UPDATE ON BROWARD COUNTY’S REGIONAL COMMUNICATIONS SYSTEM

January 21, 2016 – BCCMA
• Stakeholder Involvement/Oversight
• Radio Replacement Project
• Local Government Radio System
• Computer Aided Dispatch System
• Regional Dispatch Centers
• Closest Unit Response (CUR)
• Transparency
Fire Rescue Council:

1) Facilitate the coordination between County and Municipalities to establish a countywide communications infrastructure for fire and emergency medical services to enable closest unit response.

2) Membership includes County Commission, League of Cities, Council of Professional Firefighters, Fire Chief’s Association, Medical Association, BSO, and Trauma Management Agency.

Regional Public Safety Coordination Committee (RPSCC):

1) Focuses on Interoperability and Closest Unit Response.

2) All public safety agencies in Broward County are invited to attend.

3) Voting members include the School Board, and those municipal and county Fire Rescue and Law Enforcement agencies that have executed a Regional Interlocal Agreement (RILA).

4) An outcome of the RPSCC has been the creation of several subcommittees and three governance boards, which have promoted closer collaboration among public safety partners.

Broward County Consolidated Communications Committee:

1) Requirement from I-Board Implementation Group.

2) Provide feedback, suggestions and information pertaining to the Consolidated Communications System.

3) Membership includes Municipalities, League of Cities, County Commission, County Administration, Police Chief’s Association, Fire Chief’s Association, BSO, EMS Council and Business Community.
RADIO REPLACEMENT PROJECT
County contracted with technical consultant Mission Critical Partners (MCP) to assess existing radio system and develop specifications for its replacement

Input and Feedback:
- Sheriff and Municipal Police Departments
- BSO Fire Rescue and Municipal Fire Departments
- Dispatch Communications staff
- Broward County School Board
- Web survey
- Focus group interviews from first responders agencies
- Interviews with representatives from neighboring systems to gather interoperability requirements and determine pending system upgrade

Additional meetings (Post Report) Fire and Police Chiefs’ Associations
- Follow-up written response provided to the two associations
MAJOR RECOMMENDATIONS

- Project 25 (P25) digital trunked simulcast radio system with built-in redundancy
- Increase/enhance in-building coverage for dense structures throughout the heavy built-up areas of the county
- Replacement of Tamarac and Deerfield receive-only sites with full transmit/receive location on new towers
- Additional towers for Hollywood, Fort Lauderdale, Pompano Beach and North Lake areas
- 5-Channel multicast site along Interstate 75 to provide improved coverage in the western half of the County over the Everglades
- Back-up capabilities for support in the event primary system becomes impaired or overloaded
- Replace alphanumeric paging system
- Replace IP-based microwave system
- Replace components of the fire station alerting system
- New console systems replacing existing dispatch positions
- Repurpose frequencies prone to interference
Pursuant Regional Interlocal Agreement

- County’s Responsibility
  - Major Infrastructure and Equipment Cost
  - Estimated cost estimated of $40,631,800

- Cost estimates are inclusive of radio site electronics equipment, backhaul network, tower site facilities (i.e., tower and shelter modifications), paging system, fire station altering, vendor services and back-up capabilities.

- Users of the System: Subscriber Units/Pagers
  - Subscribers ranges from $3,500 to $6,000
  - Pagers programming cost estimated at $50 per unit (Anticipate new hardware being installed to re-utilize existing pagers)
COMPUTER AIDED DISPATCH SYSTEM
County Commission: New CAD Approved in 2014; January 2017 go-live

Estimated cost of $4.2 million

New CAD is a multi-jurisdictional, multi-agency web-based system to support the following:
- Emergency-911
- Automated vehicle location
- Multiple law and fire records systems
- Paging and toning
- In-vehicle mapping

Core implementation team includes Police and Fire Chiefs’ Associations, Communications Union, BSO, Municipal Partners, and County
LOCAL GOVERNMENT RADIO SYSTEM
️ County Commission approved Local Government Radio System (LGRS) in 2014
️ Estimated cost of $840,000; ongoing maintenance of $92,000 annually
️ UHF 400 MHz digital trunking radio system for local government non public safety users
️ Migrates non public safety radio traffic on the existing 800 MHz public safety radio system to a new system
️ Public safety radio system will only be used by Police and Fire
️ Broward County departments will start migration in February 2016 LGRS
COUNTY
2013 Consolidated Dispatch Program Approved; Completed October 2014:

ORCAT Monitors Progress Towards Meeting Performance Objectives and Report on Same

BROWARD SHERIFF’S OFFICE
Serves as the Operator of the System via Performance Base Contract w/ the County Commission

MUNICIPALITIES
Municipalities Participate via an Interlocal Agreement Provides Representation on the Various Committees and Subcommittees that Guide the Operations of the System
Through the Deployment of Best Practices: Eight Major Goals of the Consolidated Regional Communications System January 29, 2013:

- Improve service
- Employ the best technology available to expedite emergency response
- Establish consistent performance metrics
- (Eliminate) Delay in transfer of emergency calls
- Faster emergency response times
- Enhance interoperability and coordination amongst responding agencies
- Fewer errors due to standardized call handling and dispatch protocols
- Save significant amount of taxpayers’ dollars
Implementation Board (I-Board): Representatives from Municipalities, Broward Sheriff’s Office, Police and Fire Chiefs Association established and approved the highest and best standards for the Consolidated Regional System.

