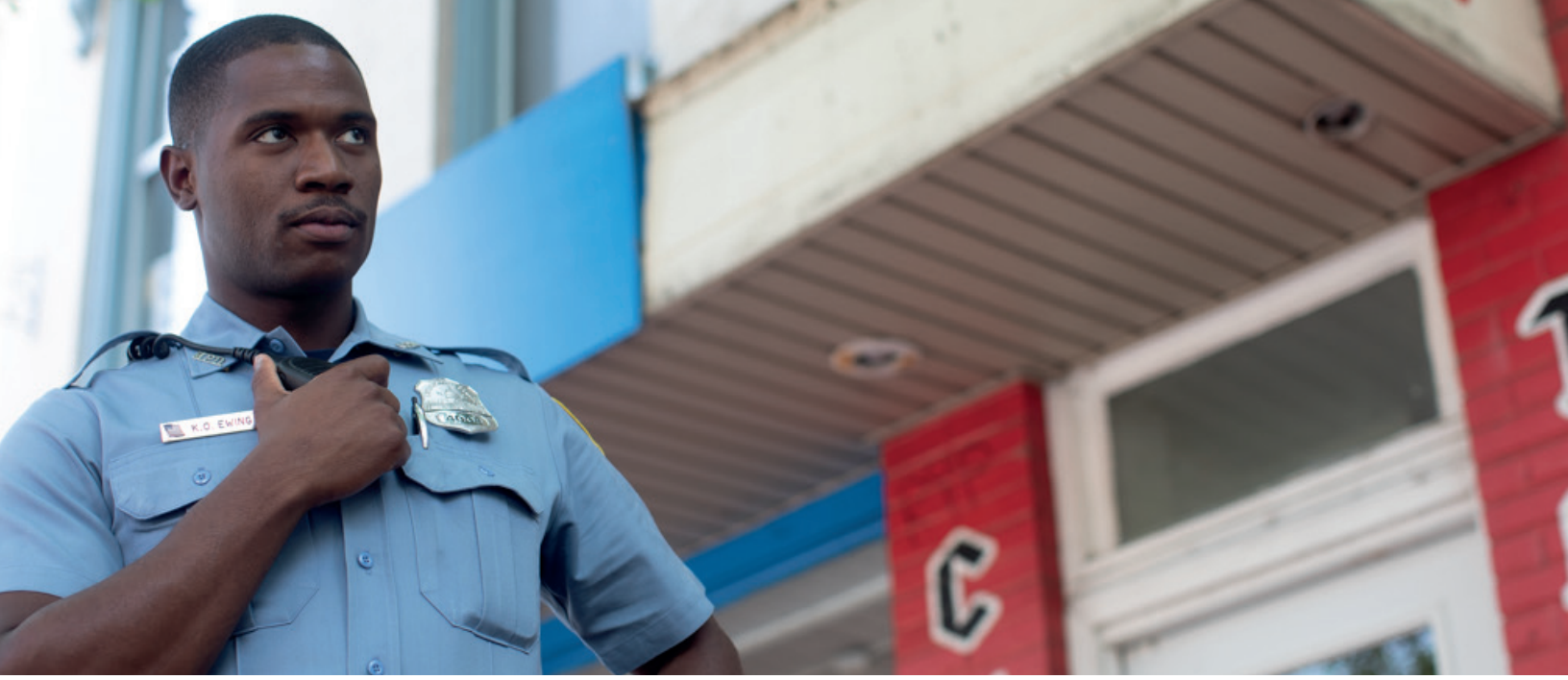
- Handles all district-wide 9-1-1 and 3-1-1 calls
- 1.8 million 9-1-1 calls per year
- Call center has 200 employees
- Responsible for the public safety radio communications systems which serves Metropolitan Police Department (MPD) and 27 other law enforcement agencies
- 3800 sworn officers and 650 civilian in the MPD
- Manage the National Capital Region Radio Cache



At the epicenter of keeping the community safe is the Public Safety Answering Point (PSAP). This is where all 9-1-1 and 3-1-1 calls are answered. As a Fire-EMS dispatcher, Jackie Boyd Thompson explained, "We are the first responders, because we get the call first. We give help over the phone." With approximately 200 call takers and dispatchers, the PSAP responds to 1.8 million calls per year. Thompson went on to highlight, "as a lead dispatcher the call comes to me first. So when the call comes to me, I am voicing to the units out in the field scene (to exercise) safety. That's first and foremost; the most important part of making sure that they're (firefighters/ EMS personnel) safe when they go on the runs."

"I love my job. My father lives in the district. He was saved (by a 9-1-1 call). I was so happy to see that everything went smoothly. It was just such a blessing to know that my coworkers saved my father's life."

Jackie Boyd Thompson, Fire-EMS Dispatcher



KEEPING CITIZENS CALM IS PART OF THE JOB

In the D.C. PSAP, dispatchers and call takers work 12 hour shifts. They never know what type of calls will come in but they know they need to remain calm and keep the citizens calm. One minute the center is calm and in an instant, things can change.

According to LaDonna Wright, assistant watch commander, "A typical day here can be quiet for a little while and then everything can just go haywire. We can go from helping a person get off the floor, to saving someone's life. We handle shootings, stabbings, all types of calls."

"We calm irate citizens down by letting them know that we're here to help them, that we need them to calm down so that we can assist them," said Desirae Dammons, 9-1-1 Call Taker. She went on to describe, the time she received a call for help delivering a baby. "It was a bit of an adrenaline rush. I helped a father deliver his third child. We were able to keep each other calm, because it was new to both of us. The baby was born healthy. Sometimes, you get a citizen that will actually be appreciative, like the father. So, I actually got to meet with him and the family."

> **"I come back to my job every day because I love helping citizens."**
>
> Desirae Dammons, 9-1-1 Call Taker

WHEN IT MATTERS MOST, YOU HAVE TO BE READY

Wright talks about one of the most memorable calls she handled. April 2, 2017 was a typical Sunday evening until the call taker received a call from a very agitated woman asking where there was a gas station. She said she needed gas and there was a girl in the car that she would kill if the call taker did not give her the location of a gas station. Wright explained how she took over the call and tried to get the location and description of the car, staying calm and keeping the verbally abusive woman and male driver on the phone for 35 minutes, while police started searching for the vehicle.

Meanwhile as the incident was unfolding, on the TV screens in the command center, a news report came on describing a man who was wanted in the killing of two people in North Carolina and the kidnapping of a young girl. Staying in control was critical to keeping a very agitated man and woman, calm and on the phone until they identified their location near a grocery store in District 1. Police were alerted via dispatch and after a car chase they apprehend the suspects. The girl was found safe in the back seat.

Wright expressed her feelings when the incident was over. "I was just tingling. It was a really scary time. You know, that could've gone either way. We saved this little girl's life." She went on to say, "When we have a good ending, we celebrate those good endings and we let our people know, Hey, if it wasn't for you, this wouldn't have happened."

WE DO THIS JOB BECAUSE WE SAVE LIVES

Wright explains why she and her co-workers do the stressful job of call taking and dispatch. "When I first started here 18 years ago, I knew what 9-1-1 was, but I had no idea the amount of 9-1-1 calls that were actually processed throughout the day. So it was a culture shock when I got here and it was, like, call after call after call. But then you realize, these people are calling for help. I am their lifeline. You know, it's either now or never. So for me, I do it every single day because I know, on the other end, that can be their last call and I want to be that person who does everything that I possibly can to save a life."

Peace of Mind

"What brings me back to my job every day is this rewarding rush that you get when you actually help somebody on the phone and you know that everything's going to be okay. I mean, I've had some scary calls and I'd be like, Whoa. Okay, let me take a break, I can't believe I just actually did that. You know, it's so rewarding. You get butterflies in your stomach at the end of the day because you know you did a good job and you did the best you could."

Kalilah Paris, Universal Call Taker (UTC) for 9-1-1

UNIFIED COMMUNICATIONS, WORKING TOGETHER

The 3800 sworn officers and 650 civilians in the Metropolitan Police Department (MCP) have a tough job to do to keep the citizens, workers and visitors of Washington D.C. safe. To do their job, the officers rely on the Office of Unified Communications (OUC) for incident information and the latest mission critical communication technology. Commander Jacob Kishter, deputy director of the Information Technology Bureau is the liaison between the MCP and the OUC. He described his job, "My role is to make sure that the officers have the tools on the street to do their job. So we are really pushing technology. We're always trying to be one step ahead of technology, so we can roll out and implement new technology as soon as it's available."

There are 27 agencies that utilize the mission critical communication system, everyone from MCP and fire/EMS to federal agencies to secret service to the National Zoo police. "We share radio interoperability with them as well, and all that's coordinated through the Office of Unified Communications. We share radio channels for daily events, but also for special events like the inauguration," Kishter explains. "We have a close relationship with multiple agencies throughout the city, both within the D.C. government and on the federal side."

MANAGING THE COST OF COMPLEXITY

Keeping the metropolitan public safety communication system and the National Capital Region (NCR) Radio Cache up and running is a full time job for 7 engineers/technicians. It's a critical job to manage and maintain all of the equipment, so public safety agencies and the PSAP can keep the officers and community safe. In addition to maintaining the infrastructure and testing the system in the underground Metro tunnels, Steve Dwayne Matthews, radio manager talked about how they routinely test and check the programming, the batteries and accessories in every radio to make sure the equipment is functional and optimized.

To make the job go smoothly Matthews recommends Motorola Solutions' Radio Manager. "Radio Manager is the best tool that I've witnessed in 31 years. It stops the mistake of duplicating the same ID number in a radio, and it also allows you to schedule a job where there's just plug-and-play, where you have to set up the UPS or you have to download system keys."

Software upgrades are also very important to keeping the radios optimized. To give the radios the most features Matthews explains, "we always upgrade our radios because, just like your cell phone, you need to always have the latest and greatest software upgrades in your radio. That's what we strive to do, to give our teams the most features that a radio can provide."

WHEN AN ISSUE IS FOUND WE ADDRESS IT

In January 2015, in the Washington Metropolitan Area Transit Authority (WMATA) tunnels near L'Enfant Plaza, a commuter train broke down and the tunnel was filled with yellow smoke. Emergency personnel lacked communications in the area due to power being turned off to an amplifier and as a result rescue efforts were hampered and a woman died.

As soon as the police and fire department personnel reported no communications on scene, the OUC radio shop took the National Capital Region cache of emergency radios for incidents and special events and provided on-scene communications for first responders who rescued 200 people from the train.

Amplifiers have been built into the tunnels to provide communications but as Matthews explained, the lack of communications was caused by a lack of modulation due to the power being shut off to the amplifiers during routine WMATA maintenance. "So to remedy that issue, we go underground once a week and test communications (in the tunnel), and test those amplifiers and make sure they're operational." The data collect from the 48 stations is documented in the WMATA database. "We do it so in the event there is an incident (like what) happened at L'Enfant Plaza, there's documentation to say when we tested it, what we found, when we notified WMATA, and how long it took them to repair. And once they repair it, we come back and retest, just to make sure the public safety radio works."

GOOD RELATIONSHIPS MAKES THE JOB EASIER

When it comes to servicing the communication systems, the engineers and technicians know how important it is to keep up with changes in technology. To have the tools and technology to service the radios and get them back on the street as soon as possible is critical.

Technician Donald West highlights the importance of having a relationship like they have with Motorola Solutions. "When our customers have problems, we want to address them as fast as possible. Having a vendor that we can ask questions if we have issues is very important. It gets us up to speed quicker, so we can service them (radios) much better and more efficiently."

"When we call Motorola or report any customer service based related issue as far as sending radios to the depot, Motorola is transparent with getting back to us," said Matthews. "They're here to work with us, side-by-side correcting whatever radio related issues we have."

TECHNOLOGY CHANGES IMPROVE PERFORMANCE

Clyde Wilson, an electrical engineer, has been working on radio systems for over 11 years. "I've seen a lot of technology change from the different styles of radios. We're dealing with APX radios, which has an IP address, which is a night and day difference from what we used to use. So technology like that keeps coming, it keeps getting better and better. It is one of the good things that I love about it."

COMPLEXITY MANAGED. CALM PREVAILS

"We are here to give 100% customer service for radio support and coverage, for scheduled and unscheduled events, and just everyday practice. This is what we do. We have a total of 10,080 users on the system, and my job is to make sure that everyone has radio coverage, and any other support that they need," said Matthews. "This is a very complex field that we're in. We're always on the go. Things are always changing, and we have to be able to keep up with that change. That's what manage the complexity means to me."

Keeping the complexity of the network well managed, allows call takers like Kalilah Paris to better help citizens. She describes how she handles a call, "I keep the citizen calm by trying to maintain my own composure and staying calm. Just letting them know that; I'm here for you. I'm gonna stay on the line with you until the responders get there. And letting them know it's gonna be okay."

PAST, PRESENT, AND FUTURE

The Metropolitan Police Department is rich in history; protecting the citizens of and visitors to Washington D.C., the Capital of the United States. A few noted historical dates in the MCPs past: In 1861, President Abraham Lincoln presided over the first police board of commissioners. On June 17, 1974 three officers responded to a possible burglary and touched off the Watergate investigations, that later lead to the resignation of President Nixon. On March 24, 2018, Washington DC was host to the biggest single-day protest, "March of our Lives", where 800,000 protesters marched to fight for tighter gun control after the school shootings Florida.

The Office of Unified Communications and the public safety communication system also continue to evolve. As West, who has been working on radios for over 45 years, talked about some of the changes he's seen. "Aligning the radio we would use test equipment, and you would have various alignment tools, to make necessary adjustments. Now we just hook the radio up to a computer, push the start button, wait for the beep, it's done."

As the department looks to the future they know they will need to continually adapt the technology and services to make it easier for the officer on the street to do his job. After all, the goal according to Matthews is, "100% customer service. That's what we were hired to do, that's what we love to do, and we are here to move forward with the district's goals."

In addition to being the Radio Shop Manager for the OUC, Steve Dwayne Matthews is also Mid-Atlantic Chapter president of the Motorola Trunked User Group (MTUG). In chapter meetings the members, who all have a Motorola trunked radio system, talk about interoperability, equipment programming, functionality and techniques, and useful tools and learning skills.

Steve commented, "The importance of being in MTUG is you get insight on the latest equipment that Motorola is deploying or putting out. It also gives you a hand up on the technology. And to work hand-in-hand with Motorola in correcting any issues that any of my neighboring jurisdictions may have had."

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