

MARJORY STONEMAN DOUGLAS HIGH SCHOOL
PUBLIC SAFETY COMMISSION MEETING

BB&T Center, Chairman's Club
1 Panther Parkway
Sunrise, Florida 33323

July 11, 2018

8:30 a.m. - 5:30 p.m.

1 COMMISSION MEMBERS/ATTENDEES:

2 SHERIFF BOB GUALTIERI, Chair

3 DET. CHRIS LYONS

4 RICHARD SWEARINGEN, Commissioner - Florida
5 Department of Law Enforcement

6 MAX SCHACHTER, Parent of Victim

7 LARRY R. ASHLEY, Sheriff - Okaloosa County (via
8 phone)

9 MELISSA LARKIN SKINNER, CEO - Centerstone of Florida

10 MICHAEL CARROLL, Secretary - DCF

11 JAMES HARPRING, Undersheriff/GC - Indian River
12 County

13 GRADY JUDD, Sheriff - Polk County

14 LAUREN BOOK, Senator - District 32

15 RYAN PETTY, Parent of Victim

16 SHAWN BACKER, Deputy Chief - Coral Springs Police
17 Department

18 KATHY LIRIANO, Communications Administrator - Coral
19 Springs 911 Emergency Communications

20 KEVIN LYSTAD, Chief/President - Florida Police Chief
21 Association

22 DOUG DODD, Commissioner - Citrus County School Board

23 CINDY CAST - Miami-Dade Communications

24 JUSTIN SENIOR, Secretary - AHCA

25 TRACY JACKSON, Director - Broward County Regional
Emergency Services and Communications

BRETT BAGG, Assistant Director - Broward County
Regional Emergency Services and Communications

ALFONSO JEFFERSON, Assistant County Administrator

1 ANGELA MIZE, Assistant Director - Regional 911
Center

2 CHIEF FRANK BABINEC - Coral Springs Parkland Fire

3 NICK SIMONCINI - Florida Department of Law
4 Enforcement

5 DANIEL SANCHEZ - Motorola

6 JOSE DE ZAYAS, Radio Systems Administrator - Broward
County

7
8 Also present:

9 TONY MONTALTO

JEFF OSTROFF

10 MICHAEL SIRBOLA

11 I-N-D-E-X

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1 (Thereupon, the following meeting was had:)

2 CHAIR: We are reconvened for day two of
3 the Commission Meeting. We have today on the
4 agenda everything to do with communications, so
5 we're going to begin this morning talking about
6 the 911 system here in Broward County. There
7 are three presenters on that topic. The first
8 is going to be from Broward County government.
9 The second will be from the Broward County
10 Sheriff's Office, which is intertwined with
11 Broward County government in the regional
12 communication center, as you'll hear about.
13 And then the third is from the Coral Springs
14 Police Department, which operates its own
15 communications system.

16 There's been a lot discussed regarding the
17 communications on February 14th, and how having
18 the regional 911 center and then two cities
19 within Broward County who also operate their
20 own 911 centers, and how that played out and
21 affected the response on February 14th, so it's
22 important to know how the system works, the
23 history of the system, where it is today, plans
24 for going forward, and the nuances of it.

25 I've met over the last month with Bertha

1 Henry, who is the county administrator down
2 here in Broward County. The regional
3 communications center comes under her. I've
4 talked to her several times, and she had
5 planned to be here herself this morning to do
6 this presentation, unfortunately she had a
7 death in the family and had to fly out Monday
8 night, but she will be here tomorrow morning as
9 we wrap up, and she's asked for an opportunity
10 to address the commission, so she will be here
11 when she gets back tonight.

12 But this morning in representing Ms. Henry
13 as the county administrator is Tracy Jackson,
14 and he is the Director of Broward County's
15 Regional Emergency Services and Communications,
16 so I'll ask Mr. Jackson to come up and begin
17 the presentations on 911. Welcome, Mr.
18 Jackson.

19 PRESENTATION: 911 COMMUNICATIONS SYSTEM BROWARD
20 COUNTY

21 MR. JACKSON: Good morning, Sheriff, thank
22 you. Good morning members of the board. Just
23 by way of familiarization before I actually get
24 into the presentation, I'm new to the team but
25 I'm not new to public service. I spent

1 twenty-one years in the City of Miami
2 Department of Fire Rescue. In that capacity I
3 had the pleasure to pass through most of the
4 ranks, and deal with detailed environments such
5 as hazardous materials, EMT. I became a
6 paramedic, state certified. I was a BLS
7 instructor at the Institute of Criminal Justice
8 and received a promotion later on in my career
9 to run the Miami Fire Rescue Communications
10 Center, a National Academy of Emergency Medical
11 Dispatch accredited center.

12 As the Chief of Communications, I was also
13 tasked with the responsibility for the radio
14 systems and upkeep, including the portables,
15 all the mobiles, all the landlines, and we all
16 were responsible for the CAD system, as well as
17 the dispatch. So, it's with some understanding
18 of dispatch systems, and how those things work,
19 both as a user and as an administrator is the
20 perspective I'm coming from. Ms. Henry is not
21 here today. Obviously, I'm not her, but this
22 morning we're just giving an overview of the
23 regional 911 system, kind of how we got to
24 where we got, there'll be some details there.
25 I'm told that you all have the slides in your

1 packets, so I won't read them to you, but I
2 will try to highlight the things that we think
3 are important for you to consider as you move
4 forward.

5 CHAIR: Mr. Jackson, I'm just going to ask
6 you to do a favor, me a favor here, because I
7 think it will help everybody out. We have a
8 lot of different disciplines represented on
9 this commission. Of course you have the public
10 that's here, and watching, and I do it myself,
11 I tend to shorthand and use a lot of acronyms,
12 but I'm just going to ask as you are the first
13 presenter on this topic that as you're talking
14 about things if you could try and spell out
15 some of those terms and terminology I the
16 acronyms, especially things like CAD, and other
17 shorthands that we all use in casual
18 conversation, because there's a whole lot of
19 people here that would benefit from you
20 spelling that out. So, if you could do that
21 for us I'd greatly appreciate it.

22 MR. JACKSON: I appreciate it, sir. I'll
23 be happy to do so.

24 CHAIR: Thank you.

25 MR. JACKSON: And thank you in advance for

1 reminding me if I should vary.

2 CHAIR: No problem. Thank you.

3 MR. JACKSON: Okay, let's try the
4 presentation. Historical perspective, there is
5 a number of factors that influence how we got
6 to where we got today in Broward County. Chief
7 among those were the annexation process that
8 the County undertook, and the expansion of
9 contractual services between BSO and the
10 municipalities, charter amendments, and finally
11 the county commission agreeing to finance this
12 regional system, which as you'll see later was
13 a pretty wise and extensive undertaking for
14 them.

15 Annexation policy, this slide has some
16 background on the policy establishment in 1997,
17 kind of the reasons why they were doing it.
18 What I want to call your attention to here is
19 ninety nine percent of the population in
20 Broward, as your slide shows you there, ninety
21 nine percent is incorporated somehow, whether
22 it's in the county, or whether it's one of the
23 thirty-one municipalities, so there's actually
24 less than one percent of the population that's
25 in an unincorporated area.

1 On Page 5, there's actually a table with
2 detailed breakdowns that you can go back and
3 look at at your leisure, and you'll be able to
4 see, you know, the numbers that are bearing
5 that first statement out. The reason for that,
6 as I advance forward to 6, is that law and fire
7 services traditionally are municipal functions,
8 so the county with less than one percent of a
9 population in an unincorporated doesn't have a
10 statutory responsibility to provide these
11 services, but they chose to. They chose to be
12 able to provide a service level that they felt
13 was going to be beneficial for everyone, you
14 know, without respect to the percentage of
15 people.

16 One of the outcomes of this annexation
17 policy was an increase in contracted services
18 for fire, police, and EMS. The next slide is a
19 listing of some of those municipalities and the
20 services that they're receiving. You can see
21 that at your leisure. Again, it's a
22 considerable list, and it's a part of the
23 provision of the regional services to the
24 municipalities in the county. And advising to
25 slide 8, we're going to talk a little bit now

1 in detail about the law enforcement and fire
2 services. So, you see that in July 2003 fire
3 and EMS service was transferred by county
4 commission to BSO via an agreement, and pretty
5 soon thereafter they also transferred
6 communications technology, which is the group
7 that's responsible for maintaining what they
8 call the, the whole 911 system, which is the
9 phones and the lines they run on, the computers
10 that all talk to each other through the
11 computer aided, computer aided dispatch system,
12 the radios and other equipment, so all the
13 things that are used to provide the systems
14 access to 911 services for the citizens. That
15 was 2003.

16 In 2012 discussions began around replacing
17 the aging radio system. The cost estimates
18 that began to come in were tens of millions of
19 dollars for the system. Looking forward they
20 decided that there was going to have to be a
21 large project undertaken to ensure that the
22 county could face the future, and as a part of
23 that forward looking in February 2013 the
24 office of communications technology was
25 returned as an agency under county government.

1 The next slide is another piece of
2 information. You'll see that it says 2002
3 charter change. The county commission it says
4 will establish a county wide communications
5 infrastructure for fire and emergency medical
6 services. The point of this charter change was
7 to set the future, because the county wanted to
8 be able to have everybody benefit from this
9 regional system. All service providers utilize
10 the elements of the communications
11 infrastructure. And the next line is
12 particularly important, facilitating closest
13 unit response for life threatening emergencies
14 and support for regional specialty teams. The
15 division even then was to begin to craft
16 something that would allow the highest and best
17 level service for everybody in the county. And
18 the forward thinking at that time, this was the
19 sea of it, this was the root of it.

20 The county developed regional inter-local
21 agreements, and those things depicted what the
22 capital investments would be and would be going
23 forward into the future. As a part of this
24 process a communications task force was
25 created. It was later named the Broward County

1 Consolidated Communications Council. That was
2 composed of many people from law, I'm sorry,
3 BSO, fire and EMS disciplines, as well as
4 county administrative staff. They came up with
5 a list of key recommendations, which I won't
6 read to you here, you know, you have them in
7 your packets, but these are some of the things
8 that were said in tone and direction of the
9 system, and of the interoperability ideas going
10 forward, obviously improving service, faster
11 response times, and things of that nature,
12 which is something that everybody here would
13 agree would be good ideas.

14 There was also a committee from the
15 administrative city manager level that was
16 created, and they were tasked with looking at
17 it from their side and finding the things that
18 they would need to do as cities in this county
19 administration that would help to gel the
20 system. They had some key recommendations as
21 well, which we'll see in our next slide.
22 They're listed there, six key recommendations
23 from the implementation committee.

24 In the second slide it says Broward County
25 takes the lead in the coordination of the

1 communications professionals among the current
2 E911 operators to address consolidation of the
3 sites, the infrastructure, the respect of
4 staffs, and the establishment of a professional
5 structure with accountability based upon
6 performance metrics. Those things have been
7 done and are continuing to be done. There's
8 also methodologies that they needed to develop
9 that the county put in place to be sure that
10 this process would end up in the place where it
11 was originally envisioned, with the high level
12 of service and protection to the citizens of
13 Broward County.

14 Before consolidation, a quick snapshot,
15 ten independent public-safety answering points,
16 they're called piece ops in your handout.
17 Those are simply the places where 911 calls are
18 received and processed. There were ten. The
19 cities are listed there. There were five
20 independent radio systems, meaning everybody on
21 the list there controlled their own radios,
22 their own maintenance, the frequencies, the
23 channels, et cetera. And there were also seven
24 independent computer aided dispatch systems.
25 Again, those are the systems into which the

1 information from the call is input, which
2 provide recommendations for dispatch or
3 response based upon the nature of the call, and
4 the nature of the situation surrounding the
5 call. With all those things the county was,
6 and remains, the designated 911 coordinator by
7 state statute.

8 Before consolidation, in our next slide,
9 slide 14, there is some idea of the same of the
10 major infrastructure projects that were
11 undertaken as a result of deciding to proceed
12 down a regional path. All the things you see
13 listed there were necessary to be able to
14 provide a cohesive public-safety radio system.
15 Many components are needed to be able to make
16 sure that everything gets done decently and in
17 order. The projects total at that time was \$75
18 million all the way across the board.

19 Slide 15. The consolidation was actually
20 initiated in May 2013. There was a staff that
21 was placed in control of the initiation and the
22 consolidation. We also want to note that as
23 this consolidation was completed on October 1st
24 all the employees of the independent
25 public-safety answering points were offered

1 employment within the consolidated system. The
2 bottom note is also important. Plantation and
3 Coral Springs were invited and did participate
4 in discussions during this system
5 consolidation.

6 Next to touch on a couple of key points
7 about a government structure. There are county
8 inter-local agreements with all of the
9 municipalities which allow the municipalities
10 to voluntarily join the system, has the terms
11 and conditions for participation. It
12 establishes a transition path for the people,
13 the municipalities that choose to join the
14 system, and it provides for the performance
15 standards.

16 The counties responsibility, and the
17 municipalities' responsibilities are clearly
18 outlined in these agreements. There have been
19 boards established, again, to pull all of these
20 disparate pieces into one cohesive unit. The
21 system governance boards, we call them, there
22 are a few there, there's a board for computer
23 aided dispatch, law and fire emergency medical
24 services, an operational review team. These
25 committees are established to ensure that field

1 operational issues that could affect the system
2 become discussed, brought up, discussed, worked
3 out, and then incorporated to continually
4 increase the level of service.

5 As a process these boards have a goal, and
6 an activity of working with all the
7 stakeholders to continue the implementation of
8 the system wide functionality. It's a
9 continuous process. As things are discovered
10 they bubble up into these places for
11 discussions to take place, recommendations are
12 forwarded, and the system is adjusted to be
13 optimized to serve the city and the counties
14 that we're in today.

15 Thank you. Slide 18, post consolidation,
16 where we have the 10-5-7 snapshot, this is a
17 different one now. There's now three locations
18 in the regional public-safety answering points.
19 It's on system, so a call that comes into the
20 system could go to any one of the three
21 locations. Plantation maintains an independent
22 system with a separate computer aided dispatch
23 system, as does Coral Springs. However, the
24 user groups that we mentioned before, they
25 still include participation from those

1 municipalities.

2 We continue, the county continues to
3 discuss the possibility and benefits of Coral
4 Springs and Plantation joining us while
5 remaining, I'm sorry, joining our computer
6 aided dispatch while remaining an independent
7 public-safety answering point. The door is
8 open, and, you know, they made decisions based
9 on what they think are the best benefits for
10 their community. We honor and respect that,
11 and we're endeavoring to put things in place
12 that will allow them to feel more comfortable
13 and join us, the county that remains the
14 designated E911 coordinator through all these
15 processes.

16 Slide 19, consolidation continuing. After
17 things were done, kind of baked in, set in
18 place, unveiled, they threw the switch, the
19 county then contracted an outside entity to
20 come in and say evaluate this. These weren't
21 goals, these were the things we were looking to
22 accomplish, tell us whether or not we did what
23 we set out to do. The company selected to
24 perform this review was Fitch & Associates, and
25 their primary goals were to identify areas for

1 improvement, and to ensure that our policies
2 and our procedures did align with and follow
3 and reflect best practices.

4 Slide 20, out of this consultation there
5 were several recommendations made. Here's a
6 snapshot of the major recommendations, along
7 with some time frames kind of tacked onto the
8 end of them. I want to call your attention
9 about the third notch down to implement
10 emergency fire protocol, implement emergency
11 police protocol. What those are, are call
12 taking systems that would allow the call taker
13 dispatchers to quickly determine the
14 appropriate level of response for any
15 emergency.

16 In that determination they can quickly
17 then get the right resources moving at the
18 right time to get the right result. It's
19 already happening on the emergency medical
20 side, and those two initiatives are also well
21 under way. I also want to call your attention
22 to one bullet one up from the bottom where it
23 talks about the closest unit response, which
24 you can recall was a vision of the county in
25 establishing this looking forward, and that is

1 also well under way. Those discussions are
2 well under way with the fire and police
3 organizations. They've committed to it in
4 writing, to the county administrator, and there
5 are teams actively working right now to make
6 that a reality.

7 The next slide is something you can look
8 at in your spare and flexible time. It's
9 simply kind of a snapshot of some of the goals,
10 some of the numbers, and a comparison of
11 standards under the, under higher standards, a
12 then and now snapshot of where we were and
13 where we are today. This ends the very quick
14 very broad overview of the dispatch side. Mr.
15 Sheriff, I'd invite any questions if anyone has
16 any at this time.

17 CHAIR: Commissioners, have questions?
18 Yes, Sheriff Ashley.

19 SHER. ASHLEY: I'm not sure if you will
20 know this, but what is throttling? Have you
21 heard that term throttling before?

22 CHAIR: We're going to get to that this
23 afternoon, if you'd hold on to that, because we
24 want to focus here, we want to try and focus
25 this on 911, CAD, and the dispatch side, and

1 this afternoon we're going to get into the
2 radio side, and we're going to have experts on
3 radio. So, that, and the throttling, and fail
4 safe, and all of those other things, if you
5 don't mind holding that until we get to those
6 people this afternoon.

7 CHIEF LYSTAD: Thank you for your
8 presentation. I just have one question on one
9 of your slides. The slide before consolidation
10 you list out \$75 million worth of project
11 recommendations that came out of that review.
12 Can you tell me how many of those projects have
13 actually been completed, if any of them?

14 MR. JACKSON: I believe you're talking
15 about slide --

16 CHIEF LYSTAD: Slide 14.

17 MR. JACKSON: Slide 14. I'm going to ask
18 for some assistance from Brett Bagg, our
19 assistant director, but I believe that with the
20 exception of the top two, which are the local
21 government radio system, we'll talk more about
22 that this afternoon, there's actually a
23 timeline, you'll be able to see when that's
24 coming online, which will be the first quarter
25 of next year. And we'll also talk about the

1 public-safety radio system this afternoon, and
2 that will be fully online the fourth quarter of
3 next year. And Brett, you can correct me if
4 I'm wrong, everything else has been completed?
5 Yes, sir.

6 CHIEF LYSTAD: Okay, thank you.

7 UNDER SHER. HARPRING: You have two
8 municipalities that are not involved in the
9 consolidated system, whether specific to them
10 or generally what if any operational benefit is
11 there to maintaining an independent PSAP, given
12 the goal of closest unit response, and cohesion
13 consolidation, maintenance of best practices
14 and standards, and measurement metrics across
15 the board, it would seem to make common sense
16 that independent PSAPs would not benefit
17 operations and public-safety. Can you comment
18 on that please?

19 MR. JACKSON: Yes, Mr. Commissioner, I
20 could. My comment would be that the
21 municipalities would be best suited to answer
22 your question, because the county recognizes
23 the municipalities' responsibility to their
24 electorate, and their choices in serving their
25 electorate at the highest level as they deem.

1 From our perspective we want to provide
2 something, we want to make it so enabling that
3 everybody wants to be a part of it, but we I
4 think wisely leave that ultimate decision to
5 the municipality. They would be best able I
6 feel to respond to your question, and tell you
7 what benefits, if any exist.

8 UNDER SHER. HARPRING: So, essentially,
9 it's the -- I don't mean to put you on the
10 spot, the determination for them is probably
11 political as opposed to operational, based on
12 my knowledge of communications, law enforcement
13 communications, independent PSAPs.

14 MR. JACKSON: Mr. Commissioner --

15 UNDER SHER. HARPRING: You don't have to
16 answer that if you don't want to.

17 MR. JACKSON: I'm going to bow to your
18 knowledge in that regard. I appreciate the
19 comment. I have a clarification for -- I can't
20 see your name card from here.

21 CHAIR: Chief -- Chief Lystad.

22 MR. JACKSON: Chief, I've been informed
23 that fire station alerting, I inaccurately
24 reported that all those projects in slide 14
25 were complete. Fire station alerting has not

1 been completed. It has been rolled out, it is
2 being installed, it is not at a state of one
3 hundred percent completion. I apologize for my
4 error.

5 CHIEF LYSTAD: Thank you.

6 CHAIR: Sheriff Judd.

7 SHER. JUDD: You've had two major events
8 recently in Broward County, one being the
9 shooting at the airport and the other obviously
10 the shooting at the school. In your
11 professional opinion would the people of Polk
12 County, Broward County, and those needing
13 services in those two major events, been better
14 served with one united consolidated system?

15 MR. JACKSON: If I understand your
16 question you're asking my opinion.

17 SHER. JUDD: Professional opinion.

18 MR. JACKSON: My professional opinion on
19 the system's impact on the loss of life?

20 SHER. JUDD: No and yes. The entire
21 event, the entire emergency event, both the
22 airport shooting event, and certainly the high
23 school shooting event in Parkland, would the
24 people involved in the emergency and the people
25 of Broward County been better served with one

1 united communications and dispatch system?

2 MR. JACKSON: I will answer your question
3 by saying from the county's perspective our
4 communications system, the infrastructure, our
5 dispatch system worked the way it was
6 implemented. In terms of service level, I'm
7 not at liberty to speak for entities that have
8 not joined the regional communications system.
9 Again, I would defer to their expertise, and
10 their perception as to their service levels.

11 SHER. JUDD: So, professionally speaking,
12 you're not going to tell us that it worked just
13 fine with a bifurcated system, or it would have
14 been better for the first responders and the
15 victims had there been one united
16 communications and dispatch system.

17 MR. JACKSON: With respect, I can tell you
18 that the system worked as designed and as
19 implemented. What I cannot tell you with
20 certainty from where I stand is with the level
21 of understanding of everything that impacted
22 the operations on those days, and the people on
23 the ground, those actual things are
24 unfortunately beyond me, however my opinion is
25 everything that can be done to unify, and to

1 professionalize all communications of every
2 kind for any emergency, the better we get it
3 the better service can be delivered.

4 SHER. JUDD: Thank you very much.

5 CHAIR: So, the -- just for I guess
6 framework, so everybody understands where we
7 are and where we're going, Mr. Jackson is the
8 director of regional communications, and works
9 for Broward County government, and reports to
10 the county administrator, correct?

11 MR. JACKSON: Yes, sir.

12 CHAIR: So, the next person we're going to
13 hear from here in a few minutes is Angela Mize,
14 who is your assistant director, correct?

15 MR. JACKSON: She is not my assistant
16 director, she actually is at Broward Sheriff's
17 Office.

18 CHAIR: Right. But she functions as an
19 Assistant Director in the Regional
20 Communications Center.

21 MR. JACKSON: On the BSO side, sir, yes,
22 she does.

23 CHAIR: Correct. Correct, okay, on the
24 BSO side. So, but she is -- she is in there,
25 and you work with her, correct?

1 MR. JACKSON: I've met with her. I --

2 CHAIR: Okay. All right. Okay. So,
3 anyway we're going to hear from Angela, and get
4 the BSO perspective in more detail about how
5 the Regional Communicate Center operates, will
6 be the next presentation. So, this was, again,
7 high level from the county side. The next
8 presentation I think you'll hear, we'll get
9 more into the operational aspects of the
10 Regional Communications Center. So, that's
11 kind of the frame work that we're setting up.

12 Before 2003 when the county transferred
13 fire EMS to BSO, what was the communications
14 structure that the county operated prior to
15 2003?

16 MR. JACKSON: The communications structure
17 was detailed in the ten different PSAPs, five
18 different radio systems. Is that your
19 question?

20 CHAIR: Yeah, so -- well, I'm trying to --
21 I want to make sure that we understand, I want
22 to make sure I understand the landscape here,
23 and exactly how all this moved along over time.
24 So, prior to 2003 county, there was, the county
25 operated its own fire department?

1 MR. JACKSON: The county as -- no.

2 CHAIR: No?

3 MR. JACKSON: No, sir. No, sir. The
4 cities and municipalities operated separate
5 distinct departments.

6 CHAIR: So, BSO -- and then BSO took over
7 fire in 2003, fire EMS.

8 MR. JACKSON: There was a director who was
9 over the different fire agencies within each
10 municipality, and that entity was transferred
11 under the control of the Broward Sheriff's
12 Office, so there's a fire department direct --

13 CHAIR: I think somebody is going to help
14 you out here a little.

15 MR. JEFFERSON: I apologize. Alfonso
16 Jefferson, Assistant County Administrator.
17 Prior to 2003 the county did operate fire.
18 During that time frame it was decided by the
19 Board of County Commissioner, Sheriff at the
20 time, to transfer fire and EMS over to the
21 Sheriff at that particular point in time.
22 During that -- during that time, when you talk
23 about dispatch, and all those components of it,
24 BSO was responsible for dispatch for contracted
25 cities. There was still independent dispatch

1 centers out there, they had their own
2 independent, from Sunrise to Pembroke Pines, to
3 --

4 CHAIR: All right, okay.

5 MR. JEFFERSON: So, they all had their
6 independent dispatch centers during that, that
7 time frame. Then the charter came and took
8 place, during the 2002 time frame, that's when
9 the county came involved. When you look at the
10 county's responsibility that's when the county
11 came involved in as far as making sure that we
12 had the right infrastructure in place in order
13 for everybody, for the front-line fire
14 component, are able to have that closest unit
15 response type feel to it. We didn't get to
16 closest unit respond as of yet, but that's how
17 the county came involved from the financial
18 standpoint, and from the communicate
19 technology. That's how all the systems itself
20 started coming together so that we can have one
21 seamless communicate structure that was out
22 there.