Lifecycle of an Emergency Call

<table>
<thead>
<tr>
<th>Emergency Event</th>
<th>9-1-1 Call Initiated</th>
<th>Call Rings at PSAP</th>
<th>Call Answer</th>
<th>Caller Interrogation and Call Entry into CAD</th>
<th>Call Dispatch</th>
<th>Unit Arrival</th>
<th>CAD Event Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td></td>
<td></td>
<td></td>
<td>P2</td>
<td>P3</td>
<td>P4</td>
<td>P5</td>
</tr>
<tr>
<td>Prior to Scope of PSAP Operation</td>
<td>10 secs</td>
<td>PSAP 9-1-1 Call Answer Time</td>
<td></td>
<td>PSAP / Responder Dispatch Response Time</td>
<td></td>
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</tbody>
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## APPROVED PERFORMANCE STANDARDS

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Goal</th>
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<tbody>
<tr>
<td>P1 Call Answer Time – Busy Hour of Each Day (911) – 90% in 10 Secs.</td>
<td>90%</td>
</tr>
<tr>
<td>P1 Call Answer Time – All Calls (911) – 95% in 20 Secs.</td>
<td>95%</td>
</tr>
<tr>
<td>P1 Call Answer Time – Alarm Calls – 95% in 15 Secs.</td>
<td>95%</td>
</tr>
<tr>
<td>P1 Call Answer Time – Alarm Calls – 99% in 40 Secs</td>
<td>99%</td>
</tr>
<tr>
<td>P2/P3 EMS Call for Service Processing Time – 90% in 90 Secs</td>
<td>90%</td>
</tr>
<tr>
<td>P2/P3 EMS Call for Service Processing Time – 99% in 120 Secs</td>
<td>99%</td>
</tr>
<tr>
<td>P2/P3 Fire Call for Service Processing Time – 80% in 60 Secs</td>
<td>80%</td>
</tr>
<tr>
<td>P2/P3 Fire Call for Service Processing Time – 95% in 106 Secs</td>
<td>95%</td>
</tr>
<tr>
<td>Emergency Medical Dispatch – 95% Case Entry Compliance Rate</td>
<td>95%</td>
</tr>
<tr>
<td>Emergency Medical Dispatch – 90% Total Compliance Rate</td>
<td>90%</td>
</tr>
<tr>
<td>Emergency Medical Dispatch – 1% Quality Assurance Case Review</td>
<td>1%</td>
</tr>
</tbody>
</table>
All Broward County PSAPs - Historical Performance
Prior to and After Consolidation
% of Months That Did Not Meet Minimum State P1 Requirement*

* Performance Measurement used prior to Consolidation. (State Minimum Requirement; 90/10 All Calls)
### IMPROVEMENT RESULTS OF PERFORMANCE

#### 911 Calls Transferred Out
(to Non-Regional PSAPs / to Regional PSAPs)

<table>
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<tr>
<th>PSAP</th>
<th>FY15</th>
<th>Oct-15</th>
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</table>
| NORTH        | 2,010 Calls  
0.72% of 911 Call Volume | 154 Calls  
0.67% of 911 Call Volume |
| CENTRAL      | 3,816 Calls  
0.47% of 911 Call Volume | 362 Calls  
0.54% of 911 Call Volume |
| SOUTH        | 775 Calls  
0.22% of 911 Call Volume | 61 Calls  
0.21% of 911 Call Volume |
| PLANTATION   | 8,994 Calls  
13.72% of 911 Call Volume | 750 Calls  
14.01% of 911 Call Volume |
| CORAL SPRINGS| 3,881 Calls  
5.67% of 911 Call Volume | 326 Calls  
5.74% of 911 Call Volume |

- Common CAD platform negates the need to transfer calls
- Both Plantation and Coral Springs continue to participate on the CAD Core Implementation Team
9-1-1 Call Answer Time

- Improvement has been made in the answer time (P1) performance on the busy hour of each day, and there is room to improve in this area.
Call Processing Time

- Improvement in the time from call answer to dispatch (P2/P3) is being addressed.

P2/P3 Fire Rescue CFS Processing Time (90/90)
County established the incident tracking management system

Purpose identify problems that could be technical, policy oriented, operator or some combination and to implement corrective action

User agencies can address the immediate resolution of priority 1 incidents (determined by user agency to be life/safety issues) directly with the Operator

Any protocol changes are directly approved by the Fire and Police Chiefs’ Associations

Both Associations accepted the process used for incident tracking management system

Regular meetings are held with fire and law personnel at the County’s three dispatch centers to address operational issues
Fitch and Associates, LLC was retained to review the Consolidated Dispatch System

Estimated cost of $100,000

Consultant will identify deficiencies and/or gaps between Best Practices and the County’s program

Plan will be developed with steps to remedy deficiencies or close any gaps in service delivery that are not in keeping with best practices
Discussions have been ongoing for over 15 years; voters approved amendment to County charter to facilitate Closest Unit Response (CUR) in 2002

County has invested millions to achieve CUR

Pilot program proven successful (Sunrise, Davie, Tamarac, Lauderhill and North Lauderdale)

Technology is in place and works

Countywide plan to implement CUR is needed (SOPs and operational policies)

Plan to be presented to Fire Chief’s Association and Municipal Managers for consideration

Municipalities required to adopt auto-aid agreements
A Major Objective of the Regional Communications System is Transparency: it is working...

Prior to consolidation, there was no overall countywide performance data that could be used to evaluate operations - today there is

Information and progress on Broward County’s Regional Communications System can be found at the following website location: