

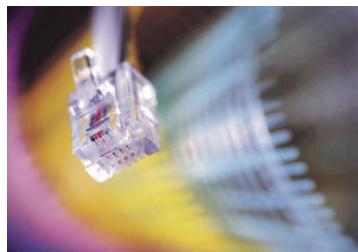
# Office of Communications Technology

NOVEMBER 2012



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## OCT MISSION

***To foster collaboration, information sharing and data interoperability by strategically designing, implementing, and maintaining cost effective mission critical public safety applications, E911, Radio and Mobile Data Systems that best meet the requirements of Broward County's emergency responders.***



DELIVERING COST EFFECTIVE REGIONAL PUBLIC SAFETY APPLICATIONS AND SERVICES TO PUBLIC SAFETY AGENCIES



## Broward County Office of Communications Technology

The Broward County Office Communications Technology ("OCT") is responsible for developing the strategic direction; and for the engineering, implementation and operations associated with the Broward County Regional Public Safety

Communications Infrastructure and its associated Public Safety applications. The Regional Public Safety Communications Infrastructure is the medium through which Broward County municipalities establish connections to shared applications such as the Computer Aided Dispatch (CAD) system that facilitates closest unit response for fire/rescue. OCT is also responsible for developing and maintaining the Public Safety Infrastructure Annual Technology Plan.

OCT is comprised of Regional Public Safety Applications, Program Management, Wireless Systems (Narrowband Voice and Broadband Data), and E-911 Wireline & Wireless Program groups.

The Program Management group provides the planning, engineering, project management and operational guidance functions required to support OCT's Public Safety applications and Regional Public Safety Communications Infrastructure.

In summary, 22 Law Enforcement and Fire Rescue agencies throughout the County and 6 Dispatch Centers rely on the Office of Communications Technology for efficient and reliable data communications and public safety application program services as provided in conjunction with the following systems/applications:

- ⇒Computer Aided Dispatch (CAD)
- ⇒Mobile Data
- ⇒Closest Unit Response
- ⇒Law Records Management System
- ⇒Fire Records Management System
- ⇒Regional Public Safety Wide-Area Network
- ⇒Smart Ring –High Availability Network
- ⇒Fire Alerting and Paging
- ⇒Automatic Vehicle Locator (AVL)

# Update on the Flee-To Sites and Paging System Replacement

Since the publication of our last newsletter, significant progress has been achieved on the construction of the new 911 "Flee-To" Sites to be located in Coconut Creek and Pembroke Pines.

## Coconut Creek

The walls, roof and floor of the new Coconut Creek Public Works Building are now in-place. During the months of November and December, the construction general contractor Kaufman Lynn will be working on both the interior and exterior of the building, installing conduits, ducting, electrical and HVAC and all other systems needed to support and operate the facility. The 911 "Flee-To" Site which will be located on the second floor of the new Public Works Building; will occupy over 3,700 square feet and will provide a total of 37 call-taker and dispatch positions. In addition to the 911 Center, additional space on the second floor has been allocated for a large server room capable of supporting all the Public Safety application servers and eventually a Prime Site for the next generation P-25 700/800 MHz Countywide Trunked Radio System.

The projected completion date of the construction project is the third week of January 2013. However due to the need to furnish the facility, occupancy is not expected until after March 1. As mentioned in our previous newsletter, this project is a collaborative effort of the City of Coconut Creek and Broward County with the City providing a building to house the "Flee-To" Site and the County providing the infrastructure and applications needed to operate the 911 Center. Our group – the Broward County Office of

Communications Technology (OCT) is responsible for initially providing the furniture, grounding, data cabling and electrical systems – in other words, the infrastructure needed to support the 911 "Flee-To" Site. Once the infrastructure is in place, OCT will be providing diverse network connectivity, 911 equipment, Computer Aided Dispatch and all other Public Safety applications needed to operate the Center.

When completed, the Coconut Creek 911 Center will be the first occupant of the "Flee-To" Site.

## Pembroke Pines

Over the past two months, the second floor area being renovated at Fire Station 101 to house the Pembroke Pines 911 "Flee-To" Site has progressed from being an empty, unrecognizable shell to a 911 Center in the last stages of completion. As of this writing the infrastructure needed to support the center has been installed. This includes a new 75 KVA UPS, data cabling and a dry fire suppression system for the new Server Room. As with the Coconut Creek Project; the Pembroke Pines 911 "Flee-To" Site project has been a collaborative partnership. The City took responsibility for the building renovation which included the removal of doors and walls and the installation of new doors and walls where needed and all the finishing work associated with this effort. The Office of Communications Technology worked closely with 911 Manager Tom Gallagher in the initial layout and design of the Center. Unfortunately, Tom did not live to see the completion of this project. He suffered a fatal heart attack on

September 28 and is greatly missed by everyone.

Briefly; here's a summary of our completion schedule for the Center.

The carpeting for the Center was installed the week of October 12 and the furniture will be installed the week of October 22. During the week of October 29, the electrical and data cabling contractors will be connecting the electrical receptacles and the data cables to the furniture. Tentatively, the Pembroke Pines 911 Center will be relocated to the "Flee-To" Site the week of November 5 or November 12.

## Paging System

It's important for each Fire Rescue agency currently utilizing the UHF pagers to be aware that the UniPage paging system that currently interfaces the pagers to the CAD system is mandated by the FCC to be shut down effective January 1, 2013. The reason for the shutdown is that the UniPage system is over 15 years old and is not capable of meeting the FCC 400 MHz narrowbanding requirements. The Office of Communications Technology is in the process of procuring and deploying a replacement paging system that will utilize USA Mobility pagers interfaced to the CAD by a communications system provided by Himlink.

Over the course of the past year, we have advised the Fire Rescue agencies of this pending change thru the RPSCC meetings, meeting minutes, e-mails and the Fire Chiefs Association. As previously stated; each Fire Rescue agency will be responsible for the procurement of new pagers thru USA Mobility. Each pager has a monthly recurring cost of

# Fleet-To/Paging System Continued...

\$5.45. The replacement cost for a lost or damaged pager is \$25.00. It's recommended that each agency procure several spare pagers that can be used for short-term replacement. As an alternative or for redundancy, the new Hiplink system will also provide text messaging to smartphones.

We need to collect the pagers and smartphone numbers that will be receiving the CAD incident data no later than Friday November 16. These numbers will be added to the Hiplink controller which interfaces to CAD and routes each page to

the appropriate subscriber. The contact for the USA Mobility pagers is provided below.

Roger Hernandez  
Senior Account Executive  
USA Mobility  
727 423-2515  
[Roger.Hernandez@usamobility.com](mailto:Roger.Hernandez@usamobility.com)



## Wireless Communications

Radio sub-division is responsible for the strategic planning and tactical operation and maintenance of Public Safety and Local Government radio communication systems and sub-systems.

Currently, we are fostering interoperability initiatives with local, State, and Federal agencies. Most important locally is the implementation of a P25 Hosted Master Site. This initiative will allow for the County to maximize the life cycle of the current 800MHz radio equipment capital expenditure and to ensure seamless interoperable radio communications of the County's 800MHz Trunked Radio System (TRS) with local and neighboring radio systems. We are also working on

implementing a cost efficient, application rich, local government radio system.

We maintain and administer the County's TRS radio system currently used by BC Local Government, BC School Board, Sunrise PD and FR, Pembroke Pines PD and FR, Coconut Creek PD and FR, BSO (DOD, DLE, FR), and all contract cities dispatched by BSO (DLE and FR). This includes all radio equipment (800MHz, UHF Medcom, paging system, fire station alerting), 84 radio dispatch consoles, and the back up EOC. There are 13 County tower locations we maintain and administer. This includes maintaining structural integrity of the towers, UPS and generator performance maintenance (weekly, monthly, yearly). We maintain, repair and program BC Local Government and BSO (DOD, DLE, and FR) radios (portables, mobiles, and base stations). We program radios for agencies such as BC School Board, State Department of Health, and Broward Health Department, as well as various others. OCT Wireless Services provides service, support and installation of County's Fire station alerting systems.

We also support any FCC mandated projects for the County. Currently, we are in process of the 800MHz Rebanding and the UHF/VHF Narrowbanding mandates. The UHF/VHF narrowbanding mandate is to be completed by 1/1/2013. The 800MHz rebanding mandate is on its final stages of completion. All that remains is the second touch of the subscriber radios and the project final audit and close out. The 800MHz Rebanding project is expected to be completed by June 2013.



# OCT E-911 Office

The mission of the OCT 911 Office is ***Excellence in the Broward County regional E911 network through an efficient, reliable, and survivable system, with a reduced total cost of ownership.*** The purpose of the regional E911 network is to carry out the legislative intent of Florida E911 Plan of “providing citizens with rapid direct access to public safety agencies by accessing the number 911.” Core responsibilities include:

- ◆ E911 Call Taking Equipment – The equipment through which 911 calls are answered.
- ◆ Voice Recording Equipment – The equipment that records voice and call record information for all calls answered at the PSAP.
- ◆ Business Continuity – Ensure infrastructure and contingency plans are in place to mitigate maintaining day to day operations during times of disaster, or

other types events that may interrupt normal operations.

- ◆ E911 Database – Provide information to the database administrator to ensure accuracy of the caller related information that is associated with each phone device, whether it is a land line or wireless caller. This information includes the location of the caller, and the call back number of the caller, among other information.
- ◆ E911 Call Routing – Design routing policies and provide to land line and wireless service providers routing instructions to route 911 calls, whether from a land line, or a cell phone, to the PSAP that dispatches Law, Fire, and/or EMS agencies for the area in from which the caller is dialing.
- ◆ County Wide PSAP Performance Metrics – Reporting of key performance indicators.

Strategic Initiatives include:

- ⇒ Deployment of Network Based Host/Remote IP architecture (IP PSAP) for PSAP 911 call processing
- ⇒ Establish Flee-to Facilities for Business Continuity
- ⇒ ACD Functionality
- ⇒ Prepare for Location Based Call Routing (Next Generation 911)
- ⇒ Migrate tabular 911 Street Addresses (MSAG) database migrate to GIS
- ⇒ Establish core esiNet infrastructure (IP Ingress)



- When Dialing 9-1-1:**
- Know your location.**
  - Stay calm and speak clearly.**
  - State the type of help you need.**



**9-1-1 is NOT as cool as you are..... Yet.**

We know that you do most of your communicating by text message and instant message, but you **can NOT text or IM “9-1-1”** to reach emergency services. 9-1-1 and

telecommunications professionals are busy in the lab trying to make that possible, but for now you will have to make an old fashioned phone call if you want to talk to 9-1-1.

# Regional Public Safety Applications

- ◆ Computer Aided Dispatch (CAD) – Computer-Aided Dispatch System (Premier CAD) computerizes public safety dispatching functions. This technology allows call takers and dispatchers to quickly and efficiently handle incident information, thus increasing officer safety and the potential for saving lives. Premier CAD is designed to allow rapid incident initiation and easy access to incident information.
- ◆ Advanced Tactical Mapping (ATM) – Using ATM along with Global Positioning System (GPS) capabilities, the wireless data network can now display maps right on the dispatcher's terminal screens. These maps pinpoint the real-time location and direction of each emergency vehicle. As a result, dispatchers can make real-time requests for incident assistance -- and response times can be improved. Knowing the exact location and status of every public safety vehicle is tantamount to efficient and effective incident response.
- ◆ Automatic Vehicle Locator (AVL) – AVL is a global positioning tracking system that populates the Computer Aided Dispatch system in order to receive electronic recommendations based on the geographical areas of the vehicles. This software and hardware is necessary to achieve closest unit response.
- ◆ Premier Mobile Data Computer (PMDC) - PMDC software is open-architecture for maximum interoperability and is fully integrated with CAD to enhance dispatch capabilities. The software also delivers direct access and real-time communication of mission critical data to field personnel through the integration of local, state, and national databases.
- ◆ Open Query (OQ) – Enables access to external data systems such as NCIC, State, and Local databases; and allows agencies to quickly collect, manage, track, and analyze vital information so that it can be shared and used when and where it is needed.
- ◆ Universal Data Transfer (UDT) – The UDT server is the mechanism that collects and transfers CAD data to the various external systems. The DSS server is the system that conducts data analysis and reporting. The UDT/DSS servers predominantly coexist utilizing the same hardware and provide a regional agency with the ability to utilize their own field based records management system while extracting valuable data from the CAD server such as incident times, events, etc.
- ◆ ProQA – ProQA Dispatch Software integrates the power of the National Academy Protocols with today's critical computer technologies. It helps emergency dispatchers move smoothly through Case Entry and Key Questioning. It assists dispatchers in quickly determining the appropriate Determinant Code for each case and clearly displays the response configuration specifically assigned to the code by local agency authorities. ProQA then guides dispatchers in providing all relevant Post-Dispatch and Pre-Arrival Instructions, as well as important case completion information.
- ◆ First Responder Mobile Mapping (FRM) – FRM is a mobile mapping application that leverages the investment made in the agency's geospatial data warehouse infrastructure which is based on a Environmental Systems Research Institute's (ESRI) Geographic Information System (GIS) platform . FRM interfaces to the Regional CAD Mobile Application known as Premier Motorola Data Console (PMDC). The FRM mobile mapping application provides routing and re-routing functionality to emergency response personnel and supports map layers generated by in-house GIS staff. Additional features include the ability to access Pictometry's oblique imagery, BSO's GIS data, and School Resource information.
- ◆ NetMotion – Mobility XE is a software-only Mobile Virtual Private Network (Mobile VPN) that provides secure and persistent access to network resources and applications from mobile devices over any wired or wireless IP-based network. Mobility XE enables organizations to maximize the productivity and management of their mobile workforces, deliver flexible remote access, and safeguard the security of their data and networks using Mobile Network Access Control (NAC).
- ◆ Law Records Management System (LRMS) – The Regional LRMS (RLRMS) is an automated system used to document, categorize, and report on activities performed by law enforcement personnel. The RLRMS produces documentation/interfaces to be provided to other local and statewide criminal justice agencies. The RLRMS provides law enforcement personnel with information at the time of dispatch which starts the documentation of the incident or event.

# Regional Public Safety Communications Committee

The Regional Public Safety Communications Committee (RPSCC) was formed in early 2007 and has served a variety of roles over the past five years. Voting members of the Committee consist of all Municipal and County Fire Rescue and Law Enforcement departments and the School Board that have executed a Regional Interlocal Agreement (RILA) for Radio Interoperability and Closest Unit Response. However, the Committee is unique in that all Public Safety agencies are invited and encouraged to attend and actively participate regardless of whether they have a signed RILA or not.

The RPSCC initially developed sub-committees specific to Computer Aided Dispatch (CAD), Fire and Law Record Management Systems and the 800 MHz Trunked Radio System. These Committees were the basis for the creation of the Law Records Governance Board and more recently the CAD Governance Board. A Fire Records Governance Board is in the process of being formed. The Committee, which meets on a quarterly schedule, also serves as a forum for the dissemination of current information to all participants by OCT staff and our Regional partners.

The Regional LE RMS Governance Board was founded in 2010 just prior to the implementation of the Regional OSSI rollout with Hollywood Police Department and a few of the Broward Sheriff's Office Districts (Cooper City and District 5/Central Broward). Since inception, Sunrise Police Department has joined the Board as a voting member. In the next few months, it is expected both Hallandale Beach Police Department and Coconut Creek Police Department will also join this Board. This Board meets every second Thursday, from 2-3pm, at the Broward County EOC.

The Regional CAD Governance Board was formed at the urging of a few members after seeing the success of the LE-RMS Governance Board. A similar structure was formulated to include an Executive Sponsor from each of the Regional Partners participating in this program. The Board meets on a regular basis to review the program health and to vote on items that have a global impact on the users of the Regional CAD Program. This Board typically meets quarterly with additional meetings requested by the Chairperson as-needed. The Regional FIRE-RMS Governance Board is currently being formed at the

urging of the Broward County Fire Chief's Association at their June 2012 meeting. Again, it was the success of the Regional LE RMS Governance Board that promoted the idea from one Fire Chief to the rest as a method to not only manage the global impacts of the program, but to improve the quality of the program by giving stakeholders a venue to voice their issues and gather information on best practices. This group will meet every second Thursday, from 3-4pm, at the Broward County EOC.

Each Governance Board has its own documented Governance Guidelines. These Governance Manuals outline the structure, rights, processes, and members (voting and non-voting). Each Executive Sponsor (and their alternates) are listed with contact information in each manual.

To obtain more information about these programs, or to obtain a copy of the Governance Manual from one or all of these programs, please contact the Office of Communications Technology at 954-357-8570.

## Fire Rescue Council

## RPSCC

## Office of Communications Technology

E-911 Systems

Wireless Communications

Governance Board

Computer Aided Dispatch

Governance Board

Law Records Management

Governance Board

Fire Records Management

Governance Board