23 CHAIR: So, in 2002, if you were in the
24 City of Hollywood in 2002, and I just want to
25 make this a little clearer, and you pick up a

1 landline in 2002, and you're in the City of
2 Hollywood, and you call 911, who is answering
3 your 911 call in 2002 in the City of Hollywood?

4 MR. JEFFERSON: In 2002 for the City of
5 Hollywood, it would have been through the City
6 of Hollywood during that time frame.

7 CHAIR: Okay, so if you're in the City of
8 Fort Lauderdale in 2002 and you pick up the
9 phone, hard line, and you call the City of Fort
10 Lauderdale, or you call, you call 911 in the
11 City of Fort Lauderdale, is it going to be
12 answered by the City of Fort Lauderdale?

13 MR. JEFFERSON: At the time, if I recall,
14 it would be the City of Fort Lauderdale that
15 would be answering that particular call. It
16 wasn't until, when you say May 17, 2013, that
17 we started the consolidation process, meaning
18 when we looked at the particular system, the
19 4C, or the Broward County consolidate
20 committee, and also the implementation board,
21 which included the city managers, during that
22 time frame the decision was let's identify
23 three public-safety answering points that we
24 need to have in the county for redundancy's
25 sake.

1 We looked at the south component of the
2 county, we looked at the central component, and
3 we looked at the north component, and the
4 locations that we looked at, there was multiple
5 locations. We did a facility assessment on
6 those particular facilities. We looked at can
7 we actually staff enough personnel in those
8 particular locations. Those facilities that we
9 currently have to date would identify as the
10 facilities that we need to have. From that
11 standpoint it depends on where the call came,
12 but the system is pretty much integrated all
13 together, so anything we have one PSAP that
14 potentially could be, go down for whatever
15 particular reason, we still answer calls in
16 other PSAP locations within the county's
17 regional system.

18 So, as the E911 administrator we work
19 directly with Plantation, with Coral Springs as
20 well, because even from a call taking
21 standpoint we are still integrated from a call
22 taking standpoint for the 911 component, but
23 from the dispatch component of it it's about,
24 in the county's opinion it's about, you can
25 still, in the slide, you can still remain an

1 independent dispatcher system, but come onto
2 the county's computer aided dispatch system.

3 CHAIR: So, I get that. So, just back up
4 with me for a second, let me just walk through
5 this. So, that -- go back -- go back to 2002.
6 So, you had, for 2002 you had a bunch of
7 different public-safety answering points, a
8 bunch of call centers where people called 911,
9 and depending upon the city that they were in
10 in Broward County, their 911 call was answered
11 in a whole bunch of different places, is that
12 right?

13 MR. JEFFERSON: It depends on if it's a
14 landline versus a cell phone.

15 CHAIR: Right, and that's why I'm --
16 that's why I'm making it landline, okay, it's
17 say --

18 MR. JEFFERSON: Okay, if it was a landline
19 it as directed to that particular city,
20 directed to that.

21 CHAIR: Right. Okay. Right, okay. So,
22 that's why I'm trying to make it easy with the
23 landline example. So, you got a whole bunch --
24 so if you called 911 and you were in the City
25 of Fort Lauderdale it was answered in Fort

1 Lauderdale, Hollywood the same thing, so you
2 had a whole bunch of different communicate
3 centers that then took the call, and the person
4 who is taking that call in 2002 would then
5 enter it into a computer aided dispatch system,
6 and the call would be dispatched out from the
7 center where the call came in.

8 MR. JEFFERSON: Correct. Every center
9 primarily had a separate disparate CAD system
10 at the time.

11 CHAIR: Right. And then so now -- now if
12 it was a cell phone in 2002, how were cell
13 phone 911 calls routed in 2002 in Broward
14 County?

15 MR. JEFFERSON: Well, and let's just say
16 hypothetical that you're making a cell phone
17 call out there, say right now, you are in the
18 City of Sunrise right now. It depends on the
19 cell phone tower --

20 CHAIR: I get it, but let's go back to
21 2002, not right now.

22 MR. JEFFERSON: Okay, the same, the same
23 concept.

24 CHAIR: Okay, so -- so if you -- so,
25 right. So, if you're, if you're in downtown

1 Fort Lauderdale on Broward Boulevard in the
2 middle of, the heart of downtown Fort
3 Lauderdale, and there's a tower right there,
4 and you're in 2002, and you pick up the phone
5 and you call 911, in 2002 you're in the middle
6 of Fort Lauderdale, the tower is in the middle
7 of Fort Lauderdale, it's going to go to the
8 Fort Lauderdale PSAP.

9 MR. JEFFERSON: It should. If that cell
10 phone call picks up from that cell phone tower,
11 yes.

12 CHAIR: Okay. Right. Right. Right. And
13 then but -- but then if you, if the call goes
14 in in 2002 and the caller, and they say where
15 are you calling from, and somehow it got routed
16 through the cell system, and they say what's
17 your address, and they gave an address in
18 Davie, okay, then, then they would have
19 transferred the call to the secondary PSAP,
20 which would have been in Davie, correct?

21 MR. JEFFERSON: Absolutely. In that
22 scenario that you're presenting yes.

23 CHAIR: Okay. Right. Right. So -- and
24 that's the problem with landline versus
25 cellular is, is that landline, it can go

1 directly to the public-safety answering point
2 that has responsibility because it's a static
3 location, and cellular, it's not static, it
4 depends on the tower, and even today you can
5 have cell phone calls where somebody calls 911
6 that it ends up in the, quote, wrong place,
7 because you have more than one location taking
8 calls in the county.

9 MR. JEFFERSON: Correct.

10 CHAIR: Okay. So, in 2003 then there was
11 a consolidation of fire EMS, or a transfer, let
12 me put it that way, a transfer from the county
13 over to BSO, who assumed responsibility, I
14 think it was under Sheriff Jenne then in 2003
15 for fire EMS.

16 MR. JEFFERSON: As mostly from a regional
17 service standpoint. Remember there's still
18 independent fire and EMS for the cities.

19 CHAIR: Right, but it didn't -- but that
20 didn't affect communications.

21 MR. JEFFERSON: No.

22 CHAIR: Okay, so the next thing, so even
23 though the sheriff took over service delivery
24 with some fire and EMS in 2003 it wasn't until
25 2013 that there was consolidation of

1 communications.

2 MR. JEFFERSON: Yes.

3 CHAIR: Okay. So, then in 2013 with a
4 consolidated communicate center is, is that any
5 911 call that went into the consolidated
6 communicate center, other than Coral Springs
7 or, any, any call from any place other than
8 Coral Springs or Plantation or Parkland -- no,
9 I'm sorry, let me back that up. Anything other
10 than Coral Springs or Plantation from a hard
11 line went into the 911 center, is that right?

12 MR. JEFFERSON: Any hard-line calls from
13 Plantation, Coral Springs go directly into
14 those PSAPs.

15 CHAIR: Right, but every place else in
16 Broward County, whether you're in Hollywood,
17 Fort Lauderdale, Davie, wherever you are and
18 you're calling from a hard line after 2013 it
19 went into one room, one place, and one --

20 MR. JEFFERSON: Comes directly into the
21 county's regional dispatch system.

22 CHAIR: Right. Right. Okay. And so --
23 and anything that's a hard line in Plantation
24 or Coral Springs then goes into the Coral
25 Springs dispatch centers.

1 MR. JEFFERSON: Yes. Or it goes into the
2 Plantation or Coral Springs, not --

3 CHAIR: Right. Plantation or Coral
4 Springs, right. So, then with cellular though,
5 with cellular is, is that because you have
6 three PSAPs, is, is that you have, you could
7 have a call that comes into the regional
8 communication center, somebody called 911 from
9 a cell phone, and let's say they're in Davie,
10 but the accident that they're calling in occurs
11 in Coral Springs, so then your communication
12 center has to transfer that to Coral Springs.

13 MR. JEFFERSON: Or vice-versa.

14 CHAIR: Right. Right. Correct. So, you
15 have call transfers, and then that applies to
16 -- now when you get into CAD is, is that the
17 city today, after 2013 with CAD is, is that how
18 many different CAD systems are there?

19 MR. JEFFERSON: There are three.

20 CHAIR: Coral Springs, Plantation, and the
21 regional.

22 MR. JEFFERSON: Yes.

23 CHAIR: Okay, So, the City of Hollywood
24 police officers on their mobile CAD is the same
25 mobile CAD that Fort Lauderdale is using.

1 MR. JEFFERSON: Yes, from a stand, from a
2 regional system, yes.

3 CHAIR: Right. Right. Okay. All right.
4 So, the CAD -- but as we'll hear, and I don't
5 want to get into it now, but just, is that, but
6 Fort Lauderdale, as an example, although it's
7 all the same CAD, it's all coming into the same
8 regional communicate center, and the mobile CAD
9 is the same, but Fort Lauderdale has its own
10 radio system.

11 MR. JEFFERSON: Yes, totally separate, and
12 --

13 CHAIR: We'll get into that this
14 afternoon.

15 MR. JEFFERSON: Yeah, just for
16 clarification CAD and radio really is two
17 separate systems --

18 CHAIR: Right, I get it. That's why we're
19 separating the, the presentation.

20 MR. JEFFERSON: Correct.

21 CHAIR: Okay, so and then -- and then the
22 difference, and the uniqueness here with
23 Parkland, is because BSO is the police provider
24 in Parkland under contract.

25 MR. JEFFERSON: Yes.

1 CHAIR: And so, this is why we have that
2 situation where Parkland, Parkland calls that
3 are hardline calls go to the regional
4 communicate center if you call 911, but if
5 you're calling from Parkland 911 on a cell
6 phone it goes to Coral Springs because Parkland
7 contracts with Coral Springs for fire.

8 MR. JEFFERSON: Correct.

9 CHAIR: Right. Okay. All right, I just
10 want to make sure I get the landscape. I want
11 to make sure we get this right, because we've
12 been talking about it, and I just want to make
13 everybody has an understanding of how this
14 system originated, how it has progressed, and
15 how we got to where we are today, and what the
16 current, what the landscape was, and what it is
17 today, because --

18 MR. JEFFERSON: Correct. And I -- and I
19 can say to you, Chair, if you look at the last
20 that Mr. Jackson went over it tells about call
21 transfers, and how call transfers with the
22 regional consolidated system, we have ninety
23 three percent reduction in call transfers.
24 There are call transfers that still occur that
25 we believe could be eliminated because of, it's

1 the infrastructure itself. We recognize that
2 cities, they, they're independence, and we
3 don't want to get into their particular items
4 because it's a voluntary system, but we believe
5 the infrastructure itself can totally or
6 essentially eliminate call, call transfers.

7 CHAIR: So, I'm just going to, for a
8 second, just so everybody, because this can get
9 confusing, and I want to make sure that we all
10 stay on the same page about this, and you all
11 are informed about it, I'm going to take the
12 liberty here for a second and explain this call
13 transfer is, is that this is not unique to
14 Broward County, because this happens in other
15 parts of the state, it happens in other parts
16 of the country.

17 You have PSAPs, which are primary public-
18 safety answering points, so if somebody calls
19 911 it goes into a center that's a primary
20 public- safety answering point. That's the
21 place where the 911 call is answered. And what
22 I think, I think most people would think is, is
23 that where that call is answered by the 911
24 operator is the best place for that call then
25 to be conveyed to law enforcement, so it can be

1 dispatched.

2 So, when a call comes into a certain room,
3 and the person is talking to the caller who
4 calls 911 in an emergency, they can keep that
5 person on the line, they can get the right
6 information, they can then send it to the
7 dispatcher who is sending law enforcement,
8 sending EMS, sending fire, whoever that first
9 responder is. When you don't have that
10 situation where the person who is receiving the
11 call has the ability to dispatch and
12 communicate with the first responding unit then
13 they have to transfer that call to the location
14 where the dispatcher can communicate with the
15 cop, as an example, and that is called a
16 secondary PSAP, or a secondary public-safety
17 answering point.

18 And when the call is transferred it
19 inherently raises issues and concerns, and can
20 cause problems, because I can tell you from
21 personal experience with this is, is that there
22 are very few people in our communities cross
23 Florida, and this isn't unique to Broward
24 County, that think when they call 911 and
25 somebody answers the phone and says this is

1 911, is this a fire, police, or medical
2 emergency, and they say police, and they way,
3 well, what's your address, and generally what's
4 wrong, and you've told them, they say hang on a
5 second, I'm going to transfer your call to
6 somebody else, and you've got to tell your
7 story all over again, because that's what
8 happens when calls are transferred.

9 In a whole bunch of the time when calls
10 are transferred from the place that the 911
11 operator is getting that information from the
12 person who's hysterical because somebody is
13 breaking into their house, or here's a bad car
14 wreck, or whatever other that emergency is, is,
15 is that when a person says hold on about a good
16 percentage of time in my, and we'll hear from
17 others, and they can express their views on it,
18 but in my experience with it is the caller
19 hangs up, and the calls are, they hang up on
20 transfer, and then when you try and call back
21 because you're trying to get the most
22 information you can in the secondary PSAP they
23 get voice mail, they're not able to get back to
24 the person, and it causes operational issues
25 from a law enforcement perspective because as

1 the cops are responding, and they told the
2 original person in the original 911 center,
3 hey, somebody is breaking into my house right
4 now, the cop on the street wants to know is the
5 person still there, what's the description of
6 the person, is the person armed, all this other
7 information, so the cops are saying to the
8 dispatcher that the call got transferred to in
9 the secondary PSAP give me all this
10 information, they're saying we contact the
11 person because they hung up on transfer and we
12 can't call them back because it's going to
13 voice mail.

14 And -- and citizens get frustrated because
15 their calls are being transferred to a second
16 place where they got to tell their story again.
17 So, when we're talking about call transfer, and
18 we're talking about primary PSAPs, and we're
19 talking about secondary PSAPs, that's the
20 process. That's how it works, and those are
21 the, those are the issues with it.

22 Now, is it successful sometimes, and does
23 it work, sure, is that somebody calls and says,
24 they answer the phone, what's thank you
25 emergency, fire, police, or medical, oh,

1 police, what's wrong, oh, I, you know, I want
2 to report a burglary, what's your address, the
3 put it in, they see it's, okay, we don't
4 communicate, let's say here it's Plantation,
5 hold on a second, they transfer it over to
6 Plantation, Plantation call taker picks up the
7 phone and says what's your address, what's your
8 emergency, and they tell it all over again, and
9 then they take the call and they hold it, and
10 they are successful in dispatching it the way
11 that it should be.

12 So, but it doesn't happen that way all the
13 time, and it is a redundant system where people
14 have to tell their story twice, and they have
15 to talk to two people before the cops get
16 dispatched. That's just how it works. So,
17 again, just hopefully I want to make sure that
18 we're all on the same page, and those of you
19 that are not familiar with PSAPs, and secondary
20 PSAPs, and call transfer, and how that works,
21 that you have an understanding of it, so as we
22 talk about things today, and you hear from BSO,
23 and you hear from Coral Springs, that's the
24 process that is in place today in Broward
25 County as it relates to Plantation and Coral

1 Springs.

2 Now, it's come a long way because you used
3 to have a lot more of that, as we were talking
4 about with the history, back when you had ten
5 different PSAPs and that 911 call came in from
6 a cell phone, is that because it's not exact,
7 is, is that it could come into the wrong place,
8 and they were transferring a lot more calls
9 prior to this consolidation than what they are
10 today. But again, I want to stress that
11 Broward County is not alone in this, this is
12 happening in a lot of other places in the
13 state, so it is, it is a problem in some
14 respects, but anyway.

15 Does anybody -- Mr. Schachter, go ahead.

16 MR. SCHACHTER: Thank you for your
17 testimony. Obviously in a perfect world it
18 works the way you say, but we have to also
19 recognize that if the city does not think the
20 county system is functional, you know, they
21 might elect to retain, you know, their
22 independence, if they doubt that the system
23 will perform as, as we need it to, and
24 obviously Coral Springs and Plantation had,
25 they were correct in, in their assumption that

1 the county radio system was going to fail, as
2 it did at the airport, and had problems, as
3 Sheriff Judd stated, and at the, you know, the
4 Marjory Stoneman Douglas massacre.

5 My question is what, what are you doing to
6 encourage or incentivize Coral Springs and
7 Planation to get on the county CAD?

8 MR. JACKSON: There was a statement and
9 then a question. The radio, the county radio
10 system, I think there's a separate presentation
11 this afternoon where the idea of what happened
12 with that system could be more clearly
13 addressed and discussed. I just want to state
14 that it's my understanding that the system, the
15 system itself functioned the way it was
16 supposed to in function. In terms of incentive
17 -- I'm sorry.

18 MR. SCHACHTER: So, are you stating that
19 the county radio system was expected to not
20 work when you have a mass casualty situation?

21 CHAIR: Mr. -- Mr. Schachter, if -- just
22 like I asked Sheriff Ashley, if you would
23 please hold that question until this afternoon
24 when we talk about radio systems, because we're
25 going to, we're going to begin and have a whole

1 discussion, and there may be other people that
2 are in a better position to answer that
3 question. So, we just keep this limited to
4 dispatch, 911, CAD, that end of this, and then
5 we'll get into the radio stuff and you can ask
6 all the questions you want this afternoon if
7 you would please.

8 MR. SCHACHTER: Okay. Okay.

9 CHAIR: That way I think it's easier for
10 everybody to understand it if we
11 compartmentalize this.

12 MR. SCHACHTER: Okay.

13 MR. JEFFERSON: So, if I can go and talk
14 about the incentive for Plantation and, and
15 Coral Springs to join the system, just like any
16 other municipality one incentive for this, for
17 all, for their residents, for all of Broward
18 County residents to eliminate call transfers.
19 That's one in particular incentives that are
20 out there for Broward County, and for
21 Plantation, and Coral Springs as well.

22 Two, it's when you look at the CAD system
23 -- they're -- they're currently maintaining
24 their own CAD systems today. There is a
25 financial incentive for them to join the county

1 wide CAD system because the county becomes
2 responsible for the CAD, the infrastructure,
3 and all that particular component associated
4 with it.

5 Another component, if for, hypothetically
6 if they choose that they don't want to run
7 their own centers anymore then it's the, also
8 the financial from the personnel side of it as
9 well. But ultimately, ultimately the incentive
10 is the call transfer, is to eliminate the call
11 transfer component associated with the system
12 itself, itself. That's why it is our beliefs
13 from the county's perspective that, you know, a
14 common CAD system is, is ideally is what will
15 eliminate the call transfer component, so that
16 is the main incentive for Plantation and Coral
17 Springs, and overall for Broward County.

18 MR. SCHACHTER: Several months ago we had
19 an outage with the county radio system where
20 the whole system went, the 911 system went down
21 for over an hour, and there was a gentleman
22 that passed away, and your county operators did
23 not fail the system as a redundancy to get it
24 back up and running, you waited to call the
25 tech, and did not remedy the situation, you

1 know, for over an hour you had no, no, people
2 could not get through. Are you -- are you
3 stating now that there is no advantage to
4 having separate CAD systems, especially in this
5 situation when, you know, we had problems, and,
6 you know, you couldn't do the patch and then
7 Coral Springs was able to do it.

8 MR. JEFFERSON: Well, we're talking about
9 multiple different systems, and first let me
10 clarify multiple different systems. One is
11 you're talking about the 911 phone system,
12 you're talking about the computer aided
13 dispatch system, and you can talk about the
14 radio system. Totally separate systems, okay?
15 So, let's -- let's go back. Yes, there was a
16 911 phone system outage that occurred, and we'd
17 be more than glad to share with this committee
18 the after-action report associated with that
19 particular 911 outage.

20 Yes, there was an issue that occur in the
21 911 phone system. That did -- that was down
22 for roughly about an hour, but it's not related
23 to the CAD system itself, so we can go -- we
24 can go through --

25 MR. SCHACHTER: It goes back to the

1 confidence that the other cities have in the
2 county radio system, that's my point.

3 MR. JEFFERSON: Well, again this is a
4 separate component. Radio system. 911 system.
5 CAD system. There -- there was a -- and again
6 we can share all the after-action reports that
7 happened with the 911 when the 911 system went
8 down, and what occur, and what the remedies
9 that were put in place. This is a large, large
10 system. There's major differences between our
11 system and what happens with Coral Spring and
12 Plantation system. There are major components
13 that are different.

14 Just, just to give you a very simple on
15 the 911 side of the house, in the county's 911
16 system we have what we call automatic call
17 distribution, meaning a call comes into the
18 system itself, it automatically populates
19 within, or goes directly to an operator, or a
20 call taking component. It's different on how
21 it's done in Plantation and Coral Springs where
22 they actually see phone ring. You really don't
23 see a phone ring within the county system at
24 all. And when you look at large urban systems
25 similar to this that's, that is a best

1 practice. There are many moving parts, many
2 technology components. Yes, it went down.
3 It's on -- it did go down from a 911 system
4 standpoint, but I can tell you there's after
5 action reports that we'd be more than glad to
6 provide to the commission, and what has been
7 done to make sure that doesn't occur again.

8 When it comes to our CAD system we believe
9 from a county, again from a county perspective,
10 a common wide CAD eliminates call transfers.
11 You have the same protocols, you have the same
12 items just to make sure that everything is in
13 dispatch in the same way so that it's, from the
14 calls transfer, that it does not occur. And we
15 think that will eliminate the need for a call
16 transfer, is a countywide same system when it
17 comes to dispatching.

18 CHAIR: So, just again, Mr. Schachter,
19 just to be clear with us, everybody is, is that
20 he's right, is, is that these systems are
21 related but not necessarily interrelated, is
22 that you've got to put it in three buckets,
23 you've got to visualize it. You've got the
24 radio system, which is how people are verbally
25 talking, right, the cops are talking to

1 somebody on the other end who is providing them
2 information. That's stand alone. That can
3 stand by itself.

4 You've got the CAD, which is computer
5 aided dispatch, and that is digital
6 communication, so it's somebody sitting here
7 that it is taking a call, transferring the call
8 to the dispatcher digitally, the dispatcher is
9 looking at the information and then sending it
10 out to the mobile CAD. So, in the cruisers
11 they have what they call a mobile CAD, which is
12 the software in the car, then there's software
13 that the call taker has, and there's software
14 that the dispatcher has. That's all stand
15 alone, and it's not dependent upon how they are
16 verbally communicated.

17 And then over here you've got the whole
18 911 system, which is cellular phones and
19 landlines that are calling into a place where
20 they've got the software. So, you've got three
21 distinct buckets that are related, but not
22 necessarily interrelated, and you can have, and
23 you can set it up in a way that the 911 system
24 could operate but you could still have
25 everybody on the same CAD so that, and the

1 other benefits to the CAD are not just where
2 they're communicating, but the units have GPS,
3 they can see each other, they know where each
4 other are, and from a closest unit response it,
5 it helps.

6 So, those are just three separate buckets,
7 and that's why we're going to talk about the
8 radio side of it this morning, so really what
9 this is focusing on is the CAD and the 911
10 buckets.

11 MR. SCHACHTER: Yeah, I mean obviously you
12 have a lot better understand of this than I do,
13 but my question is that Coral Springs and
14 Plantation have, have separate radio systems,
15 and that benefit us in this tragedy because the
16 county radios went down, so does that also hold
17 true for the CAD, those, those redundancies, is
18 my question.

19 CHAIR: So, and -- and you're making an
20 assumption there, and he mentioned to it, and I
21 would ask you to, we need to clarify, is, is
22 that -- and there's a difference, and you can
23 get into this this afternoon with the
24 presenters this afternoon. There's a
25 difference about whether the system didn't work

1 or whether the system worked as it's designed
2 to work, and that there was a problem that
3 occurred, but it wasn't a system failure. And
4 you can form your own opinion, but I ask you to
5 keep an open mind until you hear the
6 presentations on that this afternoon, because
7 what you're saying, and what your repeating is,
8 is what's been put in the public, and what the
9 word of mouth is, and what the media has
10 reported on, and you need to get the facts on
11 it, and then you can make, then, then we can
12 say whatever we want, but you got to have the
13 facts. So, we'll get into the radio stuff this
14 afternoon.

15 SHER. ASHLEY: Back to the, the CAD though
16 with these different communications systems the
17 computer aided dispatch in our particular
18 county populates our records management system,
19 so I was wondering the municipalities that are
20 on the regional CAD, do they have access to
21 that data, and who owns that data once it
22 becomes, once it goes into your record
23 management system.

24 MR. JEFFERSON: As part of the regional
25 and local agreements that were mentioned as a

1 part of this presentation we do have a records
2 management system. The municipalities own that
3 particular information, so they, they own that
4 particular, but all that information flows
5 right into those particular systems for the --
6 so they have a, a large records management --
7 they have all those particular systems --

8 SHER. ASHLEY: So, each of the
9 municipalities have access and own it.

10 MR. JEFFERSON: Yes. Even in the CAD
11 system those particular municipalities on that,
12 on the CAD system, they can run data from the
13 system, their particular data from the system
14 itself.

15 SHER. ASHLEY: Thank you.

16 CHAIR: Senator Book.

17 SEN. BOOK: Thank you so much, Mr. Chair.
18 Just from a -- we're talking about this as an
19 issue throughout this state, not unique to
20 Broward County, so I would imagine that there
21 are sheriffs like yourselves that maybe have
22 some of these issues, or don't. How have -- or
23 is it similar in some of your different areas?
24 How have -- how do we kind of navigate that
25 from a --

1 CHAIR: Well, it is different all over the
2 state, and some of us have these same issues.
3 I can tell you that in our county we have the
4 same issue, so I'll just give you an example.
5 And others can speak to it if they have and
6 answer your question if they have examples. I
7 can tell you that in Pinellas County you have
8 twenty-four different cities. There are
9 thirteen different cities that we contract with
10 where we are the police provider, but some of
11 the largest cities have their own dispatch.
12 So, St. Petersburg, as an example, has its own
13 dispatch.

14 In our building all the 911 calls come
15 into our building, they're answered in our
16 communication center, but every single, every
17 single police call, or somebody calls 911 in
18 Pinellas County, every single one, if you're in
19 the City of St. Petersburg you got to tell your
20 story twice. Every single one that call is
21 transferred after our 911 operator says fire,
22 police, medical, what's your emergency, what's
23 your address, tell me a little bit about you're
24 problem, they have to transfer the call, and
25 the person got to tell their story all over

1 again. And a good chunk of that time the call
2 gets disconnected on transfer.

3 We had a bigger issue with it prior to
4 2014 when we did some consolidation, and it was
5 worse. And, you know, Google the articles.
6 The Tampa Bay Times reported on it. Other
7 media outlets have reported on it. Citizens
8 get frustrated by it, because who in the world
9 thinks when you got somebody breaking into your
10 house, and you've told your story, and say I'm
11 afraid, it's 3:00 in the morning, this guy's
12 coming through the front door, and somebody
13 says, well, hang on a second, let me transfer
14 your call, and you got to tell your story
15 again. And -- and here's huge citizen
16 frustration with it.

17 And the same thing happens again with
18 cellular. Any time that you are calling 911
19 nobody thinks that you are going to be
20 transferred, or tell your story multiple times,
21 and that you're going to have that level of
22 redundancy. So, that is, you know, not
23 happening everywhere, but has happened in a
24 number of places in the state. And it's
25 getting better in some places, but it's still

1 happening.

2 SEN. BOOK: How -- how do we -- how can we
3 navigate that, or is it just this is sort of
4 what it is right now, it just is?

5 CHAIR: The only way to -- the only way to
6 navigate it is, is to get a hundred percent buy
7 in, and get everybody to participate in single
8 communication centers. And as you'll hear, and
9 everybody speaks for themselves on it, you'll
10 hear, I'm sure Coral Springs will have an
11 opportunity to present here in a little bit,
12 is, is that they have, some have concerns about
13 the system, some have their own reasons, and
14 they're really going to have to have answer
15 that themselves, as to why they feel, and I
16 think they have their reasons, but it's
17 nonetheless a situation where it still results
18 in a call transfer process.

19 SEN. BOOK: One other question. Is there
20 different procedures for each entity that may
21 be receiving those calls? So, let's say the
22 regional system, they have like a three-time
23 verification, like, you know, to check, to make
24 sure before they send, you know, folks out,
25 versus some of the, the different, like Coral

1 Springs and Planation for this example, that
2 has a procedure that may send somebody out
3 right away, is that --

4 CHAIR: Sure, you can have different
5 procedures, and some -- and one of the things
6 that Mr. Jackson referenced in this
7 presentation was there's a EPD, EFD, and EMD,
8 which is emergency medical dispatch, emergency
9 police dispatch, emergency fire dispatch. Some
10 use those, which are in the can protocols. You
11 know personally I'm not a fan of them, but
12 every, others swear by them, and so there are
13 some call centers where when somebody calls in
14 is, is that the dispatcher, or I'm sorry, not
15 the dispatcher, the call taker is using a
16 scripted protocol to ask only these questions,
17 and they follow this, and it's a decision tree,
18 if it's this then this, if it's this then this.

19 In others it's just free falling, and they
20 are just trained, and then they dialogue with a
21 person, so there's a whole bunch of different
22 ways, and a whole bunch of different protocols,
23 and you're going to find that vary probably
24 across the board, not just in Florida but
25 across the country.

1 SEN. BOOK: Thank you.

2 CHAIR: Commissioner Dodd.

3 MR. DODD: I know you said that your
4 system obviously is a very large, large system,
5 how many incoming lines are there for the 911
6 system in Broward?

7 MR. JACKSON: You said incoming lines?

8 MR. DODD: Yes, how -- how large capacity
9 of calls can the system hold as far as 911
10 calls, is there a limit on that?

11 MR. JACKSON: I think that's more on the
12 operational side. Do you know?

13 MR. JEFFERSON: We handle about 2.4
14 million calls on the annual basis, but when you
15 say how any at the time, coming in at the same
16 time?

17 MR. DODD: Yes. Yes.

18 CHAIR: I think -- Angela Mize from BSO is
19 going to come up here in a minute, and I think
20 she'll be able to answer some of that for you,
21 she's on the operational side.

22 MR. DODD: Okay, so -- but and then just
23 for another clarification point, the 911 outage
24 that you discussed was not a February 14th
25 event, was it?

1 MR. JEFFERSON: No, it was not.

2 MR. DODD: Okay, so I want to make sure
3 there's, you know, we're all clear on that, I
4 mean that the problem was with the throttling
5 of the radios, it had nothing to do with, with
6 the 911 system. And I know you had, thank you
7 goal is ninety, what, five percent of calls
8 should be answered within twenty seconds, is
9 that right, of --

10 MR. JEFFERSON: That's one of the measures
11 as part of the system. We still -- from a call
12 taking standpoint you still at the 90/10
13 component of it, ninety percent of the calls
14 answered within ten seconds. So, there's
15 multiple, multiple measures that we have in the
16 system that was, that the cities wanted to see
17 as part of the system. Some of those measures
18 have been modified based on the Fitch
19 assessment that Mr. Jackson talked about,
20 because they wanted to make sure that from a
21 best practice standpoint, that we were
22 measuring the right thing in the system. So,
23 there's multiple measures that go about
24 evaluating the performance of the system
25 itself.

1 MR. DODD: And then have you looked at the
2 Public Safety Communications accreditation,
3 that accreditation program?

4 MR. JEFFERSON: All a part, a part of our
5 system. All a part of our system. Accredited
6 centers --

7 MR. DODD: Through CALEA, it is -- is it a
8 Public Safety Communication accreditation?

9 MR. JEFFERSON: Yes, it is.

10 MR. DODD: Okay, thank you.

11 CHAIR: Sheriff Judd.

12 SHER. JUDD: I want to respond to Senator
13 Book. The determining factor on these systems,
14 local politics number one. Number two, local
15 control. And number three, the, the sense or
16 fear, or reality that the other entity is not
17 professionally providing the service. That's
18 what it all boils down to. And you can find as
19 many different systems and processes as you can
20 find different local governments.

21 CHAIR: Secretary Carroll.

22 SEC. CARROLL: You show a ninety three
23 percent reduction in transferred calls after
24 the consolidation. What is the actual
25 percentage of transferred calls of all the

1 calls you get?

2 MR. JEFFERSON: Well, we can definitely
3 get that information for you as a follow up. I
4 don't have that off the top, but we can get
5 that information for you.

6 SEC. CARROLL: Because you've consolidated
7 do the transferred calls that have left in the
8 system, is it primarily involving Plantation
9 and Coral Springs?

10 MR. JEFFERSON: Yes, primarily.

11 SEC. CARROLL: On the -- I'm looking at
12 your measure here where it says maintain
13 seventy eight percent of dispatching or
14 processing EMS calls within ninety seconds.
15 That's coming through that system too, right?

16 MR. JEFFERSON: Coming through our system.
17 We do not measure those components associated
18 with Coral Springs and Plantation, that is just
19 for the regional consolidated system.

20 SEC. CARROLL: Okay. But some of those
21 calls could originate with you and result in a
22 transfer of call, right?

23 MR. JEFFERSON: Possible, yes.

24 SEC. CARROLL: Okay. And then one more.
25 On the system down time, one-hour system down

1 time in a, with a system like this is
2 significant no doubt. Do you know what the
3 industry standard is for systems down time,
4 because I don't care what the technology is,
5 you're going to have down time with any
6 technology you have, what is the industry
7 standard around system down time?

8 MR. JEFFERSON: Well, I don't know off the
9 top what the industry standard, but I can tell
10 you it is from our standpoint, definitely the
11 county, administration for the county, it's
12 unacceptable for a system to be down.

13 Unfortunately, it was down. It is our goal to
14 make sure these systems stay, stay up and
15 functioning the way that they need to stay up
16 and functioning. In a large system of this
17 nation we do hold multiple contractors that are
18 involved in the, in the system itself. It's
19 our responsibility to make sure that those
20 particular contractors are keeping these
21 systems up, even when we, you know, with the
22 large system like this you have regular
23 maintenance that are happening within this
24 system, and you have to do regular maintenance
25 in the system.

1 Even when we're doing a regular
2 maintenance of the system we have not only
3 informed our customers that these maintenances
4 is going up, and if its service impacting or
5 not we'll make sure that our contractors
6 understand and are executing that these systems
7 don't go down, and if they do go down what is
8 the redundancy, what is the backup component
9 associated with it. And well, there's
10 maintenance regarding the 911 system, and so
11 when that system went down there was a backup
12 component in, in place, and I can tell you the
13 county administrator and myself, and my other
14 people, we directly met with that particular
15 vendor because in our opinion at the same time
16 that something is happening to the 911 system
17 we need to be looking at on our backup systems
18 to make sure nothing is impacted, and fail safe
19 over into that particular system automatically.

20 It didn't happen in that case, but I can
21 assure you that will be happening, because all
22 our systems have redundancies and backups in
23 place associated with them.

24 SEC. CARROLL: Other -- so you had that
25 one significant episode where you had an hour

1 of down time. Have you had any other
2 significant down time?

3 MR. JEFFERSON: Absolutely. We've had
4 episodes that occurred within the systems. We
5 are very transparent when those things occur.
6 We send out after action reports. We'd be more
7 than glad to send to the committee the items,
8 because we actually post our after-action
9 reports in the system when they go down online,
10 because we want to make sure all our customers
11 understand exactly what occurred, and how it
12 was going to be resolved. We have had an event
13 that occurred with 911 before --

14 SEC. CARROLL: This is just a question,
15 because if you look at a down time, and I just
16 want to understand your answer, do you look at
17 what the industry norm would be around down
18 times, or is it just you don't know it, or do
19 you, do you as a system --

20 MR. JEFFERSON: We actually do. I just
21 don't know it. We can get that -- yes, we do
22 look at that. We make sure that our systems
23 are staying up. I think -- I think one of our
24 measurements is ninety nine percent of time,
25 but I can get all that information to the

1 committee, that's not --

2 SEC. CARROLL: As a -- as a customer of
3 that system one of the things you're going to
4 look at is reliability and systems up time,
5 that it's going to be there when I need it, and
6 so it would be interesting to see how your
7 system performs against what the industry
8 standard is around PSAP.

9 MR. JEFFERSON: Absolutely. I would one
10 hundred percent agree with that.

11 CHAIR: Sheriff Judd.

12 SHER. JUDD: For Secretary Carroll and,
13 and to reconfirm what our presenter just said,
14 Verizon had, had an outage not long ago. It
15 affected cell phone 911 calls across central
16 Florida to millions and millions and millions
17 of people, and they have a lot of redundancy.
18 We have a large robust system, and despite all
19 the engineers, despite all the redundancy,
20 occasionally it fails because it's, it's a
21 technologically based system, and every
22 professional agency does after actions, and
23 they end up spending all kinds of extra money
24 because your engineers look at you like a deer
25 in the headlights and go we didn't know that

1 could happen. Well, we've discovered that it
2 can.

3 So, the reality of it is what we in the
4 business are hearing him say you may not
5 recognize if you don't deal with these systems
6 every day, but the reality of it is if they're
7 keeping their data, and they have a robust
8 system, and they have the appropriate
9 contractors and the checks and balances in
10 place, and they're doing what I'm hearing, then
11 occasionally these outages occur whether you're
12 Verizon and you have emulous strings of money,
13 or you're local government, but the reality of
14 it is these systems occasionally hiccup despite
15 all the engineers saying we didn't know that
16 could happen.

17 SEC. CARROLL: And I absolutely agree. We
18 have a similar situation with our hotline, so
19 technology always can fail. That's why I was
20 interested to see how they compare against the
21 norm, because I would only be concerned is if
22 they were somehow performing significantly less
23 than whatever the industry standard or industry
24 average was.

25 SHER. JUDD: Yeah, and certainly that's an

1 appropriate question, because I can assure you
2 that all of us monitor that data to make sure
3 that it's performing at above the standards.

4 CHAIR: Yeah, we'll check into that. See,
5 I don't know, I've never seen a data on 911
6 systems in failure rates and performance, et
7 cetera, but I would just affirm what Sheriff
8 Judd said. We've experienced the exact same
9 thing. We have had 911 failures where the
10 primary system and the redundant system --
11 every one has a backup. Every one has
12 redundancy, and we've experienced that where
13 both have gone down, and what we ended up doing
14 is putting out through the media, through
15 social media, through everybody, and getting
16 out, and we give them a seven digit, or a ten
17 digit as it's called, a ten digit number where
18 people can call in, they can call directly,
19 because these 911 systems, and this is not
20 unique, and it may be unique for an hour for it
21 to go down, but we've had it go down for
22 extended periods of time.

23 So, to be overly concerned about a system
24 signal, a system failure, it happens, and it
25 happens everywhere, and it happens to everybody

1 in 911 systems. But we'll find out, and see if
2 we can look at it, because your point it spot
3 on, if it is more than the norm, and it's
4 happening all the time, that's a different
5 issue than having a sporadic system failure.
6 There will be, again there will be a 911 system
7 failure, it happens, it just, every, you know,
8 most systems experience that to some degree.

9 MR. SCHACHTER: And just -- just a last
10 question. You know, the problem is if you've
11 got a system, and the municipalities don't
12 trust the system is going to work when you need
13 it, and because of the problems that we had in
14 this incident, Sheriff Judd, you know, there
15 are other municipalities that might be thinking
16 about switching and getting off of the county
17 system, how do you persuade them to stay on the
18 county system if you know that you've already
19 had all of these problems like you mentioned at
20 the airport, and all these other incidents that
21 the Chairman talked about.

22 CHAIR: Again, the airport you're talking
23 about radio. There is no evidence, discussion,
24 anything that I've ever heard about a 911
25 system failure at the airport.

1 MR. SCHACHTER: Okay. I'm talking about
2 management in general. If you don't trust that
3 management is going to make the right
4 decisions, then that, that's what I'm talking
5 about.

6 SHER. JUDD: The unique, and we'll
7 probably get into this later when the -- we
8 have a system whereby one of the most
9 influential decision makers on our 911/CAD
10 dispatch group is Chief Nelson from the police
11 department. We have a group, a representative
12 group that all manage our system together. It
13 may be the sheriff system, but when Chief
14 Nelson says, hey, we need to do this, or this
15 is a new system, or what about this, that's,
16 that's how we manage it. Yes, it responds to,
17 and reports to one person that's ultimately
18 responsible, but we have all the stakeholders
19 on board, and I think they had stakeholders on
20 board as well.

21 The question is is the funding there, is
22 the infrastructure there, and is the management
23 there. And that may be questions for later on
24 today.

25 CHAIR: Let's try and move on to -- go

1 ahead if you want to --

2 MR. JACKSON: Mr. Chair, if I could.

3 CHAIR: Sure.

4 MR. JACKSON: There was a question
5 concerning system capacity as it relates to
6 incoming calls from the floor, I'm not sure,
7 was that you Commissioner? Okay, so we want to
8 answer that, in terms of the capacity of the
9 system as designed, and what actually can come
10 into the system. I'm going to have Brett speak
11 to that.

12 MR. BAGG: Good morning, my name is Brett
13 Bagg with the Office of Regional Communications
14 and Technology. To answer your question, the
15 regional system has the capacity to answer,
16 we've got a hundred and twenty 911 trunks that
17 come into the regional system. And it is
18 designed, as all of our PSAPs are designed, in
19 accordance with the Florida Department of
20 Management Services Plan for 911, which states
21 that you have to have at least a P01 grade of
22 service for your busy hour, and we are at that
23 or better. So, we're at a hundred and twenty
24 though, to answer your question. A hundred
25 twenty calls can come in at the same time.

1 SEC. CARROLL: And so, during the tragedy
2 on February 14th was that, how many calls came
3 in? Did that exceed that limit at all, or was
4 it even close to that?

5 MR. BAGG: We can get the exact numbers
6 that came out to give you that answer, but I'm
7 not aware of the hundred twenty line being
8 exceeded.

9 SEC. CARROLL: Okay. And then the outage
10 that took place, that took place after February
11 14th? Is that -- I'm not from Broward or --

12 MR. JEFFERSON: Oh, me. That occurred in
13 May.

14 SEC. CARROLL: And was that an event that
15 hadn't happened in some time, or is that, it
16 that an annual type failure, or how --

17 MR. JEFFERSON: It's not an annual type
18 failure. What -- if I can -- if I, what
19 Sheriff Judd said, and if I'm incorrect, when
20 you deal with these large systems there are
21 things in these systems that you find out that
22 was, you never knew it was there. What
23 occurred in May was an event that associated
24 with an automatic call distribution. It didn't
25 -- it didn't necessarily fail, it went into a

1 deadlock, it started taking the calls and
2 putting them into an abandoned call list.

3 The vendor itself never saw this in their
4 system, and there's multiple vendor, I mean
5 multiple customers that this vendor has, and it
6 happened unfortunately with Broward County, and
7 so a full refresh of the system was done. They
8 had new upgrades that were placed in the system
9 that was done in Broward County, that they
10 rolled out through all of their particular
11 customers. So, there was an event that
12 occurred within the software itself that wasn't
13 even identified as part of the testing that
14 they went through, it just happened to occur
15 here in Broward County.

16 CHAIR: Okay, gentlemen, thank you very
17 much, we appreciate it. The next presenter
18 will be Angela Mize. She's the Assistant
19 Director in the Regional 911 Center, and she
20 works for the Broward County Sheriff's Office.
21 Angela, welcome.

22 PRESENTATION: BROWARD COUNTY SHERIFF 911 CENTER

23 MS. MIZE: Good morning, commission
24 members. Thank you for the opportunity to be
25 here representing the Broward County Sheriff's

1 Office. My name is Angela Mize, the Assistant
2 Director of Regional Communications for the
3 Sheriff's Office. I have been with the
4 Sheriff's Office for twenty- five years, having
5 spent twenty-three years in communications. I
6 worked my way up from a 911 operator to a
7 dispatcher, first line supervisor, a member of
8 management, and now a member of command.

9 Today we're going to briefly overview some
10 of the key components of the Sheriff's Office
11 command structure and communications division,
12 the overview of processes, the work flow, and
13 some next generation projects. Please forgive
14 me if some of my commentary is repetitive. I
15 know a lot of discussion from earlier in the
16 Broward County presentation may have already
17 been stated, so hopefully what I'll give you is
18 a little more insight in the perspective from
19 the operational point of view.

20 We're going to briefly discuss how regional
21 communications originated, so again touching
22 briefly on what Mr. Jackson had already
23 commented upon, talk about the public-safety
24 answering points, or PSAPs, is going to be the
25 acronym that I will use repetitively. We're

1 going to talk about the regional municipal
2 partnerships, the independent PSAPs that are
3 still outstanding, chain of command structure,
4 our training in specialized units, our
5 accreditation standards that we maintain, and
6 our current performance achievements.

7 As stated the purpose of regional
8 communications came by through a vote by
9 Broward County residents, and it was for a push
10 for closest unit response. What that
11 essentially is, is breaking down jurisdictional
12 and geographical boundaries for fire rescue to
13 allow fire rescue the opportunity to respond to
14 an emergency call for service regardless of the
15 jurisdiction in which it's occurring. In order
16 to do that you need to have a standardized
17 platform, you need to have a standardized
18 technological CAD system, or computer aided
19 dispatch system. You need to have something so
20 that these fire rescue agencies can essentially
21 receive the same information and allow a
22 dispatcher to pull resources based upon the
23 closest unit to the event.

24 That actually is what spawned
25 communications, or it spawned regionalization.

1 It was voted on, like I said. And
2 additionally, to that there were benefits to
3 regionalizing, most of which, as been stated
4 again, the elimination of call transfers. And
5 I will get into why call transfers occur, how
6 frequently they can be done, and really the
7 driving force behind call presentation to a 911
8 center. In addition, there are cost saving
9 benefits, obviously, through the shared
10 resources and efficiency in process.

11 BSO and Broward County are two distinct
12 entities. A lot of times they're used
13 interchangeably, they are not. I represent the
14 Broward County Sheriff's Office. I work for
15 the Broward County Sheriff's Office. The
16 Broward County Sheriff's Office is the
17 contractual operator of Broward County's
18 regional system. We are not employees of
19 Broward County. There is a distinct
20 delineation with regard to what BSO is
21 responsible for and what Broward County is
22 responsible for.

23 BSO is responsible for the personnel, the
24 staffing, the hiring, the training and
25 development of those people, the evaluation and

1 their skills assessment, and unfortunately any
2 discipline that must be rendered due to
3 performance or behavioral issues. We are
4 responsible for ensuring continuing dispatch
5 education to make sure our staff continuously
6 receives training on best practices and
7 industry standards. Overall personnel
8 management, quality assurance, and quality
9 improvement fall within our domain. Public
10 records compliance and accreditation
11 achievements, and budgetary projections, and
12 adherence to budgetary restraints falls within
13 our purview.

14 Broward County owns the regional system.
15 They are the funding source. They are the
16 governance source. Like I have stated they
17 have contract with BSO. Broward County handles
18 everything technology, from the radio system to
19 the computer aided dispatch system, to the
20 telephone system and recording systems, they
21 are responsible for the procurement, for the
22 implementation, for the upgrading, for the
23 maintenance, and everything that comes in
24 between. So, we used to joke and say if it
25 breathes it belongs to BSO, if it plugs in it

1 belongs to Broward County. That may be an easy
2 way to understand the difference.

3 As Mr. Jackson has already stated prior to
4 regionalization there were ten independent
5 PSAPs operating in Broward County, but what you
6 need to understand is that BSO well before
7 regionalization was a regional PSAP. The
8 Sheriff's Office has multiple districts, like
9 has been stated, where we have got cities that
10 contract services with BSO. There are
11 districts, but we also had municipal partners
12 prior to regionalization, Davie, Lauderdale, Hallandale,
13 Miramar, to name a few. So, prior
14 to regionalization BSO was already a regional
15 PSAP, but prior to 2013 there were ten that
16 were floating about. Regionalization brought
17 us down to consolidating down to three.

18 Currently BSO regional communications
19 handles twenty-nine of the thirty-one
20 municipalities found in Broward County, with
21 Coral Springs and Plantation being the
22 independents. As has been stated we do run
23 three PSAPs. Now, while they may be physically
24 located in three physical locations it is a
25 single regional consolidated system, so all the

1 PSAPs are doing is separating the
2 municipalities geographically. We run the
3 north building out of Coconut Creek, the
4 central building is out of Sunrise, and the
5 south building is out of Pembroke Pines. Those
6 in red represent the districts that the
7 Sheriff's Office provide law enforcement
8 services for. If you'll notice Parkland is
9 asterisked, and we will get very much into why
10 that is the case, because they are very unique
11 when it comes to call processing and work flow.

12 The purpose in our mission statement is to
13 provide the highest level of professional
14 public- safety dispatch services to the
15 customers that we serve. There is over 1.9
16 million residents in Broward County. BSO
17 regional communications provides services for
18 approximately 1.7 million of them. That
19 estimates over 2 million calls annually, with
20 over 5,500 calls for service being generated
21 every day amongst our three buildings. This is
22 911 and non-emergency. We provide full DLE and
23 fire rescue dispatch services, again asterisked
24 because of Parkland, but what that means is our
25 dispatch staff provide dispatch services for

1 law enforcement and for fire rescue services.
2 We supply full tactical support, countywide
3 resources allocation, and tri county
4 communications.

5 So, what that means is we provide for any
6 regional asset securing, aviation, canine,
7 regional canine support. Marine support comes
8 through BSO, tri county communication with our
9 tri county partners, Palm Beach and Miami-Dade
10 County obviously being the two closest to us,
11 and tactical support. And what that means is
12 obviously as we go into critical incidents, or
13 the mass casualty incidents, or MCIs, these
14 operational procedures on the law enforcement
15 and fire rescue field side take on a life of
16 its own, it is not just going to be a single
17 dispatcher to a single event, it will branch
18 into multiple independent assignments. We
19 supply full tactical support for that.

20 Obviously, teletype query and
21 confirmation, those who don't know what
22 teletype query is, it's essentially an officer
23 or deputy responds out on a traffic stop, wants
24 to query to see if the tag is wanted or if the
25 tag is stolen, or if the person may be wanted,

1 that's a teletype query. We perform those
2 services.

3 Emergency medical dispatch pre-arrival
4 instructions. This is critical. And as stated
5 before this follows a priority dispatch sweep
6 that we are embarking. We are emergency
7 medical dispatch certified and accredited.
8 What emergency medical dispatch does is it
9 provides pre-arrival instructions on the phone
10 to anybody in medical need, and the medical
11 need can range from literally a headache to
12 CPR, cardiac arrest, imminent child birth, and
13 the Heimlich maneuver. We have had many
14 successful CPR saves on the phone, and we've
15 had many successful child births done on the
16 phone, and that is through EMD.

17 We are also the county warning point.
18 Every county has a PSAP warning point, and
19 essentially what that warning point does is it
20 becomes the conduit to ensure that something of
21 a critical nature is not only reported to the
22 Broward, or the county's emergency operation
23 center, or the EOC, but to the state warning
24 point. So, we are the conduit for that
25 procedure, so we have a lot of responsibility

1 as it pertains to ensuring the notification and
2 the awareness of critical incidents through the
3 state.

4 Our chain of command structure, we are
5 budgeted for four hundred and forty-seven full
6 time employees, making us the largest civilian
7 division in the Broward County Sheriff's
8 Office, and making us one of the largest
9 consolidated public-safety answering points in
10 the nation. Our command structure, we have a
11 direction, who is again all civilianized
12 command, the assistant director. The three
13 PSAPs have a management structure of a manager
14 and an assistant manager. And we have a full
15 support administrative unit. That
16 administrative unit is comprised of quality
17 assurance unit, an emergency medical quality
18 assurance unit, training, audio evidence and
19 accreditation.

20 New employees who get hired into the
21 Sheriff's Office for communication will attend
22 an in-house twelve-week program. During that
23 twelve weeks they are receiving two in-house
24 written examinations of which they must pass
25 with an eighty percent or higher to be

1 retained. They also must certify through the
2 Department of Health telecommunicator
3 examination which is now required by the state
4 of Florida. Training is going to incorporate
5 obviously utilization of the CAD system,
6 utilization of the telephone system, standard
7 operating procedures, emergency medical
8 dispatch protocols, countywide geography for
9 law and fire rescue. And the reason I break
10 that out is you will see that there are some
11 specialized areas that kind of make it a little
12 different. Classification of signals, basic
13 elements of crime, we have to basically
14 understand how to classify what the caller is
15 describing us in order to send it to fire or
16 law enforcement appropriately. When the
17 employee graduates our academy they hold
18 multiple certification, and those are listed
19 here below.

20 But once they graduate what happens, well,
21 we continue to train. Annually we strive for a
22 twenty-four hour continuing dispatch education
23 responsibility requirement of our operators.
24 That can be done in a number of ways. We do
25 conduct in-service training, so those in the

1 law enforcement and fire rescue field side are
2 probably familiar with that term. What that
3 basically means is we're bringing our personnel
4 in and we're doing classroom focused
5 instruction. Our in-service training agenda
6 can vary depending upon trending topics,
7 emerging deficiencies that have been identified
8 through our quality assurance and quality
9 improvement processes.

10 We bring in guest speakers to give them a
11 perspective on how specialized units like K-9
12 and the HazMat fire rescue team may work. We
13 bring in the psychological element for employee
14 assistance. We bring in the State Attorney's
15 Office. So, we host a lot of agendas depending
16 upon what we're seeing as far as trending with
17 our staff. We do a lot of roll call training,
18 reading side directives, individualized
19 training as needed, so if we see something kind
20 of peaking that shows a concern in deficiency
21 and performance we don't wait for an in-service
22 training opportunity, we will develop training
23 right then and there, and immediately apply it.

24 We participate in a number of simulation
25 drills for active shooter, active killer, and

1 mass casualty, the most recent being at the
2 Florida International Hollywood, excuse me,
3 Fort Lauderdale/Hollywood International Airport
4 recently had an active killer scenario at the
5 end of April. We participated in that, as well
6 as doing the post incident analysis review. We
7 also have a number of individualized programs
8 in regional communications. Our SWAT
9 dispatcher program is very popular. We have
10 been asked throughout the nation for
11 information on our program, our policies and
12 our procedures.

13 It is a very popular program that enables
14 our DLE dispatchers to train with the SWAT
15 team. The SWAT team has individualized
16 acronyms in ways of doing business which is
17 very unique to that team so it's prudent to
18 have staff that can understand what that SWAT
19 team is communicating on radio, so to do that
20 we've got a team that specializes in that
21 arena.

22 We do succession training through duty
23 officer mentorship. Duty officers are our
24 first line supervisors, and we obviously hold a
25 training program with communication training

1 officers. We maintain some of the highest
2 industry recognized accreditation standards,
3 one being through CALEA, communications
4 specific, so CALEA is the Commission for the
5 Accreditation of Law Enforcement Agencies. We
6 have been CALEA certified since the early
7 2010's. We maintain that certification through
8 REMD, through the International Academy of
9 Emergency Medical Dispatch we are ACE
10 certified. ACE is the highest standard which
11 demonstrates the highest level of compliance to
12 those medical protocols. We have been ACE
13 certified since before 2010.

14 We are also certified through Project 33
15 through APCO. APCO is the Association of
16 Public Safety Communication Officials. APCO is
17 an industry organization that is very specific
18 to the communications industry. Project 33 is
19 similar to the CALEA accreditation, but it
20 really is more focused on the communications
21 element. We have been APCO Project 33
22 certified since around 2010 as well and
23 maintain that. We also have a certification
24 through the State of Florida Department of
25 Health for our training program, so we are a

1 recognized training program.

2 Some of the performance standards that are
3 required, one being the Florida Emergency E911
4 Plan that talks about, as we mentioned earlier,
5 the 90/10, or somebody had mentioned the
6 90/5/15. These are all 911 performance
7 standards on how quickly and efficiently a 911
8 operator will pick up the phone. We average
9 1.8 seconds on every 911 call to pick up the
10 phone. We have a ten second window to get that
11 done. We are averaging 1.8 seconds at our
12 busiest hour. The consultant that Broward
13 County had hired in order to assess the system
14 in all of its health in all of its areas has
15 commented that they have never seen times that
16 efficient before, so we're very, very proud of
17 that.

18 We have achieved and have made that
19 standard since the beginning of the year with a
20 compliance to that standard, over ninety nine
21 percent compliant to that standard since the
22 beginning of this year.

23 I'm going to go into work flows. I'm
24 going to give you a view of what the operators
25 will see. I'm going to give a discussion as to

1 what the operators do with that information,
2 and I'm going to pinpoint some of the
3 limitations of inbound 911 call information,
4 and some major misconceptions that callers and
5 public have when it comes to what 911 calls
6 give us as far as information, and what we have
7 to do to ascertain proper information.

8 We are going to get into some of the
9 specialized areas. We're going to talk about
10 the independence briefly. And of course, we're
11 going to talk about the City of Parkland being
12 very unique. This is a telephone system. This
13 is called Viper. This is what the 911 operator
14 is going to see on an inbound call. I've
15 arrowed out a couple of unique areas to kind of
16 focus upon. The ANI-ALI data, I will explain
17 what ANI- ALI means, but the ANI-ALI data is
18 the driving force behind which PSAP gets the
19 call. It is critical. ANI-ALI data is going
20 to be presented right there.

21 You'll hear me refer to trunks, inbound
22 trunks, well, there's varieties and priority
23 levels of trunks. In the regional system we
24 have got three priority levels of inbound
25 trunks, 911 trunks, we have got priority

1 trunks, and we have got non-emergency trunks,
2 so those are highlighted there. The abandoned
3 queue, which was mentioned earlier with regard
4 to the failure, how the calls were presented to
5 abandoned, the abandoned queue list is
6 presented as well, so the operators are always
7 aware of calls that do not reach an operator
8 for assignment, it's presented to them. And I
9 didn't green this out, so if I can bring your
10 attention to a little button right below the
11 word system that says RTX, that's retransmit.
12 That becomes important as we talk about cell
13 phones.

14 As mentioned earlier we do operate under
15 an automatic call distribution system. This is
16 a telephonic programming that automatically
17 delivers a 911 call, or actually in our case
18 all calls to an operator. The delivery of
19 calls to an operator is priority based. As I
20 mentioned there are three inbound trunks, 911 I
21 list for, but alarm and priority are together,
22 and non- emergency.

23 The highest priority is obviously the 911
24 trunk, so what that means is that if I've got
25 two inbound calls, one being 911, one being

1 non- emergency, and they're dialing at the
2 exact same moment, the 911 call will receive
3 the highest priority and go to the first
4 operator, with the non-emergency waiting.
5 Amongst the trunks, so if I have got two 911
6 calls coming in the longest ringing is the
7 first delivered, so if I've got two inbound 911
8 calls and one has been ringing for a second and
9 one is ringing for five seconds the five second
10 call will take precedence and go ahead for
11 delivery.

12 The system is going to identify the
13 longest idle operator. The system is also with
14 911 going to seek the geographical location of
15 the 911 call first before it pushes this out,
16 so what that means is you would dial this call,
17 911 from this building in the City of Sunrise,
18 the first location that the system is going to
19 look to deliver that call is the central PSAP
20 which is responsible geographically for the
21 City of Sunrise. If the 911 system cannot find
22 an operator within a second that call gets
23 pushed to north or south simultaneously, and it
24 looks for the longest idle. It is through this
25 programming, and it is through our attention to

1 call volume and staffing expectations that
2 allows us to achieve the 1.8 second pickup time
3 average. It is through these processes that we
4 are very attuned to.

5 ACD is going to ensure the complete
6 efficiency of the system, so again it is going
7 to utilize every resource found in all three
8 buildings, the most optimal. Any call
9 disconnected prior to answering goes to
10 automatic, or, I'm sorry, the abandoned call
11 list, as I have mentioned, and the operators
12 always have the visual presentation. On any
13 given day at any given moment between the
14 middle of the night to the highest busy hour
15 the three regional centers will staff anywhere
16 from eleven to thirty-one 911 operators just to
17 answer calls.

18 So, ANI-ALI. ANI stands for automatic
19 number identifier. ALI stands for automatic
20 location identifier. Both of these bits of
21 information are presented to every inbound 911
22 call, regardless of it's a land line or
23 cellular. This comes with the presentation of
24 the call to the operator. ANI-ALI is what's
25 driving the call. This is where the call is

1 pushed to which PSAP, it's based upon ANI-ALI.

2 The type of telephone that is used is
3 critical to where the call goes and how
4 accurate the ANI-ALI information can be. And
5 you're about to see that there is vast
6 differences in this information. It must also
7 be noted this is not unique to Broward County.
8 This is not unique to the state of Florida.
9 This is nationwide, so please keep that into
10 perspective. Landline callers are always going
11 to be the most accurate call you receive,
12 because the ANI-ALI information is going to
13 tell you the exact location of that caller
14 right down to the apartment number or the
15 business name, or the bay number. It's going
16 to give you the caller's name and phone number.
17 There is no question as to where that caller
18 is.

19 Landline ANI-ALI get pushed out of
20 something called the ESN number, which is the
21 emergency service number which is represented
22 as part of the address of that call. The ESN
23 number based upon the location is going to say
24 this call belongs to this location, this
25 location pushes to this PSAP, and the call gets

1 delivered. In the event that somebody on a
2 landline call disconnects we know exactly where
3 they were, there is no question.

4 Cellular phones are very, very different.
5 Cellular phones will get delivered based upon
6 the cell site tower that hits and receives the
7 call, so the information that you would get, or
8 the PSAP that it goes to is really relative to
9 where the caller is at the time the call is
10 made. One tower can be pointed to different
11 PSAPs depending upon the positioning of where
12 that tower is.

13 Here's a sample. This is what the
14 operators see. Landline is to the left. As
15 you can see we did black out the name, but the
16 information there, there is no question as to
17 where that caller is. And in fact, not only do
18 we know where the caller is, in case we happen
19 to forget, because there is unique city, you
20 know responsibilities for law and for fire
21 rescue, it tells us, it tells us the PD is
22 Broward Sheriff. It tell us that FD is Lakes,
23 and it tells us rescue it Lakes. It even gives
24 us the station number that responds. There is
25 no question as to where this caller is.

1 Look at your right, cellular phone. The
2 only viable information in this display is the
3 phone number. That is all we can ascertain.
4 The address given there is the cell site tower,
5 which gives us no use unless the caller happens
6 to be in front of the tower at the time they
7 called. This is one of the key differences
8 between landline and cellular. And again, this
9 is nationwide. But there's also differences in
10 the quality of cell phone. Not all cell phones
11 are the same. You have what's called phase one
12 and phase two data information. Inbound
13 cellular calls can be delivered either or.
14 Now, FCC requirements outline that you, the
15 call has got to have phase two compliance at
16 some point during the call, it has to be able
17 to present that. The ability must be present.

18 But inbound call, when you first get that
19 call delivered to you, or when you pick up the
20 call it may not be phase two. Well, what's the
21 difference? Phase one, the location of the
22 caller, again that address you saw is not where
23 the caller is, it's the cell site. In order
24 for phase one to become phase two if it is not
25 given to you at the time of the delivery you

1 must rebid, or RTX, that button I asked you to
2 recall in that display, you must rebid it.

3 Basically, in a rebid what you're telling
4 the system to do is this is no use to me,
5 please triangulate and give me some GPS
6 coordinates on where this caller may be at this
7 moment. The rebid process can take twenty-five
8 to thirty seconds to complete. If the caller
9 disconnects before the rebid is complete you
10 may not get anything. So, in a phase one the
11 only viable information I have is the phone
12 number. If the rebid does not occur before
13 they disconnect the only choice I have at that
14 point is to try to dial them back, and as the
15 Sheriff so apply said sometimes it goes to
16 voice mail, and in fact a lot of times it goes
17 to voice mail, so to that becomes an obstacle.

18 The difference with phase two, the address
19 is still not relevant to me, that's presented,
20 however the GPS coordinates, or the
21 latitude/longitude display is an approximation
22 estimation of where the caller is, and through
23 FCC regulation it really needs to be accurate.
24 I believe it says up to a three hundred meter
25 is the diameter in which it has to have

1 accuracy up to ninety five percent.

2 So, what does the ANI-ALI look like on
3 these two phones, really nothing different
4 really that you can see. The main difference
5 to pay attention to is what's boxed in red,
6 class of service. WRLS on the left is a phase
7 one, which means when you see XY coordinates to
8 the bottom those latitude/longitude coordinates
9 are of no value to you, that is the cell site.
10 To the right you see WPH2. That is a phase two
11 compliant phone. Again, the address is of no
12 value, but the latitude/longitude below is an
13 approximation of the caller.

14 Now, our CAD system has got the
15 intelligence to reverse GEO code, so I can tell
16 my CAD system, all right, based upon this phase
17 two data where is this caller at, and my CAD
18 system will give me a location, and the
19 location usually is exceptionally reliable in
20 order for us to generate a call for service.

21 Some of the misconceptions out there.
22 Callers do not understand that we do not have
23 the same technology as your local pizza
24 delivery company or Uber, they don't understand
25 that. We do not. And again nationwide, not

1 BSO, not Broward County specific. We do not,
2 therefore we must rely on your voice direction,
3 which is why we are going to ask where you are
4 and verify it. To your point, verification is
5 industry best standard, it bears a second
6 verification, so we will ask and verify. The
7 technology designed to locate the caller can be
8 very dependent, like I said landline versus
9 cell phone, phase one versus phase two. And
10 keep in mind over eighty percent of inbound 911
11 calls are cellular driven, over eighty percent,
12 and that is probably going to keep increasing
13 as people abandon landlines.

14 This is what our CAD system looks like, so
15 after the operator answers the phone call they
16 are now going to generate a call for service in
17 order for it to be given to a law or fire
18 rescue field unit. They are inputting it into
19 our CAD. The 911 operator at regional
20 communications will obtain and verify your
21 location, and again, through comparison of
22 ANI-ALI data if necessary, and preferably
23 confirm the phone number, identify what you
24 need, what is the source of your emergency.

25 Once a call is generated in CAD it is

1 automatically pushed to the correct dispatcher
2 responsible for assigning fire and law field.
3 There is nothing more that the operator has to
4 do other than transmit. We are not zoning, we
5 are not mapping, not with our CAD system. The
6 CAD system is going to say, okay, you inputted
7 this address, this address belongs to this
8 zone, this zone belongs to this dispatcher.
9 Now the beauty of a regional system is it
10 doesn't make a difference if that 911 call is
11 answered in Coconut Creek at the north center
12 for a caller who is in Davie in the south
13 center. It doesn't matter, the 911 operator
14 generates the call for service, and the Davie
15 dispatcher in the south 911 PSAP in Pembroke
16 Pines receives the call. That is the beauty of
17 a regional system.

18 The CAD will automatically prompt for dual
19 association, so if you ever wanted to know,
20 well, what if they need fire and law
21 enforcement, well, the CAD will say based upon
22 the classification do you want to create two
23 calls. All we have to do is type Y and off it
24 goes. We have very strict policy with regard
25 to unique circumstances, such as when to remain

1 land line with the caller.

2 What to do with silent interrogation, this
3 is interesting because silent interrogation is
4 a policy we've had in place for a while because
5 we are not yet on a text to 911 system, which
6 we are moving towards with Broward County. But
7 until then we do have policies on what to do if
8 the caller cannot communicate with you for a
9 number of reasons. The policy was actually
10 more developed with a consideration of domestic
11 violence victims in mind, but obviously is very
12 applicable to an active killer scenario as
13 well.

14 What to do if the caller does not speak
15 the language you're speaking, and you have no
16 ability to communicate, we have processes and
17 protocols on how to deal with that. What about
18 telecommunication devices for the deaf, we have
19 policies as to that as well. And we also have
20 unique critical interrogation for unique
21 circumstances that are the low frequency high
22 impact kinds of events, so we do have very
23 unique policies for those.

24 Best practices, the National Fire
25 Protection 1221 indicates that calls should be

1 entered within ninety seconds ninety percent of
2 the time. This benchmark pushes for call
3 creation to be done at the soonest possible
4 opportunity for critical incidents. The reason
5 I bring this up leads me into misperceptions
6 and misconceptions of callers. Callers feel
7 that if the 911 operator is speaking to him or
8 her nothing is happening, and in a regional
9 system that is absolutely untrue. The 911
10 operator is going to generate the call once the
11 location and a reference on a critical event is
12 determined, but they are going to stay on the
13 phone with you to get, again to the Sheriff's
14 point, updated information, real time
15 information, suspect description, direction of
16 travel, weapons utilized, things of that
17 nature.

18 But people don't understand in a large
19 PSAP the person you're speaking with on the
20 phone is not the same person who is dispatching
21 units, so just because you're speaking to us
22 does not mean nothing is happening on the back
23 end. And as I'd already stated any inbound
24 call gets entered into the regional system as
25 long as it belongs to a regional partner.

1 There is no transfer.

2 We do have some specialized areas, again
3 these are all regional partners, so again as
4 far as work flow it doesn't make a difference,
5 but for an example the City of Tamarac has
6 contractual DLE services with the Sheriff's
7 Office, but they have their own fire rescue
8 service, so the City of Tamarac fire rescue is
9 its outside, is an independent entity from the
10 Sheriff's Office. Wilton Manors, they have
11 their own DLE, their own law enforcement
12 agency, but they contract fire rescue services
13 with the City of Fort Lauderdale.

14 We have to know this when it comes to
15 understanding in training, and understand why
16 the work flows are, but as far as processing it
17 doesn't matter in the regional system. So, our
18 regional work flow is a big circle, no matter
19 what call comes in as long as it's a regional
20 partner it gets entered into CAD and it goes to
21 dispatch, and around it goes.

22 There are two non-regional PSAPs in
23 Broward County. If a call is received in
24 either of those PSAPs that belong to regional
25 it must be transferred. There is no ifs, ands,

1 or butts about it, and vice-versa, if we receive
2 a call for them it must be transferred.

3 Cellular phone calls are the most susceptible
4 for this, because as I explained landlines, the
5 efficiency and the accuracy is almost near a
6 hundred percent. Cell phones on geographical
7 boundaries due to the tower being on that
8 boundary, this is where it's most susceptible.

9 Here's an image of Broward County, and the
10 situation of the two cities, just in case
11 you're not familiar with it, so you can see
12 that they're, there's a lot of opportunity for
13 a tower to mis-point, or to actually point
14 correctly for that matter. Why call transfer,
15 well, it's simple, non-regional CAD platform
16 for the independence. There is no technology,
17 and there is no efficient technologically
18 driven mechanism to communicate between the
19 regional and non- regional so you have to
20 transfer, there is nothing else there.

21 What does the transfer take? Well, as the
22 Sheriff had already stated it takes us to
23 confirm the address and the city of occurrence.
24 We need to identify what it is you need, then
25 we transfer you, and once we transfer you we do

1 what we call a call announce, we will tell the
2 receiving PSAP that this is so and so with a
3 transfer for this location, and then we let the
4 caller continue. We don't disconnect until we
5 know the caller is now communicating with the
6 receiving PSAP.

7 NFPA outlines that the benchmark
8 performance standards for call transfer that
9 says that it should be done within thirty
10 seconds, that gives you an indication that
11 every call transfer adds thirty seconds
12 minimally to the call processing time. The
13 National Emergency Number Association has best
14 practices when it comes to how to call
15 transfer, so our policies for call transferring
16 mirror this, which basically states what I just
17 explained. Once we know it doesn't belong to
18 us we tell the caller we're going to transfer
19 them, we connect, we announce to the receiving
20 PSAP, we wait to make sure they're
21 communicating before we disconnect. And again,
22 just a pictorial image of what I just
23 explained.

24 Parkland is different. Landlines for the
25 City of Parkland will go to the regional center

1 at north in Coconut Creek. Cellular phone
2 calls for the City of Parkland will go to the
3 City of Coral Springs. That was a decision
4 made by that city management. Call transfers
5 are an absolute certainty routinely for
6 virtually every call received, it just is. Law
7 enforcement is serviced by the Broward
8 Sheriff's Office, fire rescue is serviced by
9 Coral Springs. We are on disparate CAD
10 systems, so as I stated there is no opportunity
11 for technology driven resource sharing, call
12 transfers are required.

13 Here it gives you an image of what the
14 call workflow looks like. If the cell phone
15 caller dials in it's going to be picked up by
16 the City of Coral Springs, and if they need law
17 enforcement they must transfer to regional.
18 Regional will create the call for service.
19 Coral Springs will have to take no action. If
20 the cell phone caller is answered by Coral
21 Springs and they need fire rescue Coral Springs
22 is still going to alert us to the occurrence.
23 In that case Coral Springs is going to generate
24 the call for service, and we will generate the
25 call as well.

1 If the call is landline it's going to be
2 reached at the regional center. The 911 call
3 for fire rescue must be connected to Coral
4 Springs, so the regional 911 is going to
5 transfer to Coral Springs. The CAD event is
6 generated by Coral Springs. We will take no
7 action. If the 911 caller on a landline needs
8 law enforcement services, this is the only
9 opportunity where there's no transfer, the call
10 gets entered. If it's a dual response there is
11 transfers. On a dual response as part of our
12 policies, and what we feel is industry best
13 practices, law enforcement always takes the
14 primary interrogation. So, in a dual response
15 if the caller needs law and fire rescue the
16 Sheriff's Office is going to take the call and
17 will start interrogation due to scene safety
18 and officer safety concerns, so the driving
19 force behind interrogation as a policy decision
20 is that it's law enforcement driven.

21 The concern with Parkland individuality is
22 the work flow is based on memorization and
23 manual recall, and there are multiple
24 opportunities for failure because it is a
25 unique situation. And also, the call creation

1 for the City of Parkland in comparison to the
2 other cities we have is not that high, so you
3 do not have a lot of opportunities where you
4 have a lot of calls for service being generated
5 over the course of an annual year. There can
6 also be, to your point as well, the disparate
7 standard operating procedures, so the call
8 received by Coral Springs first is a cellular
9 driven call, their procedures for interrogation
10 could be very different from ours, and this is
11 no fault of anybody, it just is what it is,
12 these are two distinct agencies with two
13 different policies. And like I stated we had
14 mentioned this prior to management looking for
15 recommendations to change this. Our
16 recommendation was all calls should go to one,
17 not both, and to date there has been no change.

18 Just to keep in mind some next generation
19 projects that are coming on board, has been
20 stated before, we are emergency medical
21 dispatch certified. We are going to be looking
22 to adopt emergency fire and emergency police
23 dispatch protocols. The benefit to
24 protocol-based dispatching is it takes away the
25 lack of standardization. Currently we are not

1 standardized on fire and law enforcement
2 interrogation, so that results in our
3 interrogation being subject to my experience,
4 my training, and my recollection as far as
5 interrogation strategies.

6 Standardized protocols removes those. It
7 allows for a consistent and reliable delivery
8 of information to field units, and this has
9 been identified through the consultant hired by
10 Broward County as an industry best standard, so
11 we are moving towards these protocols. Fire is
12 going to go up live by the end of this year,
13 with PD going live at the beginning of next
14 year. We are actively working with the text to
15 911 workflow.

16 This is Broward County's timeline that
17 we're working in cooperation with them. They
18 have done a lot work already with regard to the
19 infrastructure and the technology. Now we're
20 working on the workflow processes and the
21 launch. We are doing that in partnership with
22 Palm Beach and Dade County. Palm Beach just
23 went live I believe a couple of weeks ago, and
24 Dade County is also going live similarly with
25 us. Next generation CAD system, and as stated

1 before we have a gate keeper proposal for fire
2 rescue, it's just a fire rescue strategy for
3 unit assignment.

4 And that concludes.

5 CHAIR: Okay, thank you, Angela.

6 Commissioners, questions. Sheriff Ashley, go
7 ahead.

8 SHER. ASHLEY: Thank you. That was a very
9 in-depth presentation, and I appreciate the
10 details. You mentioned data sharing, both on
11 different CAD systems. Just from, give me a
12 plain, I don't know, layman's terms, if I'm in
13 Coral Springs do I know, as an officer do I
14 know if there's a trespass warning on an
15 individual that Broward County has dealt with
16 in that area? Do you share universal
17 precautions? I mean -- you know what I'm
18 talking about.

19 MS. MIZE: Absolutely. What you're
20 referring to I believe is more like hazard
21 flags, and critical safety flags affiliated
22 with the CAD systems.

23 SHER. ASHLEY: Yes, intel flags.

24 MS. MIZE: And the answer to that question
25 is more than likely not because it is

1 affiliated with the CAD system. And again,
2 I'll let Coral Springs speak to that on their
3 point, but our CAD system with regard to
4 critical safety flags and premise hazards is
5 affiliated with an address, so since the
6 address that would have that warning associated
7 would not belong in Coral Springs, or Coral
8 Springs with us, vice-versa, no, more than
9 likely not. Now, the opportunity through
10 perhaps their records management with regards
11 to maybe flagging people, or flagging vehicles,
12 may be more robust, but with us on the CAD
13 system it really is linked through the address,
14 and being the independence, no.

15 SHER. ASHLEY: So, other than Coral
16 Springs and Plantation do all the other
17 municipalities that are on the regional
18 communications center, are they able to see
19 that?

20 MS. MIZE: Absolutely. We're able to
21 supply it because the information is available
22 to us.

23 SHER. ASHLEY: I was -- I'm just trying to
24 determine the, you know, if incentives for
25 everybody to share the same data. But thank

1 you, very, very informative.

2 CHAIR: Is there any -- to follow up on
3 that, is there any interface at all, any
4 automated interface between the regional CAD
5 and the Coral Springs CAD?

6 MS. MIZE: There's technologies that are
7 available, and it kind of seems as though --
8 and again this is probably a better question
9 for Broward County to speak to, or Coral
10 Springs. I know there are technologies
11 available that have been investigated, and it
12 actually may prove that the technologies to
13 interface may be more costly than just joining
14 the regional CAD platform.

15 CHAIR: So, my question is today, not
16 what's available, but today and operationally.

17 MS. MIZE: Yes.

18 CHAIR: Getting to Sheriff Ashley's
19 question for hot files, et cetera, and
20 everybody has a different name for them but
21 it's information about prior calls at an
22 address, about people are anti law enforcement,
23 or universal precautions, or all those other
24 things, when a CAD screen pops up for the
25 officer responding for a particular address it

1 will have those types of things in it, whether
2 they have a trespass authorization, whether the
3 person is anti-law enforcement, all of those
4 things will be there.

5 So, if the - in the BSO system for an
6 address, let's say it's on the border of Coral
7 Springs, one side of the street is Parkland and
8 the other side of the street is Coral Springs,
9 there's nothing that's entered into the BSO
10 system with all of those flags that would
11 automatically be interfaced into the Coral
12 Springs CAD, and vice-versa?

13 MS. MIZE: Not unless there was a request
14 by Coral Springs or Parkland, and vice-versa,
15 to say, hey, I'm going to link this to a
16 Parkland jurisdictional address that's going to
17 apply to the Coral Springs. Now, since the
18 incident with Stoneman Douglas there has been,
19 we have been engaging Coral Springs on trying
20 to work on some stock measures to ensure a
21 better sharing of information, so we have been
22 working towards that.

23 CHAIR: But that would have to be manually
24 done.

25 MS. MIZER: Yes.

1 CHAIR: Because -- and that's the question
2 --

3 MS. MIZER: Yes.

4 CHAIR: And that's what -- that's -- you
5 know, I want to follow up on that because it's
6 an important question, and I think, you know,
7 make sure we understand it, because, what
8 Sheriff Ashley asked, but there's no automatic
9 interface so it would be inconsistent, it would
10 have to be Coral Springs calling you and saying
11 enter this in, or you calling Coral Springs, it
12 would have to be done manually by somebody
13 deciding to do it.

14 MS. MIZER: Correct.

15 CHAIR: Go ahead, Sheriff.

16 SHER. ASHLEY: There is bridging software
17 that would automatically populate records
18 management, or CADS from both systems with that
19 data, you just have to have a data entry, and,
20 you know, you identify those ten things,
21 trespassing, universal precautions, those that
22 we share in common. I think that certainly
23 would be a recommendation of this commission,
24 that those municipalities that don't
25 participate in a regional or countywide

1 communications system at least have the ability
2 to have access to that data.

3 CHAIR: Questions, anybody else? Under
4 Sheriff, go ahead.

5 UNDER SHER. HARPRING: First I'd like to
6 thank you for your presentation. I think that
7 the endeavors of public-safety dispatchers,
8 public-safety telecommunicators is largely
9 unknown, which you actually do on a day to day
10 basis, even to us in the industry, and I
11 certainly want to just let you know that I
12 recognize it, and I appreciate what you do.

13 But in that regard, and I asked this in a
14 previous presenters, and maybe you're more
15 inclined or less inclined to provide a direct
16 answer, but from an operational standpoint
17 given the industry standards with CALEA, APCO,
18 ACE, Department of Health, is there really any
19 operational reason why one entity would not
20 want to be part, say municipality would not
21 want to be part of the regional system, other
22 than as Sheriff Judd maybe more directly
23 alluded to, local political reasons, as opposed
24 to operational reasons?

25 MS. MIZE: So, I'll give my personal

1 opinion on this. When you scale down your
2 operations and you merge into a consolidated
3 environment you're going to potentially have to
4 give up immediate control, control of custody,
5 care of your system. It becomes a process by
6 which there is governance and deciding bodies
7 that can drive where the system goes. Now, I
8 have to give a lot of credit to Broward County
9 to doing a lot of governance structures to
10 ensure that there is countywide participation.
11 Our stakeholders have a voice in not every,
12 virtually everything that the operation that we
13 apply do.

14 We have multiple committees that are set
15 up to ensure that our practices meet the needs
16 of the law enforcement deputies and officers on
17 the field. It is not our operational decision.
18 We are the support unit for that. So, some of
19 hesitation can't be, and again I certainly
20 don't want to speak for Coral Springs, so I'll
21 let them speak to that, but again some of the
22 things that have to be looked as it -- and the
23 reason I can comment to this as far as my
24 opinion is I saw it when we merged in
25 Hollywood, when we merged in Sunrise, when we

1 merged in Pembroke Pines, you saw these themes,
2 and the concern that was expressed was what if,
3 what if I don't like, what if I don't agree
4 with, what if I want to be able to control X,
5 Y, and Z factor.

6 And that's a very real and legitimate
7 concern for those parties, and those are things
8 that they have to decide whether it is worth it
9 or not worth it. But those are some of the
10 themes that I had seen coming up, and again I
11 don't know if that's how Coral Springs or
12 Plantation currently feel. That would be a
13 good question for them, but that's how I, my
14 experience has been.

15 UNDER SHER. HARPRING: Have you seen any
16 issues with the bifurcated system, as you kind
17 of described it, as people versus plug in, as
18 far as the needs of the dispatchers and
19 telecommunicators, those individuals relative
20 to the technology side, as far as an issue
21 occurring and having some immediate response?

22 MS. MIZE: Sure. Our -- our relationship
23 with our county partners through Broward County
24 ORCAT. There's three main heads of Broward
25 County ORCAT, or their technology structure,

1 the 911 side, the CAD side, and the radio side.
2 We have exceptionally good relationships with
3 those management teams. They're very responsive
4 to us, they're very cooperative with us, but
5 again they can only do what is within the scope
6 of their technology to do, so, you know,
7 there's times unfortunately when we'd say, hey,
8 I would love the system to do this, well, the
9 system cannot do that, it's just unable to be
10 done, so, you know, we will try to figure out,
11 all right, well, if not then then maybe this is
12 an option.

13 But they've been very receptive with us,
14 and our relationship over the past five years
15 of regional has strengthened with regards to
16 that partnership, so I have nothing, you know,
17 negative to say in that regard at all, you
18 know, the technology is what it is, and, you
19 know, obviously the objective is to enhance,
20 and to go state of the art on a number of
21 technology projects, and, you know, we're very
22 much in favor of that.

23 UNDER SHER. HARPRING: Is there an ongoing
24 singular concern that occurs once you
25 incorporate, or as you alluded to say when

1 Hollywood came in, once you incorporated or
2 brought in a particular municipality to the
3 regional system, were there concerns or, or
4 fears allayed over time once the transition
5 occurred, or does there tend to be some ongoing
6 concern relative to a particular issue, or
7 multiple issues?

8 MS. MIZE: Sure. Yes, kicking and
9 screaming we all came along. It's -- it's
10 difficult, and, you know, having been with BSO
11 for twenty-five years, and having been part of
12 the BSO communications division for the
13 majority of that time, this is not our first
14 time in the rodeo with regards to bringing in
15 former independents, so during my tenure we
16 brought in Broward County Fire Rescue, to which
17 county administration commented to. We brought
18 in Deerfield Fire Rescue, Miramar Fire Rescue,
19 Oakland Park. We brought in Parkland. We
20 brought in a number of former departments, some
21 of which did have their own PSAP prior to.

22 And along with the personnel came the
23 field personnel, so absolutely, and when we
24 started consolidating we knew it was going to
25 be an exceptionally bumpy ride, because what

1 you're doing is your bringing in people who had
2 complete different expectation, different
3 process, policies and procedures, expectations,
4 interrogations, certifications. And what had
5 to be done with every inbound city we had to
6 assess what they had and what they needed, and
7 we could develop individualized training for
8 each inbound city to say, all right, you
9 already have this, but you need this, or you
10 know what, you have most of everything so all
11 we need to do is fine tune you.

12 But you have to remember when any time
13 you're inbound in a municipality you're
14 taking them from a single sited location with
15 very specific geographical awareness. For an
16 example, a City of Hollywood resident could
17 have called back in 2003 and said I'm at the
18 old, you know, junkyard that used to be behind
19 the 7-eleven. An operator would probably know
20 exactly what you're talking about. A regional
21 operator will have no clue what that means.
22 That's some of the concerns that municipals
23 have, is that that does happen.

24 We have to have a countywide awareness;
25 the pace and the speed of the regional system

1 is unlike anything a municipality has ever
2 dealt with. Over 5,500 to almost 7,000 calls a
3 day, that's a lot. That is a tremendous amount
4 of influx. So, you have got a lot of
5 municipalities when they came in, it was the
6 pushback to the new expectation for policy.
7 The accountability that we have is tremendous.
8 We have got two distinct quality assurance
9 units, one that just does your medical profile
10 to make sure you're adhering to standards, and
11 another one that does every other inbound 911
12 call and your dispatching, and they meet with
13 operators every month to do quality assurance,
14 so accountability is incredibly high.

15 And again, depending upon the
16 municipalities some had it, some didn't. Some
17 had performance expectations like the 90/10
18 pickup time. While it's a state requirement if
19 the department decided not to regulate and
20 manage it they didn't do it. So, from the
21 field perspective now you had a different
22 voice, perhaps a different cadence, perhaps a
23 different way of going about things, and so you
24 had kicking and screaming from there.

25 So, typically what happens is once you

1 merge in the personnel that merge in with you
2 are not happy, the field departments that come
3 in with you, they're going to complain, and the
4 complaints come up, and up, and up, and up, and
5 then what happens is through a lot of organized
6 discussions with them, and inviting them in,
7 and letting them plug in, and discussing with
8 them their concerns, we start to find common
9 ground. So, at this moment this regional
10 system in my opinion is very solid. It is
11 exactly where we want it to be at this point
12 moving it forward.

13 The partners that we have at this point
14 seem to be very satisfied with our engagement
15 with them, and our receptiveness to them, their
16 needs and their concerns. So, yeah, everything
17 you said is absolutely correct, you know, they
18 are going to be concerned and hesitant coming
19 in, it's normal because you're kind of rocking
20 their world a little bit, and everything does
21 standardize after a while.

22 UNDER SHER. HARPRING: Thank you.

23 CHAIR: Commissioner Dodd, and then
24 Commissioner Petty. Did you -- you're good?
25 Okay, Commissioner Petty.

1 MR. PETTY: I want to echo the comments
2 earlier. Thank you for your, for what you do,
3 and what the, the service you provide to the
4 community. One clarification for me. So,
5 going through the Parkland individuality
6 section the flow charts were incredibly
7 helpful. Just to make sure I understand, so
8 cellular calls for fire rescue are answered by
9 Coral Springs, by that PSAP, correct?

10 MS. MIZE: Correct.

11 MR. PETTY: And then your flow chart says
12 that caller is transferred to regional, and
13 then a CAD event is generated by Coral Springs
14 and regional. What -- what is the reason for
15 both systems generating that, and why is the
16 call transferred if Coral Springs is going to
17 service the fire rescue?

18 MS. MIZE: Yeah, and it's -- I know it's
19 kind of -- it's kind of strange. It's really
20 for situational awareness for Parkland deputies
21 to know why Coral Springs is running code in
22 their city, so it's more for situational
23 awareness. Operationally it doesn't do
24 anything as far as the caller, as far as
25 enhancing the caller's experience, or

1 decreasing it necessarily, it's just so that
2 Parkland deputies are aware of why, because the
3 last thing that they want is to see Parkland
4 fire rescue running code through the city and
5 having absolutely no clue.

6 The other concerns comes in, is I could
7 have been closer, I could have been around the
8 block, so it's more situational awareness that
9 it's being done. And like I said we have been
10 very, I'm working very well with Coral Springs
11 as of recent to figure out some stop gap
12 measures. So, some of the stuff that is
13 outlined in there does occur, but there's also
14 some radio communication that's happening, and
15 there's paging that the CAD systems are pushing
16 out to field units as well. So, it's just for
17 awareness.

18 MR. PETTY: So -- so that part of it makes
19 sense, but why is the caller transferred to
20 regional?

21 MS. MIZE: Just honestly, I will let Coral
22 Springs, see if they're even doing that to be
23 honest with you, so allow us to speak to them,
24 but honestly, they probably could just relay on
25 a medical only. There probably is not a lot of

1 reason. I'll -- that's probably a better
2 question, to see how they're doing it, per se'.

3 MR. PETTY: Okay. I just -- the concern,
4 again, has been the call transfer, and the hang
5 up, and so I'm just wondering why it was
6 necessary to transfer the call.

7 MS. MIZE: Yeah, maybe -- honestly, maybe
8 they're not. Maybe they're just relaying it to
9 us after the fact. But that's a better
10 question for them.

11 MR. PETTY: Thank you.

12 CHAIR: Chief Lystad.

13 CHIEF LYSTAD: Thank you, Mr. Chair. I
14 have a question just in response, or in regards
15 to the 911 system and the calls as it relates
16 to Marjory Stoneman Douglas. Have you all
17 conducted any sort of after-action review of
18 the calls, the number of calls that came in,
19 calls event, and calls, the response time,
20 reviewed since that incident?

21 MS. MIZE: We have.

22 CHIEF LYSTAD: And is that copy of the
23 report available to us?

24 MS. MIZE: Honestly that I don't know.
25 That we'd have to check with our command. I

1 don't know where they are with that. That
2 would be a question for Colonel Dale actually.
3 But there has been some review on it,
4 absolutely.

5 CHIEF LYSTAD: Mr. Chair, I would like --
6 I would like to see that.

7 CHAIR: Okay. Commissioner, go ahead.

8 COMM. SWEARINGEN: I apologize. I'm not a
9 telecommunications specialist so I apologize if
10 this is an ill-informed question, but you
11 mentioned that eighty percent of all 911 calls
12 comes from cellular telephones, and the GPS
13 data that you receive on WRLS calls doesn't
14 help you. Are you aware, and we know the
15 telecommunications companies are driven by
16 profit, not necessarily the best interests or
17 safety of their customers, so are you aware of
18 any mandate that requires these companies at a
19 date certain to have all of their phones be
20 phase two compliant?

21 MS. MIZE: Well, I did do some research on
22 that, and the requirement from the FCC outlines
23 the phase two rules are in place, and have been
24 achieved, because all the phase two actually
25 states, and again I could be misinterpreting

1 the FCC's documentation, states that it has to
2 be compatible, it has to be capable. So, they
3 are capable, the question is whether or not
4 they're delivered. And some of the impacts to
5 the delivery can lead to some issues that could
6 be outside of the carrier's control, for
7 example the cell, you know, the strength of the
8 tower that it hits, how long it takes for the
9 system to actually pull the data in.

10 So, for an example, in multiple 911 calls
11 we see at any given month -- we look at -- we
12 do a lot of analysis on our call performance.
13 We see a tremendous amount of inbound calls
14 that are phase one coming in. We have also
15 preset our phone system to automatically rebid,
16 to take it away from manual processing, so once
17 a call comes in that is phase one our phone
18 system is going to automatically push for get
19 me the triangulation, but it can take
20 twenty-five to thirty seconds.

21 But from everything I've read from the FCC
22 that does, that basically has this outlined,
23 they've met their objective with regard to the
24 timeline and the requirement, which just says
25 it has to be capable, and it's capable, it just

1 can take some time to get it done.

2 COMM. SWEARINGEN: Thank you.

3 CHAIR: Go ahead.

4 MR. SCHACHTER: Thank you very much.

5 Let's see here. Earlier -- chairman, can you
6 explain, or Sheriff Ashley, elaborate a little
7 bit what you're talk about the flags, because I
8 didn't understand that, and what problem this
9 whole situation creates.

10 CHAIR: So, every CAD system has the
11 ability to track certain information, such as
12 -- so when a deputy gets dispatched to a
13 certain address you can push a button that has
14 something comparable to, and you get different
15 terminology, but prior, so if you click on
16 prior it will tell you the prior calls at that
17 address, the type of call, how it was cleared,
18 the nature of the call. Because if you're
19 going let's say to a domestic you want to hit
20 prior, and you want to know have deputies been
21 out there five times in the last week or is
22 this the first time we've ever responded there.

23 Then there's going to be some other
24 button, and the nomenclature varies from CAD
25 systems, but there's a caution button. You can

1 push on a caution button and it'll tell you
2 that this person is known to be anti-law
3 enforcement, that there's universal precautions
4 for that address, that there are certain things
5 you need to be aware of, a whole variety of
6 things that would be safety related, scene
7 safety related, officer related.

8 So, some of that information is automated
9 so it's automatically populated in the screen,
10 and some has to be, some of it has to be
11 manually entered. But it's situational
12 awareness information that would be available
13 to the responding officer or deputy.

14 MR. SCHACHTER: And by having the
15 disparate CADS that information is not
16 available to the responding officer, is that
17 what you're saying?

18 CHAIR: Right, it wouldn't be -- it
19 wouldn't be because -- so as an example is, is
20 that if you had information in the Broward
21 County CAD system, in the regional CAD system
22 that talked about that a, let's say a certain
23 address -- so I'll use this as an example,
24 okay, is, is that it is, is that it's at a
25 certain address, and the certain address is in

1 Parkland, and that person is known to be
2 anti-law enforcement, is known to have used
3 violence against law enforcement, that would be
4 an example.

5 Let's say that a Broward deputy is
6 investigating a call, and it happened somewhere
7 else, and they got to go to that address. When
8 they update it and you put your secondary
9 location in, et cetera, it would pop up and
10 tell you, once you put that address in it would
11 pop up and tell you that this is known about
12 that address. But if a Coral Springs officer
13 is investigating something in Coral Springs and
14 they're going over to the Parkland address they
15 wouldn't know that.

16 MR. SCHACHTER: That could be a, a
17 problem, that could be a big problem.

18 CHAIR: Yeah. So -- and to be careful,
19 and that's my experience in what I know, but
20 I'll ask Angela if anything I've said is
21 incorrect about that or needs to be clarified
22 the way it is here in Broward County. So,
23 clarify my response to that if it needs
24 clarification.

25 MS. MIZE: No, you're absolutely correct

1 in how -- so what you're talking about, well,
2 we refer to it as two different things,
3 previous history, which is affiliated with the
4 address, and it will show like your stating,
5 the type of calls that were there, the
6 disposition codes that were used, the
7 classification of the events, or flags. And
8 when we refer to flags we refer to something
9 that the field is stating that this address in
10 particular must be marked for.

11 The flag could be officer safety, but it
12 could also be for HazMat. It could be
13 medically, because perhaps there's a person who
14 is hearing impaired in there, and there's
15 special directions on how to access the
16 residence. So, it could be a variety of
17 things, but they're all driven by the field to
18 say do something specific to this address.

19 CHAIR: And the same thing holds true
20 where, and we'll have Coral Springs up here in
21 a minute, and their CAD, that they're putting
22 that type of information in theirs. So, if you
23 have a BSO deputy who is going into Coral
24 Springs and they out code at a certain address
25 the information that is known to Coral Springs,

1 and in the Coral Springs CAD, may not be known
2 to that BSO deputy when they out code at that
3 address in Coral Springs.

4 Now, the same thing happens in Plantation,
5 so it's no different between Coral Springs and
6 Plantation, and it does become information
7 silos, and the information that would be of
8 benefit vice-versa is not readily available.
9 Now as she mentioned a few minutes ago, is that
10 if it were to happen, and somebody were to do
11 it, somebody could call BSO Regional
12 Communicate Center is, let's say they're
13 putting a flag in their system, a call taker
14 could, or a dispatcher could call Coral Springs
15 and say, by the way you might want to put
16 those, this in yours, but you can't rely on
17 that. And that's, you know, that depends if
18 somebody wants to do it and, and whether it
19 happens, so --

20 MR. SCHACHTER: Are -- are you aware,
21 aware of any officer safety issues that that
22 has created?

23 MS. MIZE: Officer safety issues that
24 resulted in an incident, no.

25 MR. SCHACHTER: Yeah, okay.

1 MS. MIZE: But officer safety concerns
2 with regards to, hey, we didn't realize this,
3 and this is a concern, absolutely it does
4 happen.

5 MR. SCHACHTER: Yeah. Yeah, okay, thank
6 you.

7 SHER. ASHLEY: I just want to point out
8 that that's not limited to just addresses. You
9 also do intel flags on people.

10 MS. MIZE: Not with the CAD system, but
11 with the records management system I believe it
12 has that capability, which is independent of
13 our CAD. So, yes, the field units I believe do
14 have more robust versatility for that.

15 CHAIR: But some could in some CADs, and
16 why don't we ask Coral Springs, because some,
17 some do with individual people.

18 MS. MIZE: Sure. They might.

19 CHAIR: We do with ours, we identify
20 people by individual, so you put a name and it
21 would pop up. So, that -- that is a
22 possibility, and it varies from system to
23 system.

24 MS. MIZE: Correct.

25 SHER. ASHLEY: Can I just follow up on

1 that just one second? That was back to my
2 question on CAD populating record management
3 systems. Does your regional CAD populate each
4 one of your municipalities' records management
5 systems?

6 MS. MIZE: To my awareness it does, yes.

7 SHER. ASHLEY: Okay. But it does not to
8 those non-participating municipalities.

9 MS. MIZE: Correct, independents.

10 SHER. ASHLEY: Thank you.

11 MR. SCHACHTER: I've been working very
12 closely with Coral Springs and Parkland and BSO
13 to fix this problem that we're talking about.
14 Are you aware of that issue, and can you talk
15 about that briefly just to update the
16 commission on the temporary fix?

17 MS. MIZE: Absolutely. Correct. So,
18 temporarily what we have in place right now is
19 currently any call that Coral Springs runs in
20 the City of Parkland for fire rescue, they're
21 actually coming over our main police dispatch
22 talk group, and they're announcing that they're
23 actually responding out, so it give us
24 immediate situational awareness to their
25 response.

1 There's also been pages set up between
2 Coral Springs fire and Parkland BSO so when BSO
3 executes an assignment for a Parkland deputy
4 depending upon the nature of the call Coral
5 Springs fire rescue is being alerted that
6 Parkland is responding out and that this is the
7 type of call that they're going. Vice-versa,
8 if Coral Springs fire rescue is being sent out
9 paging is going off on the Parkland deputy side
10 so that they're aware that Coral Springs is
11 running. So, we have now multiple layers of
12 redundancy to ensure that there is sharing of
13 information because of the disparate CAD, and
14 because you've got one entity doing law and one
15 entity doing fire. That is in place right now.

16 MR. SCHACHTER: Thank you. I would
17 certainly, you know, like the commission's
18 opinion on that, but to answer Commissioner
19 Dodd's question, there were, according to BSO's
20 presentation earlier, our first presentation,
21 they received approximately eighty-six incoming
22 calls, so it was under that, that hundred and
23 twenty. And then my last question is in your
24 first presentation of those eighty-six incoming
25 calls only, to Coral Springs only three calls

1 were transferred to BSO. Do you still stand by
2 that? Is that still correct?

3 MS. MIZE: The information that I have
4 available to me, of the calls that Coral
5 Springs had we got three, two of which were
6 relay, not transfer, and the third was a
7 transfer.

8 MR. SCHACHTER: Do you have any idea
9 where, why all those others calls did not get
10 -- I understand you're not that department, but
11 do you have any --

12 CHAIR: We're looking at that. We have
13 our investigators that are going through those
14 records right now, and you're going to get a
15 whole chronology, that chronology that I was
16 talking about yesterday, you're going to get a
17 whole chronology on that, and a whole
18 presentation on it. And I think we should
19 probably wait as opposed to her ad-hoc trying
20 to answer something that she doesn't have the
21 information to answer. You're going to --
22 we're going to get into that, and you're going
23 to be able to --

24 MR. SCHACHTER: She does -- she does have
25 it, I've seen it. I just want her opinion.

1 CHAIR: Let's wait until we get all of
2 that from, we have it in front of us, and then
3 everybody can see it at the same time.
4 Question on, if you know this, and you may not
5 know, and it may be a better question for Coral
6 Springs, or for the County, when you talk about
7 911 systems, we're talking about phone systems,
8 would Viper, as an example of that, be
9 considered a part of the 911 system?

10 MS. MIZE: Yeah, that -- that is the --
11 that is the software.

12 CHAIR: That is the system, right, right.

13 MS. MIZE: That is the hardware that's
14 supplying that, correct.

15 CHAIR: So, is the Viper system -- is
16 Viper -- does Coral Springs and Plantation use
17 different systems other than Viper, or they use
18 Viper?

19 MS. MIZE: No, they all use Viper as well.
20 And actually, because the 911 system is pushed
21 by Broward County as the E911 source, very
22 similar in structure.

23 CHAIR: So, if we're talking about
24 competence in 911 systems is -- is Verizon the
25 phone provider, do you know?

1 MS. MIZE: I believe AT&T.

2 CHAIR: AT&T, okay. And do you know
3 whether it's AT&T for Coral Springs and --

4 MS. MIZE: It -- it should. Yeah, it
5 should.

6 CHAIR: Okay, so as far as competence in
7 systems go Plantation, Coral Springs, and
8 Broward County are all using AT&T, and using
9 Viper, and all using the same vendor, and the
10 same equipment, and the same technology?

11 MS. MIZE: They are. There is an
12 architectural different though between the
13 regional setup and the non-regional setup, and
14 that's a definite better question for County to
15 describe. So, they are using the same
16 technology, yes.

17 CHAIR: All right. So, and different
18 things occur in different places, in different
19 experiences. You mentioned in your
20 presentation about the call transfers, and that
21 your protocol is when you transfer a call to
22 either Plantation or to Coral Springs that your
23 protocol is, is to remain on the line until
24 that receiving entity is communicating with the
25 calling party. Does it work the same way

1 coming into the regional center? Do they have
2 the same protocols where they remain on the
3 line until you all are communicating with the
4 calling party?

5 MS. MIZE: I don't know if their standard
6 operating procedures have that. I can just
7 tell you that I feel that's an industry best
8 practice, and Nina has it outlined as a best
9 practice. I can't state whether Coral Springs
10 or Plantation has that as part of their policy.
11 I don't know.

12 CHAIR: So, what is your experience, and
13 your call takers' experience with two things,
14 one is, is that do you experience when somebody
15 has called the regional center and you ask
16 those preliminary questions, and you realize
17 that you need to transfer it, and you say hold
18 on, I'm going to transfer it, and then you have
19 probably some type of a ring down line that
20 goes over, and it's answered, and you say this
21 is so and so with regional, I have somebody
22 who's calling, do you experience where the
23 caller is no longer there, and that the call
24 has dropped, number one?

25 And the second part of the question is, is

1 that and/or do you ever, do hear frustration
2 from the callers when they have to tell their
3 story a second time?

4 MS. MIZE: In my personal experience back
5 in the day absolutely both of what you said
6 does happen. If you explain to the caller what
7 you're doing, and why you're transferring, so
8 it's all in caller reassurance, and telling
9 them what your process is. I mean, I've heard
10 tapes where 911 operators just transfer over,
11 and in the process of connecting to another
12 department you're hearing clicking, and it
13 almost sounds like a disconnect. So, depending
14 upon whether the operator adheres to the
15 policy, I've seen examples where, you know,
16 yeah, they're absolutely frustrated. Sometimes
17 you can mitigate that frustration by explaining
18 I need to transfer you over for this purpose,
19 but again if the operator doesn't follow policy
20 all best can be off.

21 CHAIR: So, that -- my question, and you
22 answered it going, going out, but do you and
23 your call takers experience frustration in
24 incoming calls that are transferred from
25 Plantation and/or Coral Springs where they are

1 trying to talk to the people and either they
2 get frustrated or the caller is not there?

3 MS. MIZE: Absolutely can happen.

4 CHAIR: Does it happen?

5 MS. MIZE: Does -- does it happen? It
6 absolutely happens, yes.

7 CHAIR: And that would be an example of
8 something that can cause frustration for the
9 deputies that are responding when they're
10 asking your dispatchers -- remember for
11 everybody that's not familiar, you know,
12 nomenclature, dispatchers are different than
13 call takers. Call takers are the people that
14 are talking on the phone and getting the
15 information, entering it into the CAD, and then
16 they're sending it to the dispatcher who is
17 communicating with the cops on the street. The
18 dispatchers aren't talking to the people
19 calling in, and the call takers aren't talking
20 to the cops on the street.

21 So, when the dispatcher is saying, the
22 deputy is asking about a physical description,
23 a location of travel, all of the other relevant
24 things, is the person armed, and they're asking
25 the dispatcher, who is then asking the call

1 taker, is that the call taker doesn't have the
2 ability to provide that information because the
3 person is not there.

4 MS. MIZE: Correct, that can absolutely
5 happen.

6 CHAIR: Okay, any other questions?
7 Senator Book, go ahead.

8 SEN. BOOK: Thank you, Mr. Chair. And
9 thank you again so very much for walking us
10 through. Bur for the lay person who is not in
11 law enforcement, and does not know how to turn
12 on a computer oftentimes could you go to slide,
13 well, Page 8, the Viper telephone system, and
14 to 12? Can you walk me, and maybe some us,
15 through what that would look like, because what
16 I understand the Chair saying is that Coral
17 Springs, Plantation, and regional all use
18 Viper, and they have the same operating
19 systems. Would they see the same thing? And
20 if you writes notes into -- if the call taker
21 writes notes they wouldn't see it, it can't be
22 like --

23 CHAIR: No, because they're totally stand
24 -- they're separate systems, so they're hosted
25 separately, they're on separate servers,

1 they're in separate -- so they're in a silo.
2 It may be the same, you know, I don't know how
3 to analogize it. You know, it's the same
4 cereal box, okay, it's Fruit Loops on the shelf
5 here and it's Fruit Loops on the shelf there.
6 I don't know how -- it's two -- it's the same
7 but they're not connected in any way. So, it's
8 that you're entering it into the same software
9 program, but those software programs are not,
10 are not connected at all.

11 SEN. BOOK: Thank you, Mr. Chair. And
12 then when I visited Coral Springs they had
13 something, a dashboard, could you, maybe -- and
14 that's a better question for Coral Springs to
15 be able to -- how -- so then, wait, let me ask
16 this. A patch, or is that later on?

17 CHAIR: That's different. That has to do
18 with radios, totally that --

19 SEN. BOOK: That's later, okay.

20 CHAIR: So, that's really apples and
21 oranges from this, because that -- that -- so
22 we got our three buckets. We've got 911, we've
23 got CAD, and we've got radio. The patch is a
24 form of interoperability that's on the radio
25 side, and we'll get into -- patch -- and

1 patching also goes into throttling, it goes
2 into fail safe -- that's all for this
3 afternoon.

4 SEN. BOOK: Okay, so the call taker gets
5 the call then they give it to the dispatch, and
6 then the dispatch talks to law enforcement.

7 CHAIR: Correct.

8 SEN. BOOK: And then they have their CAD
9 system in their car, or --

10 CHAIR: Yeah, so you have -- you have the
11 CAD system that's, that's in the communication
12 center, so the screen that she's showing you
13 here on Page 12 is that you have somebody
14 that's sitting there at a, at a call taking
15 position, and they have a number of different
16 screens, and one of the screens is most likely
17 going to be the Viper screen, and then they're
18 going to have the CAD. And so as they're
19 talking to the person, and the call comes in,
20 and they're getting all this information about
21 telephone numbers, and pre-populated
22 information, then they're going to take that
23 and they're going to open, some people call it
24 a call ticket, and there's different names for
25 it, they're going to open a CAD screen, and

1 then they are going to manually type in what
2 they need to, and they're going to ship it
3 electronically over there to the person that's
4 sitting at a dispatch console who is
5 dispatching it to the cops.

6 So, they are continually updating that, so
7 as she talked about when they're on the phone
8 and they're taking it, and they are able to
9 communicate, and they're getting direction of
10 travel, and they're getting clothing
11 description, and they're getting all the
12 information, because when they first got it
13 they sent it to the dispatcher, the dispatcher
14 probably voice dispatched it and digitally
15 dispatched it to the cop on the street, so
16 they're going. This person is getting more
17 information, and they're continually updating
18 the screen, the person left and they're wearing
19 a red shirt, they went northbound, they're
20 driving this kind of car, then the dispatcher
21 is either verbally communicating that, or is
22 shipping that information.

23 Because they're updating the screen the
24 cop on the street can see the screen as it's
25 being updated by the call taker in the CAD, so

1 that's all in the CAD. And then you've got if
2 you have a dual response, fire and law
3 enforcement, then this CAD ticket, or this CAD
4 screen is being filled out, and the dispatcher
5 is going to -- and I'll give you a second to
6 correct any of this if it's not the way it is
7 in Broward County, is, is that it's going to
8 the law enforcement dispatcher, but it's also
9 going to the fire dispatcher, because the fire
10 dispatcher is different. The fire EMS
11 dispatcher is sitting over here. The police
12 dispatcher is sitting over here. But it's all
13 common CAD where it's all getting pushed out so
14 that they're all seeing the same things, but
15 one is talking to police while one is talking
16 to fire and EMS, and they're on different radio
17 channels. So --

18 MS. MIZE: Correct.

19 CHAIR: Is any of that wrong?

20 MS. MIZE: No, correct.

21 CHAIR: All right. So, that's how --
22 that's how it works. Clear as mud, right?

23 SHER. ASHLEY: Mr. Chair, if I could just,
24 one more question.

25 CHAIR: Yes. Yeah, absolutely.

1 SHER. ASHLEY: Do you all have a ProQA, or
2 some other --

3 MS. MIZE: We do.

4 SHER. ASHLEY: Do you know if the other
5 municipalities that do not participate have
6 that?

7 MS. MIZE: Both municipalities, Coral
8 Springs and Plantation I believe are APCO EMD,
9 so they follow an EMD protocol, but it's not
10 through the International Academy of the
11 Emergency Dispatch, it's through APCO, and I
12 don't know if they have ProQA. That's
13 definitely for them to ask, you know, that
14 response.

15 SHER. ASHLEY: Thank you.

16 CHAIR: Yes, Commissioner, go ahead.

17 MS. LARKIN SKINNER: In the world of 911
18 what is the difference between relaying a call
19 and transferring a call, and how does that
20 affect the dispatching, the response to the
21 incident?

22 MS. MIZE: So, relaying a call -- in how
23 I'm going to, how I'm using the term, would
24 mean I spoke to somebody, I'm speaking to
25 somebody, but I'm having you make a phone call

1 to another party to tell them what I'm telling
2 you, so I'm relaying it. So, you're not
3 actually speaking to the caller, you're just
4 being told information that I am telling my
5 partner to tell you.

6 In a transfer I'm actually giving you the
7 caller, so now we have a three-way telephone
8 conversation going on. So, in the transfer
9 opportunity I'm going to tell the caller please
10 wait a moment, I need to connect you to, I'm
11 going to transfer it over, now you've picked
12 up, you are now able to hear me and the caller.
13 I'll tell you this is this department, I'm
14 transferring regard to this event at this
15 location, caller please go ahead. Now you are
16 speaking directly with the caller, so there is
17 no thirty-party involvement in that.

18 MS. LARKIN SKINNER: Okay, so my
19 observation is that at best either having to
20 relay or transfer delays the response.

21 MS. MIZE: By thirty seconds on average
22 under NFPA standards for best practice.

23 MS. LARKIN SKINNER: And when lives are at
24 stake thirty seconds is a lifetime.

25 MS. MIZE: Sure.

1 CHAIR: Sheriff, go ahead.

2 SHER. JUDD: Commissioner, let me respond
3 to that with an, with a story. In 1975 I went
4 to the small Mulberry Police Department to
5 deliver a civil process on the midnight shift.
6 The dispatcher who was a complaint operator
7 took a call, I'm at 123 Main Street and I hear
8 somebody in my backyard. She pushed the button
9 and said Car 1 there's a burglary at 123 Main
10 Street, Mulberry, Florida. Seconds. That time
11 is gone. We could dispatch a call faster
12 thirty years ago, forty years ago, than we do
13 today, but it was a totally different
14 environment. Because I have this frustrated
15 talk about that thirty seconds at least on a
16 monthly basis in my shop about how do we cut it
17 down, how do we cut it down, how do we cut it
18 down, and, and believe me we're still all
19 working on that process.

20 But when you're dealing with thousands of
21 calls, and really dozens of different protocols
22 in order to get the best resources there in the
23 quickest amount of time, and what they're
24 trying to do is get the right resource there,
25 because quite frankly there's two things in an

1 emergency, a real emergency in somebody's life,
2 they don't know where they are, and they don't
3 know what they need, they're just scared beyond
4 all comprehension. So, that's what these folks
5 are up against, and that is why some of this
6 takes longer than all of us wants, I mean
7 that's just the reality of life.

8 But before -- so before I close I've got
9 to tell you, Angela, that it was, it was really
10 delightful to hear someone with decades of
11 experience who has answers and knows what's
12 happening present to us. You were exceptional
13 today.

14 MS. MIZE: Thank you.

15 CHAIR: So, to be -- and to put it in
16 context for how long thirty seconds is, I'm not
17 going to do it, do it yourself. Sit there and
18 look at your watch for thirty seconds and don't
19 say anything in silence. You want to know how
20 long thirty seconds is, it's a long time. You
21 want to know how long thirty seconds is, Nick
22 Cruz was inside Stoneman Douglas for six
23 minutes. Thirty-four people were shot in six
24 minutes. How long is thirty seconds; that's a
25 long time. That's a long time.

1 Go ahead, last one.

2 MR. SCHACHTER: I think the -- the thing
3 that I always think of is that, that the
4 coward, the coward got to the front of the
5 building at 2:23. Eleven kids were already
6 dead by then, in two minutes. Unless you can
7 stop these attacks in under a minute a lot of
8 people are going to die, so thirty seconds,
9 you're absolutely right, it's a huge important
10 thing.

11 And back to the Chairman's point, that six
12 minutes is obviously true, but we all know that
13 everybody was dead in just over three minutes
14 and forty seconds, so forget about the six
15 minutes, everybody is going to dead in, if you
16 don't, if you don't stop this attacker, in
17 minutes.

18 CHAIR: All right, Angela, thank you. I
19 know you're going to be around, and we'll hear
20 from you later. And we're going to take a
21 fifteen-minute break now. It's -- let's come
22 back, it's 11:08, and so let's come back at
23 11:25, and we'll hear from Coral Springs. It
24 will push us a little bit into the lunch hour,
25 but like yesterday we'll make up. We have a

1 lot of important discussion, we'll make up some
2 of that time this afternoon. So, let's come
3 back from the break, at 11:25 we'll get started
4 again.

5 (Thereupon, a break was taken off the record and the
6 meeting continued as follows:)

7 CHAIR: Our next presentation on the topic
8 of 911 centers and emergency communications is
9 Deputy Chief Shawn Backer from the Coral
10 Springs Police Department. I've been
11 communicating over the last month or so with
12 Chief Clyde Perry from Coral Springs, and Chief
13 Perry has been extremely cooperative, very
14 professional in all the dealings we've had, and
15 unfortunately, he's out of town this week. I
16 know he wanted to be here himself, but again I
17 just want to make sure everybody knows that the
18 have been extremely cooperative in this
19 process, and I know that Deputy Chief Backer
20 will fill us in from a Coral Springs
21 perspective. So, welcome, Chief.

22 PRESENTATION: CORAL SPRINGS 911 EMERGENCY
23 COMMUNICATIONS

24 DEP. CHIEF BACKER: Good morning. Thank
25 you for having me, commission. Again, as you

1 mentioned, Chief Perry is unable to be here
2 today. He sends his apologies. I know he
3 wished he could. He had a pre-planned trip
4 that kept him out of the area and unavailable.

5 So, with that I would like to mention that
6 along with myself I also have Kathy Liriano,
7 who is our communications administrator, and I
8 also have fire, Coral Springs Parkland Fire
9 Chief Frank Babinec here to assist with this
10 presentation. There are certain aspects when
11 it comes to the technology that I would
12 absolutely butcher and do a disservice to
13 explain, that's why I've got Kathy. And a lot
14 of the people that are in charge of certain
15 aspects of communications at Coral Springs such
16 as myself and Kathy, we were not a part of the
17 decision-making process to remain an
18 independent.

19 I know that's obviously an important
20 question that you as a commission want to
21 address so Fire Chief Babinec was a part of the
22 management team of the City at the time, so I
23 think from a historical perspective it will be
24 best to hear from him when we get to some of
25 those aspects.

1 I also want to thank the County for their
2 presentations. Angela did a great job
3 explaining, you know, a lot of the workflow and
4 stuff, and obviously a lot of the processes and
5 things that we utilize at Coral Springs are
6 very similar. Kathy will talk about that, so
7 there might be some level of redundancy to
8 aspects of what we've discussed today. I just
9 want to introduce a little bit of our emergency
10 communications center. We are an independent
11 public answering safety point, a PSAP, as you
12 guys have heard that acronym used today. We
13 process emergency police and fire rescue calls
14 for the City of Coral Springs, and we also
15 process fire rescue calls for the City of
16 Parkland.

17 We are interoperable with the County's
18 radio system. I know the heart of today's
19 presentation this morning is more 911 and PSAPs
20 and not radio, but I think it's important to
21 understand that all of these regional centers
22 and independent centers are all part of the
23 hosted master site and makes all of our radio
24 systems interoperable. We have the ability to
25 talk across all radio systems, which will

1 become something we'll discuss more in depth
2 later this, or, excuse me, tomorrow when we
3 represent our radios, but also as we get into
4 the event itself somewhere down the road.

5 The City of Coral Springs -- the City of
6 Coral Springs is roughly about twenty-four
7 square miles. Our communications center
8 services about a hundred thirty thousand
9 residents just in Coral Springs, and when you
10 factor in the City of Parkland that adds about
11 another thirty thousand residents that are
12 serviced from the, the fire rescue side. Our
13 dispatch, or excuse me, our emergency
14 communications center is the lifeline between
15 our residents and our first responders.

16 We operate, obviously, twenty-four hours a
17 day seven days a week, 365. We have
18 thirty-eight trained professionals that staff
19 our center during those hours of operation.
20 That includes Kathy Liriano, who is our
21 administrative, communications administrator.
22 It also includes a technical coordinator, and
23 we also have a full- time training coordinator.

24 Our regional center, excuse me, our
25 independent communications center is certified

1 through the Association of Public Safety
2 Communication Officials, also known as APCO, as
3 meeting nationally recognized training
4 standards. We're also accredited through
5 CALEA, which is the Commission on Accreditation
6 for Law Enforcement Agencies. In fact, the
7 last two accreditation cycles we were dual gold
8 accredited in both communications and law
9 enforcement. Our training curriculum exceeds
10 state requirements and is certified through the
11 Florida Department of Health.

12 So, a lot of the same certifying bodies
13 have ensured that the way we do business is
14 just as good if not better than the County in
15 some aspects, so we're very proud of our
16 center. We're very proud of the service that
17 it provides to the City of Coral Springs. At
18 this time, I'm going to bring Kathy Liriano up
19 to talk about some of the mechanics of the
20 operation, the technical aspects. After Kathy
21 Fire Chief Babinec will come up, talk about
22 some of the history, and then all three of us
23 will remain and be available for any questions
24 that any the panelists have.

25 MS. LIRIANO: Good morning, commission.

1 My name is Kathy Liriano, Communications
2 Administrator for the Coral Springs Parkland
3 Fire Emergency Communications Center. I've
4 been with the communications center for
5 approximately ten years. I started as a call
6 taker, you know, I went to telecommunicator,
7 shift supervisor, and now administrative, the
8 administrator for the unit. Just like Chief
9 Backer said, you know, we have thirty-eight
10 trained professionals that we staff in our
11 communications center. We service the
12 residents of Coral Springs for police and fire,
13 and then for Parkland for fire only.

14 So, prior to regionalization, regional
15 consolidation went into effect with all, you
16 know, jurisdictions on October of 2014, and
17 prior to regionalization the E911 office was
18 responsible for providing all the hardware and
19 software for our 911 system. And to this date
20 they still provide that for Coral Springs,
21 Plantation, and the regional system. We are on
22 two separate platforms when it comes to how,
23 for redundancy purposes. The regional is on
24 one, and the non-regional is on another for
25 redundancy purpose, but we still use the same

1 Viper system, all managed by ORCAT, which is,
2 you know, the Office of Regional Communications
3 Standard for the County, so they are the ones
4 that provide that to not only Coral Springs and
5 Plantation, but also the regional PSAP centers.
6 So, that was prior to regionalization, and it's
7 still current to this day.

8 And at that time there was ten PSAPs that
9 operated in the county. We worked at that time
10 very closely with the Margate PSAP, and at that
11 time our CADs did interface with each other,
12 especially for fire rescue and automatic aid.
13 Each PSAP did maintain their own system and
14 personnel, and the E911 office now falls under
15 the Regional Communications and Technology
16 Office with Broward County.

17 So, kind of what Chief Backer was talking
18 about, was the county configuration. So, you
19 know, the radio is managed by ORCAT, also, you
20 know, the county's radio is at the end of life,
21 and you know, should be, you know, from the
22 meetings we've been attending, 2018, 2020,
23 replacement, and you know, they corroborate
24 with six different committees that Plantation
25 and Coral Springs are also a part of, just

1 because we just want to make sure that we have
2 that open lines of communication with the
3 regional centers, and if, you know, we can
4 provide any input, and also receive any input
5 from them, we try to make sure that we're
6 attending all the meetings that they have so
7 that there's no miscommunication, or if there's
8 any questions that they have of us in our
9 system that we're able to answer for them.

10 The CAD-ORCAT is also, is through,
11 CAD-ORCAT is through Motorola, and the 911's
12 system is through ORCAT, through the West Corp,
13 which is their vendor. And then personnel and
14 training is through the Broward Sheriff's
15 Office. Sorry, I'm a little bit under the
16 weather, but just bear with me. So, the Coral
17 Springs' configuration, how we have been set up
18 prior to and after regionalization. The City
19 maintains complete control of the radio, which
20 we upgraded to the Motorola P25 radio system,
21 which is a digital, digital radio system, back
22 in May of 2015, so we've been on that platform
23 now, you know, for a while, for three years, a
24 little bit over three years.

25 Our computer aided dispatch system which

1 is through Superior, and a lot of people know
2 it as OSSI, also runs the RMS program, which is
3 a records management system that most of the
4 county agencies use, are also, you know,
5 through that vendor, and we have as well. We
6 updated to that CAD platform in December of
7 2016. During that time, I know some of the
8 questions are, well, Coral Springs didn't join
9 the CAD at the time, well, we weren't sure when
10 the County was going to go over to their CAD
11 live at that time. When they started the
12 process of looking into it we were already at
13 the stages of implementation, when they, they
14 started inquiring if we were interested in
15 joining their CAD platform.

16 I know a couple of the questions that came
17 up was about premise alerts, you know, any
18 BOLOs on subjects, and so forth, so our CAD
19 does have that capability. We have -- we are
20 able to provide premise alerts for officer
21 safety reasons, medical reasons, also for entry
22 purposes, for just like Angela said, and also,
23 we do have on the subject itself. So, if an
24 officer runs a subject we are able to see if we
25 have prior history of that person, and also

1 because our RMS talks to our CAD we're able to
2 see if they've been arrested, if we've run them
3 on a traffic stop or domestic, and so forth, so
4 we do have that interoperability with our
5 records management system and our CAD.

6 One thing to note is, you know, through
7 the RMS product with OSSI that most
8 municipalities in the county have, is that we
9 have a, a program, it's P2P, so P2P gets to
10 talk to each other, and they're able to pull
11 data information of all the agencies that enter
12 information into the RMS program, or the
13 records management system, and other agencies
14 are able to view as long as they participate in
15 the P2P, which most municipalities do just to
16 be able to share certain information, to be
17 more informed so that anyone that goes out with
18 this, or if they're doing an investigation on a
19 certain person and they say, oh, look, Coral
20 Springs went out with them, or they see, you
21 know, the City of Tamarac went out with this
22 person, that these agencies are able to, to see
23 that information.

24 And then we are in charge of our personnel
25 and training. Our personnel are state

1 certified through the Department of Health.
2 Our curriculum is approved through the
3 Department of Health as well. Our -- the
4 requirement for the certification for the state
5 is twenty hours for the two years, because we
6 recertify every two years for the
7 certification. Our agency requires for our
8 dispatchers to have at least forty hours a
9 year. We feel that twenty every two years is
10 not sufficient because things change on a daily
11 basis, annually they change, so we try to make
12 sure we have the in-service training, that we
13 train with firefighter paramedics, we do riding
14 programs with the police and fire, and we also
15 do in-service training with our law enforcement
16 officers.

17 We go out -- when they do the in-service
18 we, we have a range, and they practice the
19 active killer, or when they do, they've done
20 scenarios at different schools, at the mall.
21 Our dispatchers are there to be able to try to
22 picture what the officer is seeing so that
23 we're better able to grab, and when we're
24 interrogating a caller what type of information
25 we may need, and also when dispatching trying

1 to be a step ahead of the officer in trying to
2 get the information for them.

3 And then the Coral Springs 911 phones are
4 still being provided by ORCAT, so for both
5 hardware and software it's through them. So,
6 the Coral Springs' PSAP phone hardware and
7 software is provided and served by ORCAT
8 through West Corp. They provide our voice
9 recording system for the 911 lines, and also
10 the Power MIS, which is the reporting software,
11 the more we get on the reports and reference to
12 the actual system as a whole, so each PSAP has
13 the capability of running reports for their
14 agency for what's coming in, what's outgoing,
15 and then also the voice recording system
16 software for the 911 lines is managed by the
17 County, for the non-emergency lines it's
18 managed by the City. And so, the radios, the
19 radio recording is also managed by the City.

20 So, for the phone system the hardware and
21 software upgrade was completed on February 14,
22 2018 with Broward County vendor West Corp, and
23 the couple of projects that we're working with
24 the E911 Office are the texting 911 and the
25 GIS, the geographic information services. So,

1 we work very closely with the County. Our IT
2 team and our GIS team, which does the mapping,
3 they've been working with them just to make
4 sure that it's consistent throughout the County
5 and sharing the data with each other for the
6 phone system is as accurate as possible.

7 And obviously wire lines are the most
8 accurate, but with technology nowadays most
9 everyone has a cell phone, or even a VOIP
10 phone, which is a voice over internet phone. A
11 lot of people have it through their internet
12 providers where, you know, I can tell you a
13 personal story. My brother in-law, he had a
14 VOIP phone in his home. Unfortunately, he had
15 a heart attack, and when he passed out in front
16 of the computer it unplugged, so when my sister
17 in-law tried to dial 911 she couldn't get
18 through because it disconnected.

19 So, there's so many different aspects to
20 nowadays with the technology of how calls are
21 sent to a PSAP that we even have instances
22 where people live in Coral Springs, move to
23 California, and never change their address in
24 VOIP, and when they dial 911 it comes into our
25 center and we have to figure out how to get

1 them to California. So, there's so many
2 intricacies that a lot of people that don't
3 deal with the 911 system on a regular basis
4 don't realize of things that can occur just by
5 simple programming. You know moving is hectic,
6 and if you have kids and, and trying to go
7 across the country, the last thing you're going
8 to remember, oh, let me change my address on my
9 phone for the house to make sure it says, you
10 know, Los Angeles, California, and still it
11 says Coral Springs, Florida.

12 So, there's just a lot of intricacies with
13 the phone system that even a lot of people,
14 well, I do have a hardline, it's through, you
15 know, AT&T or Comcast, oh, but it's through my
16 internet, so that's something completely
17 different. So, there's a lot of things to take
18 in consideration when the normal person is even
19 trying to find what the best option for their
20 home for a 911 line is.

21 And just so you know the text to 911,
22 that's one of the reasons why the County has
23 been doing the hardware/software upgrade, so
24 that when the County as a whole goes to this
25 texting 911 Coral Springs and Plantation will

1 be included in this as well. There's no --
2 when it comes to the 911 system there's really
3 no divide other than the redundancy purposes
4 behind it, but other than that there's no, you
5 know, the County goes first, or the regional
6 centers go first and then Coral Springs and
7 Plantation are last. Testing is done at the
8 same time. You know, right now we're working
9 closely with the County and BSO with
10 contingency plans if there is any, you know,
11 failures.

12 We have one in place with Plantation
13 ourselves, and we're working closely with the
14 County to do the same for the regional centers
15 in case we were to go down or they were to go
16 down. Just like you guys said earlier the
17 technology, it's not a hundred percent,
18 technology will fail unfortunately. Even
19 though there's some many redundancies in place
20 we just try to make sure that we have all areas
21 covered in case something were to happen, being
22 prepared.

23 So, the measuring of time. The City of
24 Coral Springs measures emergency dispatch time
25 in two segments. So, the first is the APCO

1 standards. And I know one of the questions was
2 how is Coral Springs certified for EMD, or
3 emergency medical dispatch. We are certified
4 through APCO. APCO, you know, the Association
5 of Public Safety Communications Officials,
6 they're the ones that set the standard for us,
7 what's approved by our medical director, and we
8 have the protocols that our call takers have to
9 abide by to be able to provide the EMD to the
10 caller when they're calling in.

11 Just so you know roughly how the system
12 works for Coral Springs, you know, when a 911
13 call comes in for Coral Springs and, for
14 Parkland for fire rescue and EMS, the call
15 taker picks up the phone, 911, what is your
16 emergency. Then the phone is picked up, you
17 know, the caller usually states what's going on
18 so, and a lot of it comes to the training of
19 the call taker, and how we train, you know, to
20 be a telecommunicator or dispatcher is not that
21 easy. The training program is anywhere from six
22 to nine months. Sometimes it's even longer
23 depending on the person. So, it is very
24 intricate, because not only are you learning
25 about the technology but also interrogation

1 aspects of it with, you know, asking questions
2 not only on the medical side but also on the
3 law enforcement side.

4 When it comes to, when we put in a call
5 for service in our CAD the call is inputted
6 with the address and the nature code of the
7 event. When it's -- we -- the way we classify
8 our calls is by priority, so if it's a priority
9 1 call our CAD knows as soon as the dress and
10 the nature code signal is entered it
11 automatically goes to the fire or law
12 enforcement, or both. No matter what type of
13 call it is in the City of Coral Springs, and
14 Parkland for, when a fire call comes in, when
15 we put it in it automatically spawns a law
16 enforcement call. So, our law enforcement has
17 the call holding, and the law enforcement
18 dispatcher will read to see is it pertinent for
19 law enforcement to respond, or we just announce
20 it over the air so in case the law enforcement
21 officer sees them going code in the City they
22 know what they're responding to, and obviously
23 if they need to be dispatched they'll be
24 dispatched at that time.

25 For Parkland we do the same, we put in the

1 call for service, and one of the things that we
2 did, we have improved the communication with
3 Angela and Lisa Zarazinski, who is the Director
4 for BSO communications, is the way we
5 communicate to them when there is a call for
6 service in the City of Parkland. So, right now
7 for a medical call we put in the call, it
8 routes to our fire dispatcher, and once it gets
9 routed to our fire dispatcher our police
10 dispatcher is going over there, the Parkland's
11 district talk group and announcing that Coral
12 Springs fire rescue is responding to 123 Main
13 Street for an illness, or a heart attack, or
14 whatever it may be.

15 And we also -- if -- we relay a lot to the
16 calls over if police is not needed, a lot,
17 because I know that was one of the questions,
18 do you automatically transfer. The relaying
19 is, is key, is relaying the information,
20 another call taker in the center would, you
21 know, be calling BSO and saying, look, we're
22 responding to the City of Parkland for X, Y,
23 and Z.

24 If we -- if the caller needs law
25 enforcement as well we will be transferring

1 that call to the Broward Sheriff's Office as
2 well, but one thing to remember is when we're
3 taking fire rescue calls we have to provide the
4 EMD, which is just the sustainability of life
5 really, because we do answer those CPR, there's
6 a CPR in progress calls. We do answer the
7 drowning calls when, you know, you pick up the
8 phone and you hear screaming from a parent, you
9 know something's wrong. You -- we pick up so
10 many different types of calls, and they each
11 follow a certain protocol and standard that we
12 have to follow to be able to render service,
13 because to us time equals life, and to make
14 sure that if -- we've saved so many -- our fire
15 rescue, we have a great relationship with them.

16 They've come up to dispatch and told us,
17 look, if you, your people had not started CPR
18 on the phone that person would have not
19 survived. We have had many success stories
20 because of that, so the EMD portion of this
21 profession is vital to, to sustainability of
22 life. So, APCO standards indicates that 911
23 calls should be answered with ten seconds or
24 less ninety percent of the time, and in 2017
25 the Coral Springs PSAP answered fifty-nine

1 thousand seven hundred forty- one 911 calls
2 only within ten seconds, which equates, equates
3 to 92.6 percent of the time with a live person.

4 CHIEF BABINEC: Good afternoon and thank
5 you for having us today to be able to speak on
6 this very important matter. And just on a
7 personal note, thank you guys for all the time
8 and effort you're putting into this commission.
9 My name is Frank Babinec. I'm the Fire Chief
10 for the Coral Springs Parkland Fire Department,
11 and we are the primary rescue agency that
12 responds into the cities of, responds for the
13 cities of Coral Springs and Parkland.

14 The next, the slide that we have up talks
15 a little bit about the national standards for
16 the first unit being dispatched within sixty
17 seconds or less, and also talks about the
18 thirty-five seconds of calls being answered in
19 2017 Coral Springs PSAP dispatched fire EMS and
20 police units within an average of thirty-five
21 seconds, so that's well under that sixty second
22 mark. As well we measure all of our response
23 times and our data on a daily basis when it
24 comes to call answering times, turnout times,
25 and all of that good stuff, and we always make

1 sure that we're staying within those acceptable
2 standards.

3 To give you a little bit of history, the
4 City of Coral Springs has been servicing the
5 City of Parkland for EMS in dispatch for EMS
6 since 1996. We took over the fire suppression
7 rescue and community risk reduction services in
8 2004 when the City of Parkland decided to do
9 away with their public-safety department
10 volunteer fire department, and we've been
11 providing those services since 2004
12 holistically across all of the fire rescue
13 disciplines. So, and then BSO started as well
14 in 2004 with the provision of law enforcement
15 services.

16 So, I'm going to get into a little bit of
17 why the decision was made to stay with our own
18 PSAP within Coral Springs when the rest of the
19 county was talking about consolidation. We
20 hired a consultant, RCC. I don't know if you
21 guys have this, have this report. If you don't
22 I'm sure Chief Backer can get it to you. But
23 we hired a consultant in 2013 to look at this,
24 to look at the radio systems, and to look at
25 our dispatch system for us to kind of give us

1 guidance in which direction we should go. The
2 reason we hired the consultant was our radio
3 system was coming to its end of life, and, you
4 know, obviously it's important to keep these
5 radio systems up and running, and we wanted to
6 see what our options were.

7 The approach was to look at best practices
8 to see what services were out there, and kind
9 of come back and give the decision makers at
10 the time what their options were, and what the
11 recommendation of the consultant was. Our
12 system was more than fifteen years old at the
13 time we started this approach. We knew it was
14 going to take a couple of years to, to get it
15 implemented, so the goal was to get it up and
16 running before we didn't have the availability
17 of parts, or to be able to keep the system up
18 and running. We knew that a failure would
19 result in us not being able to provide
20 services.

21 So, an analysis was done, and several
22 options were, were given. Maintaining our
23 current system, which obviously wasn't an
24 option because it was end of life. Using
25 national public-safety broadband network. Use

1 of a commercial cellular service exclusively.
2 Migration to the Broward County regional
3 system. A vendor neutral competitive
4 solicitation for a new P25 system, or a
5 migration to the Motorola P25 system with the
6 hosted master site that it right here out of
7 Plantation.

8 When all of the analysis was done each one
9 was looked at, and there was reasons that were
10 given to the decision makers as to why they
11 should be considered and why they shouldn't be
12 considered, and the, the recommendation that
13 came back, and that was eventually decided
14 upon, was to buy a new Motorola P25 hosted
15 master site system that Cappy had spoke about,
16 that's been up and running since 2015.

17 The reason for that decision was based on
18 operational needs, as well as some other items,
19 which I'll read from the report here that was
20 given to the decision makers at the time,
21 including the City Commission for the City of
22 Parkland, I'm sorry, for the City of Coral
23 Springs, and then, and then the same services
24 provided for the City of Parkland. The hosted
25 master site offers the City a lower system

1 capital and recurring costs by instead of
2 having our own master, hosted master site. It
3 offers lower maintenance and requires cost
4 system hardware or software, less reoccurring
5 costs for system hardware and software
6 upgrades, the guaranteed ability to maintain
7 existing interoperability and eventual enhanced
8 interoperability with all of our partner
9 agencies.

10 There's no need to link or have associated
11 costs to link the system into the Broward
12 County system. Now this is from a radio
13 perspective. We talked about those different
14 buckets that, dispatch center falls into 911,
15 the radio systems, the personnel, and all that.
16 This is the radio system I'm talking about
17 right now, which was the first part of the
18 equation that the decision was made not to go
19 with the, the consolidated center. And then a
20 maximum level of back up and redundancy.

21 So, when, when the City took a look at
22 this, and the discussion points were made with
23 the Commission, really it came down to the City
24 wanted, wanting to maintain its autonomy within
25 the dispatch center, the City realizing that

1 our radio system needed to be replaced, and was
2 willing to move forward with that, knowing that
3 the County's radio system was kind of in the
4 same position our radio system was at the time,
5 and the City wanted, the decision makers at the
6 time wanted to make sure the City could
7 maintain control of the operations within the
8 dispatch center so they had the ability to
9 really provide the service levels that they
10 felt were appropriate for the City of Coral
11 Springs and the City of Parkland, so when it
12 comes down to it really that's the main reasons
13 that this, this decision was made to stay as an
14 independent PSAP within the Broward County
15 area.

16 Again, we should make a copy of this
17 report available to you from RCC. I kind of
18 just glanced over it. The full report has much
19 more detail into it, but in the interest of
20 time I didn't want to sit here and read a full
21 report to you. Shawn, can you go to the next
22 slide please?

23 One of the other things, Parkland receives
24 -- we talked about them receiving -- the last
25 thing I just want to talk about is the Coral

1 Springs dispatch, over two thousand calls for
2 service for fire and EMS in 2017 for the City
3 of Parkland, and it was talked about earlier,
4 about how thirty seconds can matter, and how
5 time can matter, and I agree with that one
6 hundred percent. We know that fire doubles in
7 size every fifteen to thirty seconds depending
8 on what's burning, and the compartment that
9 it's in, and we know that after six minutes of
10 somebody not breathing that their chances of
11 survival are very limited, so as the fire chief
12 I want to see these calls come in and go out as
13 fast as possible to get our units, the fire
14 rescue units responding to those calls as fast
15 as possible.

16 I also agree with the statement that was
17 made earlier that all the 911 calls should come
18 to one center. We might not agree on which
19 center that is, but I do agree that they should
20 come to one center, and back when we looked at
21 this in 2004 I was not part of the decision-
22 making process of why Parkland would keep the
23 911 calls for, for cellular phones going to one
24 and the landline going to another, but at the
25 time technology isn't what it is today, and

1 that played into it.

2 But also seeing that the majority of the
3 911 calls are coming in via cell phone, and the
4 majority of the 911 calls that are coming in
5 that are, that are true high priority life
6 threatening emergencies the, in my opinion the
7 proper place for those calls to come into would
8 be to the fire rescue provider so we can get
9 those, those lifesaving services in route, and
10 to the house as quickly as possible, so we can
11 make sure that we're sticking to those values
12 of time equals life. So, we're available for
13 any questions, and anything that you may have.

14 CHAIR: So, Chief, just follow up on that,
15 what you just said there, because you said that
16 you agree that all 911 centers, or not, all 911
17 calls should come into a single center, but you
18 may not agree on which center, right, that's --

19 CHIEF BABINEC: Yes, sir.

20 CHAIR: So, what do suggest then, is, is
21 that you have a choice, you have a regional
22 communications center here in Broward County.
23 All the other 911 calls for Fort Lauderdale,
24 Hollywood, fire, every fire in Broward County
25 other than Coral Springs and Plantation, going

1 to the regional center where you have fire
2 dispatchers that are dispatching the calls, so
3 what do you, do you suggest that everybody
4 should merge into Coral Springs call center?

5 CHIEF BABINEC: No, sir. What I'm
6 suggesting is that all the land lines and cell
7 phone calls from Parkland should come to the
8 Coral Springs center. That was a
9 recommendation that was actually made to the
10 City of Parkland from myself as the fire chief,
11 as well as our communications --

12 CHAIR: But that doesn't eliminate the
13 redundancy and the call transfer, and you're
14 still not going to get the law enforcement
15 call. So, if every call from Parkland, law
16 enforcement call, every landline call from
17 Parkland -- so if somebody at 3:00 in the
18 morning is awakened because somebody is
19 breaking into their house and they got a gun,
20 and they call 911, under your scenario the call
21 would go to the Coral Springs call center,
22 Coral Springs is not the primary law
23 enforcement responder, that call would have to
24 be transferred to the regional center, then
25 they would have to talk to the person and then

1 dispatch a BSO deputy. How does that make any
2 sense?

3 CHIEF BABINEC: From -- from a law -- I'm
4 speaking from a fire rescue standpoint. I'm
5 not going to get into the law enforcement side,
6 sir, because it's just not my area of
7 expertise.

8 CHAIR: But this is global. We have to
9 get into that. This isn't -- this isn't just a
10 silo. This isn't just fire EMS or just law
11 enforcement, this is looking at the whole
12 picture.

13 CHIEF BABINEC: Right. So, if we took
14 that same scenario, where somebody called and
15 said my house is on fire, and that same lag in
16 time took place, we're, we still have people
17 that may be trapped that need to be rescued
18 from that house fire.

19 CHAIR: Not -- not if Coral Springs like
20 everybody else is in the same building in the
21 same place, and if Coral Springs was, all the
22 911 calls for Coral Springs and for Parkland
23 went into the regional center, you had one call
24 taker taking the call and your dispatcher, your
25 fire dispatcher was sitting in the same room

1 and dispatched your units, you wouldn't have
2 that problem.

3 CHIEF BABINEC: Correct.

4 CHAIR: So, why not?

5 CHIEF BABINEC: I -- I, you know, I'll
6 have Chief Backer answer that as well, but from
7 my perspective I think in a perfect world that
8 that's great. I think that a regional -- I
9 don't disagree with the regional approach to
10 dispatch, by the way. I think it is a viable
11 thing, and I think it is a good thing, and I
12 think that having all of the information to all
13 of the responders is obviously the best-case
14 scenario. But as for what we have today in
15 place, that's what I'm speaking to. I'm not
16 speaking to if, if we could take everything and
17 just combine it into one.

18 CHAIR: But -- but it works for Fort
19 Lauderdale, it works for Hollywood. It works
20 for -- you have a whole bunch of cities in
21 Broward County that have their own police
22 departments and their own fire departments, and
23 they're all housed under one roof for 911,
24 where every call comes in, the person answering
25 the call has the capability of immediately

1 conveying it to the dispatcher for fire, EMS
2 and police, they can communicate with the units
3 on the street, and it works throughout Broward
4 County, it works in a number of other places
5 throughout Florida and about the country, but
6 it doesn't work for Coral Springs and
7 Plantation, and I don't understand why.

8 CHIEF BABINEC: That was, again, the
9 decision was based by the decision makers at
10 the time on the information that they had that
11 the City of Coral Springs wanted to maintain
12 its own dispatch.

13 CHAIR: Okay, we'll come back some more --
14 Commissioner Swearingen.

15 COMM. SWEARINGEN: Mine is more a
16 statement than it is a question. And this is
17 not directed at you, Chief, it's directed at
18 the politicians within Coral Springs and
19 Broward County. When I see on your slide that
20 some of the reasons for not going to the
21 combined or the regional approach loss of
22 control and loss of hometown feel, that's why
23 we're in this situation. Those are political
24 decisions made not on what's best for the
25 citizens, but, but it's a political decision,

1 which goes back to what Sheriff Judd said
2 earlier. Any decision made on these types of
3 issues should be made on how to best serve the
4 citizens.

5 And again, I'm not directing this at you,
6 I'm directing this at the politicians who
7 decided that this approach is the best
8 approach, because when I see statements that
9 you don't want to go to a regional structure
10 simply because you lose control and it loses a
11 hometown feel, in my opinion that's why we're
12 sitting here today. Thank you, Mr. Chair.

13 CHAIR: Sheriff Ashley. Chief, go ahead.

14 DEP. CHIEF BACKER: If I could -- if I
15 could address that for a minute. I know it was
16 more a statement than a, but a, than a comment,
17 but there's a couple maybe counterpoints to
18 some of those things that I think are worthy of
19 consideration. When you look at -- when I say
20 loss of control, when you look at the
21 governance that's taking place, and you have
22 six committees that have to collaborate with
23 ORCAT, there could be the potential loss of
24 efficiency in decision making and
25 implementation.

1 We don't have that situation. If I have a
2 change that needs to be made to our CAD I can
3 call Kathy and it's done today, and that serves
4 our community well. In regards to hometown
5 feel, Angela mentioned it, regards to
6 geography, okay, our Chief is real fond of
7 telling a story where a lady had driven her car
8 into a canal. She did not know what road she
9 was in in Coral Springs. She was able to
10 describe the buildings around her, and our
11 dispatchers knew exactly where she was. We
12 were able to get people that and save her life.

13 That's what we're talking about with home
14 town feel. When you have a smaller group of
15 people working as a cohesive unit all the time,
16 where we're training the geography and the
17 nuances of Coral Springs, we believe that that
18 provides better service to our community, and I
19 think those are the things that were considered
20 when they were making that decision back then.

21 CHAIR: Okay, so -- and to make sure that
22 everybody visualizes this correctly, is that
23 you can have the situation where you maintain
24 that, as you're calling it, quote, hometown
25 feel, which what you're talking about is local

1 geography and familiarity. You can have a
2 situation where in a room you've got call
3 takers, the call takers are speaking to people,
4 but you have people in that room that are
5 employees, as an example of the Coral Springs
6 Police Department, who are dispatchers for
7 Coral Springs, where you can maintain your own
8 radio channel, but you could merge the 911 and
9 the CAD and still maintain that level of
10 familiarity you're talking about because they
11 are your dispatchers talking to your cops who
12 are familiar with your city. So --

13 DEP. CHIEF BACKER: Yes, absolutely. And
14 those are things that we're considering -- I'm
15 sorry.

16 CHAIR: No, that's the question. That's
17 what I'm just flabbergasted about, is, is that
18 why not, because everything that Chief Babinec
19 said is the reason, it comes back to radio, is
20 that you don't have to have radio, and go on
21 their radio channels. You can maintain your
22 own radio channel and consolidate the other
23 two, which are going to -- and something that
24 Kathy mentioned when she mentioned in there
25 about sharing hot files, caution files, and all

1 that, and she said your system is capable of
2 it. We know your system is capable of it, but
3 Broward County Sheriff's deputies don't have
4 access to that information, and it goes
5 vice-versa. So, you've got a silo situation
6 that can be remedied if people would just make
7 the decision to do it.

8 DEP. CHIEF BACKER: Yes, sir, I agree with
9 that, and that's why we have engaged the
10 County, and we have been looking at options
11 about whether or not we should go onto their
12 CAD or purchase an interface that would provide
13 even greater level of interoperability.

14 CHAIR: Yes. Commissioner.

15 SEC. SENIOR: Just a -- just a question.
16 Are we going to hear from Parkland officials on
17 this? I mean ultimately there must have been
18 some decision making at the Parkland local
19 official level as to why they would want to use
20 Coral Springs for certain services. It
21 wouldn't have been Coral Springs' decision
22 necessarily. Am I wrong about that?

23 CHAIR: Well, and Chief can speak to this,
24 but there's a contract for fire service between
25 Coral Springs and Parkland, so Parkland, and

1 Chief Babinec is also the fire chief of
2 Parkland because of the contract. So, he can
3 speak to this, but the decision about -- once
4 they contract with Coral Springs then Coral
5 Springs is the provider, and Coral Springs is
6 making these decisions about whether they
7 communicate.

8 SEC. SENIOR: But I guess my question is,
9 I mean if this had happened at Coral Springs
10 High School ultimately the calls would have
11 come in, Coral Springs would have handled it,
12 the Coral Springs Police Department, fire
13 rescue, everything would have come unified. It
14 actually seems like it's a decision by Parkland
15 that resulted in some of this confusion. Is
16 that -- am I missing that?

17 CHAIR: I don't see that. I mean, Chief,
18 do you -- what's your contract with, with
19 Parkland, do you all make decisions about your
20 communications center, or does Parkland have a
21 say in how this is set up from a communications
22 standpoint?

23 CHIEF BABINEC: They do have a say, and
24 the decision is made based on the information
25 that's presented to them. We have been working

1 with BSO, Coral Springs, and Parkland, to sit
2 down and evaluate all this to see exactly what
3 you're saying, what is the best way we can do
4 this for all the citizens, and, and that's
5 where Chief Backer was just talking about
6 integration of the CAD and all of that. We're
7 looking at that right now actively to see how
8 we can get our CADs to talk to each other.
9 Whether that's us going on the County CAD,
10 whether that's us getting our interface, or a
11 variation of, but we are actively engaged to do
12 that.

13 So, we bring all that information at the
14 time, this was done back in 2003 so I wasn't
15 sitting in the room at the time, but all of
16 that information, as well as there was a
17 technology component to that that played into
18 this, as well as the amount of, at the time the
19 amount of law enforcement calls as compared to
20 fire rescue calls. And it was all based on, on
21 all of those factors.

22 CHAIR: Sheriff Ashley.

23 SHER. ASHLEY: Chief, do -- are your
24 officers the only people that answer calls in
25 your jurisdiction?

1 DEP. CHIEF BACKER: I'm sorry, repeat that
2 question, sir.

3 SHER. ASHLEY: Are Coral Springs police
4 officers the only people who answer law
5 enforcement calls for service in your
6 jurisdiction?

7 DEP. CHIEF BACKER: Yes, sir, the Coral
8 Springs Police Department services all law
9 enforcement component for the City of Coral
10 Springs.

11 SHER. ASHLEY: So, the Sheriff's Office
12 never answers calls for service in your city?

13 DEP. CHIEF BACKER: Unless we ask them to
14 under mutual aid under exigent circumstances.
15 For example, we had a night where an officer
16 was shot, and all of our resources were tied up
17 on that.

18 SHER. ASHLEY: So, only in emergencies.

19 DEP. CHIEF BACKER: Only in emergencies.

20 SHER. ASHLEY: Do your officers serve
21 civil process in your city, subpoenas,
22 injunction, the like?

23 DEP. CHIEF BACKER: We will do emergency
24 injunctions, but subpoenas are served by the
25 County.

1 SHER. ASHLEY: So, my point in asking that
2 question is the data share that, that's missing
3 here. A deputy goes to serve a domestic
4 violence injunction, he goes to serve a
5 subpoena, or whatever he may be serving within
6 your jurisdiction, he has no idea of what you
7 know about that particular resident, or
8 particular person he's about to go serve
9 process on. And so, the importance I think
10 this commission is trying to get at is, is
11 sharing this information, and it doesn't appear
12 that it's happening now.

13 DEP. CHIEF BACKER: To some extent it
14 might be problematic, but others not
15 necessarily. As we mentioned before we are a
16 participant in the P2P through Superion, or
17 OSSI, so they have access to quite a bit of our
18 information and our records management system,
19 not necessarily our CAD, however, and I'll go
20 back to when I was a detective, there were
21 times certainly that my investigations would
22 take me into Parkland. I could certainly call
23 up ahead of time and say I'm en-route to 123
24 Main Street, can you tell me what history you
25 have with, you know, my subject is, you know,

1 John Jones I'm looking at, and I can get that
2 information on the telephone ahead of time.

3 So, there -- there are ways to share that
4 information and have that information when
5 there's no in an exigent emergency circumstance
6 taking place.

7 SHER. ASHLEY: Thank you.

8 CHAIR: So, on the -- on the transfer, and
9 I want to make sure we're clear on this too, is
10 on the call transfers is, is that we've talked
11 a lot about the call transfers between Coral
12 Springs back to the regional center for BSO and
13 Parkland, and then of course sometimes BSO is
14 transferring calls into the Coral Springs call
15 center, but because you all are separate as it
16 relates to cell phones is, is that, my question
17 is this, do you all also in your communications
18 center get cell phone calls from other cities,
19 such as Tamarac and Coconut Creek, and Margate,
20 and others that you then have to transfer to
21 the regional center, so that you're
22 transferring more than just the calls that are
23 in Parkland, but you're getting call phone
24 calls because they're hitting towers and
25 they're coming into Coral Springs?

1 MS. LIRIANO: That is correct, we do
2 transfer to other cities, but also within, we
3 also get a lot of calls for Palm Beach County,
4 and they're not even on the system at all, so
5 we do transfer to them as well. You know, the
6 surrounding cities that we do have are
7 Parkland, Coconut Creek, Margate, and Tamarac,
8 and those are the ones that we normally
9 transfer to --

10 CHAIR: Which are all dispatched out of
11 the regional center --

12 MS. LIRIANO: That's correct.

13 CHAIR: -- and if you were all under one
14 roof all of those call transfers wouldn't have
15 to happen either, correct?

16 MS. LIRIANO: That is correct.

17 CHAIR: Okay. Mr. Schachter.

18 MR. SCHACHTER: You guys -- you guys heard
19 the testimony I'm sure back that first day
20 where BSO reported that they received
21 approximately eight six incoming calls the
22 tragic day, and according to their testimony
23 only three calls were, you transferred three
24 calls to BSO. Is that accurate according to
25 you as well?

1 DEP. CHIEF BACKER: We are still in the
2 process of evaluating the totality of all the
3 calls that were transferred. If you noted in
4 the, early in the presentation, our phone
5 system was actually upgraded the morning of the
6 massacre, so the files are very, I'll just say
7 comingled. For example, if I get one file
8 that's a 911 file it should be one call, but
9 sometimes there's upwards of six or seven calls
10 on it, so we're having to extricate all of
11 those calls and confirm the time and date stamp
12 as we're evaluating them, when they go on, when
13 they occurred during the event. In regards to
14 the amount of calls we've transferred there is
15 some data that's available.

16 MS. LIRIANO: We're still in the process
17 of the ongoing, just, you know, the staffing
18 that we have -- to be honest I'm going through
19 it and listening to the calls one by one and,
20 and putting it into perspective of, just how
21 the Chief said, a lot of the calls were coming
22 in and they're not broken up by call. The way
23 the recording system works is -- if it doesn't
24 -- it doesn't -- if you're picking up so fast
25 it doesn't cut off that call, like it keeps

1 recording that original call that you took.
2 So, let's say you started with one 911 call,
3 it's, you know, technology, if I hang up and I
4 pick up that next call it may not recognize
5 that I even hung up that call because I hung up
6 and picked up the next one so fast that it
7 keeps recording on that original recording.

8 It keeps the recordings, but it's just,
9 for example it might have maybe eight calls
10 maybe on a sixteen-minute recording just
11 because they all were in one. But that's just
12 how the system is designed for the recording
13 purposes behind it. You know, we -- like the
14 Chief said we were, and the presentation shows,
15 we did the upgrade in the morning of 2/14, and
16 our, we were, a lot of the tapes that we pulled
17 were by position, and we were also trying to
18 pull calls through the 911 trunks, the 911
19 trunks, it's able to separate it better, and it
20 doesn't do the redundancy of putting it all
21 together on the positions.

22 Unfortunately, when it comes to the 911
23 trunks the way the, this is why I was saying
24 the redundancy of separate, even though we're
25 all on the same Viper system we have the

1 non-regional PSAPs and the regional PSAPs.
2 Under the 911, the non-regional PSAPs how it,
3 how it's formed is Plantation is under it,
4 Coral Springs is under it, and the Broward
5 County EOC is under it, the Emergency
6 Operations Center, so if the Emergency
7 Operations Center is activated they are part of
8 our 911 system, the non-regional PSAPs.

9 At that time, it has been corrected since,
10 but at that time the 911 trunks were not
11 recording in the Emergency Operations Center,
12 so we are not able to obtain any 911 call that
13 came through that and how it was divided, so
14 that's why it's just been taking a lot longer,
15 having to listen to the calls under one file
16 that should be maybe eight files, for example.

17 CHAIR: Because you all got overloaded
18 that day and your, and your backup was the EOC,
19 not the regional center.

20 MS. LIRIANO: Well, they're -- they're
21 part of our, our backup process, and also for
22 the regional sites that's part of one of their
23 backup facilities. If they were to go down,
24 like on 4/27 when their system went down, their
25 backup is to go, you know, to Coral Springs,

1 Plantation, or the EOC under that redundancy,
2 so if one system doesn't work, it's just like
3 us, if our system went down we would go to one
4 of the regional PSAPs, so it's the same thing,
5 they would have to come to one of those, and at
6 that time the EOC trunks were not recorded.

7 DEP. CHIEF BACKER: So, but I know we're,
8 it seems like maybe we're talking a little bit
9 of circles. The reason we're trying to explain
10 that to you is that we can get a report from
11 the phone system that says we transferred X
12 amount of calls, but until we go through and
13 listen to every single call, and what took
14 place, it would be premature to give you a
15 number right now.

16 MR. SCHACHTER: Chief, it's been five
17 months. Are you telling me you haven't had
18 time to go and listen to those calls in five
19 months?

20 DEP. CHIEF BACKER: We have listened to
21 every call, but going through and actually time
22 stamping them, and charting them out, is still
23 in progress right now, sir.

24 MR. SCHACHTER: So -- so you went, and you
25 had a meeting with BSO, and you guys went over

1 it together, because BSO has it all, I mean
2 it's all correct, it's all, you know, primed
3 out with BSO, you guys met with them and went
4 over everything, I would hope, or --

5 DEP. CHIEF BACKER: Other members of our
6 department have met with them in regards to
7 other aspects. In regards to the
8 communications I don't know that that's taken
9 place yet.

10 MR. SCHACHTER: Why?

11 DEP. CHIEF BACKER: I anticipate having
12 the breakdown of all the calls done by next
13 week.

14 MR. SCHACHTER: It would've been nice if
15 we had it before today.

16 CHAIR: They weren't asked -- out of
17 fairness, they were not asked to bring that
18 today. This is background information. We are
19 going to get into this, and our investigators
20 are going through it as well, so in fairness to
21 them, is that they were not asked to provide
22 it. In fact, they were told that we would not
23 be getting into that today, so they came
24 prepared with what they were asked to come,
25 what they were asked to come prepared for.

1 MR. SCHACHTER: No, but I mean I'm sure
2 that they've listened to these calls in the
3 last five months, and I'm sure that you've seen
4 how many calls got transferred, so you can tell
5 me if, no, that's, their completely wrong, we
6 transferred all the calls, or we transferred
7 ninety percent of the calls, because if it's
8 only three or four that's, that's,
9 unacceptable.

10 DEP. CHIEF BACKER: I understand. There
11 are definitely a few calls that we've heard
12 that we should have transferred that were not,
13 at some point we should have transferred them,
14 they were not. We're still in the process of
15 analyzing those. As I said when you look at
16 the totality of all the calls that came in,
17 eighty something calls that came in, there are
18 a lot of them that had no first-hand pertinent
19 information fifteen, twenty minutes into the
20 massacre, it's a parent calling from, you know,
21 I got a text from a third person, you know, so
22 we're still having to analyze and look at all
23 of those. There's probably not as many calls
24 from the initial wave of 911 calls that came in
25 that are going to be germane to the initial

1 response.

2 CHAIR: Chief Nelson.

3 CHIEF NELSON: On Page 7, the top slide,
4 you indicate in 2017 that two thousand two
5 hundred twenty-one calls for service were
6 dispatched for fire and EMS. Do you have a
7 number of the law enforcement calls that were
8 transferred specifically for Parkland?

9 DEP. CHIEF BACKER: So, that's an
10 interesting question. There's a modicum of how
11 the dispatcher actually facilitates the
12 transfer. They can designate whether it's a
13 Parkland transfer or a BSO transfer. There are
14 times where maybe a dispatcher is not being as
15 diligent as they need to be, and they may just
16 queue it up as a BSO transfer when in fact it's
17 a Parkland transfer. That's why we gave an
18 aggregate of all of the transfers for the seven
19 contiguous cities surrounding us in the
20 totality of all those calls.

21 If we just looked at Parkland based on
22 what was punched in for Parkland the numbers
23 are very, very small, sir.

24 CHIEF NELSON: But those numbers would not
25 be accurate from what you're saying, just

1 because --

2 DEP. CHIEF BACKER: I don't believe they
3 would be an accurate representation of the
4 totality of transfers, no.

5 CHIEF NELSON: Thank you.

6 CHAIR: Have you all ever experienced your
7 911 system going down?

8 MS. LIRIANO: About I'll say three or four
9 years ago it did go down. It was actually, I
10 believe it was the whole county, that we went
11 down, but it was, you know, again through
12 ORCAT. They're the ones that facilitated,
13 they're the ones that got technicians out there
14 right away, and also with West, which was
15 Entrado at the time, was able to rectify the
16 incident. But it's just, like I said earlier
17 it happens at every PSAP, that it could go
18 down, it's just the technology behind it, how
19 up to date the software and the hardware is as
20 well plays a huge role in how the system will
21 operate and perform.

22 CHAIR: Right. So, just like the County's
23 went down yours went down a few years ago.

24 MS. LIRIANO: Yeah, before the, the
25 upgrade for the hardware and software.

1 CHAIR: Right. Any other -- yes,
2 Commissioner?

3 MS. LARKIN SKINNER: Along the lines of
4 what Secretary Senior was asking, and I don't
5 know if you can answer this or not, in 2004, or
6 prior to 2004 when Parkland decided to contract
7 out for their public-safety services, did they
8 contract with BSO before that for law
9 enforcement? They had their own police
10 department?

11 DEP. CHIEF BACKER: That's correct,
12 Parkland had a public-safety department,
13 meaning that police, police officers that were
14 fire certified, and they kind of did both.

15 MS. LARKIN SKINNER: Okay. So, my second
16 question is, did they have the option -- I
17 don't know how law enforcement jurisdictions
18 work, but did they have the option to contract
19 with Coral Springs Police Department for law
20 enforcement versus BSO in 2004 when they made
21 that decision?

22 DEP. CHIEF BACKER: I don't know if that
23 was allowed in 2004 or not. I don't have the
24 answer to that.

25 MS. LARKIN SKINNER: Okay, thank you.

1 CHAIR: Sheriff Judd.

2 SHER. JUDD: Commissioner, that's, that's
3 against the law, because we've had that issue
4 come up for legal opinions, that a police
5 officer can only hold one certification, when
6 you operate for a different department you do
7 office solely.

8 CHAIR: Secretary Carroll.

9 SEC. CARROLL: I got to just check this
10 mic. The City of Coral Springs has always gone
11 by the model of time equals life it says here,
12 and then down below it says and one of the
13 reasons that you didn't make the switch is
14 because the County system doesn't abide by that
15 principle, or that model. When I look at the
16 performance it looks like time to answer a call
17 within ten seconds, very similarly, both over
18 ninety percent, in the low nineties. On their
19 emergency response system, they were seventy
20 eight percent or better in terms of getting
21 that call handled within ninety seconds. Yours
22 measures slightly different, but you were given
23 an average about thirty-five seconds, so I
24 surmise you're probably a little better on that
25 measure.

1 But can you tell me what you mean by that
2 when you say time equals life, because I would
3 agree with that, but is that an actual model or
4 are you just saying that your performance is
5 better?

6 DEP. CHIEF BACKER: It was a model that
7 was looked at. So, there's different ways that
8 you can process a call, and I'm not going to
9 get too far into it because I'm not a
10 dispatcher, but my understanding, and I could
11 be corrected here, is for example when you take
12 a 911 call and somebody says, you know, I'm
13 having a heart attack, or I'm having chest
14 pains, well, in the Coral Springs model that
15 call is dispatched right away, and meaning that
16 the units are being sent.

17 There are other models that where there
18 are other questions that are asked before units
19 are being sent, so we believe that the units
20 should be sent, and if those aren't, if you're
21 sending too many resources then you can always
22 back them down rather than trying to get more
23 information up front to send those units. So,
24 that -- that's kind of what the philosophy was,
25 was to get resources started as fast as

1 possible and not having the interrogation as
2 much on the front side, from the fire rescue
3 standpoint.

4 SEC. CARROLL: And -- and that's not an
5 issue that could be resolved between the two
6 parties in terms of moving forward?

7 DEP. CHIEF BACKER: I can't answer that.
8 I don't know if Kathy can shed light on that or
9 not.

10 MS. LIRIANO: So, the terminology behind
11 it, from the question that you asked, is time
12 equals life, so like I was explaining in my
13 presentation when a call comes in to the 911
14 center, and I'll use Coral Springs as an
15 example just to make it a little bit easier,
16 when you, we talk to the caller, they're saying
17 we're having chest, I'm having chest pains, so
18 the address is put in and the signal or nature
19 code is selected. As soon as that's put into
20 the system it's automatically routed to the
21 dispatcher. As the call taker is still taking
22 information and providing EMD those units are
23 already dispatched.

24 Also, for the police department if it's a
25 priority one call as soon as the address and

1 the nature code or signal is put into the
2 system it's automatically routed to the police
3 dispatcher, so while the call taker is still
4 getting up to date information these units are
5 already in route and getting updated live
6 through the CAD, and also on their mobile units
7 in their vehicles. When it comes to, my
8 understanding speaking with the Broward
9 Sheriff's Office is the way that they're doing
10 it, and also, well, researching the EPD and
11 EFD, it's based on determinants, so you could
12 put the address but depending on how you answer
13 the question will determine the type of call
14 that is going to be put in, and sometimes it
15 could be on the second question that the units
16 are being dispatched out, but it could also be
17 on question ten that they're being sent out.

18 So, there's like a little different BTW
19 determinants that, you know, some agencies do
20 use, and it works for them, but for us we
21 prefer just to have the units being sent out
22 immediately and still being interrogating the
23 caller or giving medical aid if needed.

24 CHAIR: Do -- do you -- I'm sorry, do you
25 -- again I want to clarify that. Do you use --

1 do you use EMD?

2 MS. LIRIANO: Yes, sir.

3 CHAIR: Do you use EFD?

4 MS. LIRIANO: No, we do not.

5 CHAIR: Do you use EPD?

6 MS. LIRIANO: No, we do not.

7 CHAIR: Okay, so philosophically you only
8 subscribe to the EMD protocol, and you choose
9 not to use EFD or EPD.

10 MS. LIRIANO: That is correct.

11 CHAIR: And so, for everybody who may not
12 be following this is, is that the theory is
13 with emergency medical dispatch, and if you use
14 all three, you use EMD, EFD, and EPD, the call
15 taker becomes very robotic, is that a call
16 comes in -- now some people, there's a
17 philosophical divide on this topic. Some
18 adamantly subscribe to it. Some are adamantly
19 opposed to it, and some are in the middle.

20 But how it would work, if you're using all
21 three when a call comes in and the screen pops
22 up in front of the call taker, is that they are
23 trained, I think robotically, to answer those
24 questions that are asked, there's decision
25 trees, and they don't deviate from the script,

1 and they only ask the questions, and if they
2 get the answer that drives decision do they go
3 onto the next one.

4 And I don't want to put words in your
5 mouth, and you can clarify this, but I think
6 what you're saying is that it can delay a
7 response because they are so scripted that
8 unless they get to number five they may not get
9 the units rolling, where if it's more free
10 flowing, and you're using independent decision
11 making that's not scripted then they could have
12 the latitude to drive the process much faster,
13 is that correct?

14 MS. LIRIANO: That is correct. And that's
15 where our model of time equals life comes in,
16 is just getting the field units out there.
17 Like the Chief said we prefer to send the extra
18 engine, or the extra rescue, because if they
19 get canceled and it's not as big as it we can
20 always pull them back, because you don't want
21 to be in a situation where you need that
22 additional engine, or that additional rescue to
23 be responding, and then at that point there
24 becomes a bigger delay.

25 CHAIR: But you come back to the point

1 where you, where you said a minute ago, in the
2 situation to Secretary Carroll though is, is
3 that when it's coming in, and the call is
4 coming in, and you can quickly get FD
5 responding, you can quickly, EMS, and then you
6 can quickly, quickly get the law enforcement
7 responding, that's only true through in the
8 Coral Springs setting because under your roof
9 you got the person taking the call, you've got
10 your fire dispatcher here, you've got your
11 police dispatcher here, but that it absolutely
12 not the case as it relates to a call coming in
13 to your call center that the Coral Springs
14 Police Department is not the responding agency
15 for, because then you can get FD rolling, but
16 let's say it's a shooting that requires a dual
17 response, and FD's going to stage until law
18 enforcement gets there, then you could have a
19 delayed law enforcement response and FD could
20 be, even be sitting even longer because it has
21 to go through the transfer process.

22 MS. LIRIANO: It would have to go to the
23 transfer process, but even before we have made
24 a lot of strides with the Broward Sheriff's
25 Office communication when it comes to going

1 over on every call that we respond to in
2 Parkland, on a normal day to day basis we go
3 over their channel if there's a BOLO, it's
4 called a fourteen call channel, which is kind
5 of like, it's a County channel where we can
6 BOLO or give information quicker than having to
7 transfer, and you go over that channel and are
8 able to announce this is happening and so
9 forth, so that has been utilized in the past,
10 and during this incident.

11 CHAIR: So, it does seem like that
12 resolving the EPD, EFD issue is something that
13 could get reconciled is that is the barrier, or
14 a significant barrier to everything joining
15 together, is that you would think that people
16 could come together and resolve that
17 difference.

18 MS. LIRIANO: And one of the things, just,
19 you know, the Chief mentioned, and we've been
20 in discussion with the County, and trying to
21 see what would be the best option for CAD, and
22 just to make it more interoperable, you know,
23 we're, we're looking at it in a bigger picture,
24 not small minded, or anything like that, we are
25 looking in a bigger picture. One of the things

1 is, you know, cause CADs, you can build it by
2 agency, and if we build it by agency you can
3 build it that one agency may not have to have
4 EPD. Those are the questions we're asking,
5 that if we do build it, and we are part, if we
6 receive a law enforcement call in Parkland, and
7 we're able to input the call for service so
8 that the BSO dispatcher can get it in their
9 system, or if it's a Coral Springs call that I
10 won't have the EPD standards coming through,
11 that I can still just ask the questions and not
12 be robotic, as you explained. That's an option
13 that we are entertaining. It's not we're not
14 absolutely not doing so.

15 CHAIR: Sheriff Ashley.

16 SHER. ASHLEY: How many questions do you
17 have to ask to determine the priority of a
18 call? A shooting, a drowning, I mean how many
19 questions do you have to ask?

20 MS. LIRIANO: It depends also on the
21 caller that's calling in and being able to take
22 control of the call. There's a lot of aspects
23 of being a dispatcher call taker, and part of
24 the training that comes with it is making sure
25 that you're able to stay on the phone and be

1 able to extract that information. Some people
2 are not able to even talk to you when they're
3 in the middle of a high stress situation, they
4 completely shut down, and you have to go a
5 different interrogation mode, including even
6 for hostage situations. There are times where
7 the caller does not want to talk to the SWAT
8 team or the hostage negotiator, they want that
9 rapport that you started with with that call
10 taker.

11 SHER. ASHLEY: So, under that scenario,
12 and for the fire medical side of the house, if
13 they can't even talk to you are you still
14 sending all priority one services?

15 MS. LIRIANO: Yes. Yes.

16 SHER. ASHLEY: So, that's my, my question,
17 or do you send priority one services to every
18 call if they don't give you an answer?

19 MS. LIRIANO: Not to -- not to every call.
20 We are able to manually bump it or depending on
21 the nature code and what we're hearing in the
22 background we're able to also determine the
23 priority that it goes in as.

24 SHER. ASHLEY: So, it's all subjective.

25 MS. LIRIANO: It depends on the type of

1 call that comes in.

2 SHER. ASHLEY: Okay, thank you.

3 CHAIR: Anybody else? Hang on one second.
4 Commissioner Dodd.

5 MR. DODD: I just want to understand. I
6 just want to make sure I'm clear on this. So,
7 five months after the massacre you can't tell
8 us the number of cell calls that came into your
9 agency from Parkland, or you can't tell us the
10 number of calls that were transferred?

11 MS. LIRIANO: Well, the way the 911 system
12 is built for the City of Coral Springs, just so
13 you understand we have fourteen 911 trunks
14 assigned to the City of Coral Springs,
15 determined, you know, by ORCAT in the sense of
16 how many calls normally come in from Parkland
17 and, and Coral Springs. On that day, just also
18 to explain, when the fourteen trunks are full
19 the way our system is currently built it, it
20 goes into the non-emergency line, so at that
21 point you don't know if you're getting a 911
22 call or a non-emergency call, so that's one of
23 the things that we're actually in the process
24 of working with ORCAT, because when I took -- I
25 can only speak from the time I've been in

1 management, I was under the impression that we
2 were always under rolling over to Plantation
3 and then EOC.

4 That's not the case. The case is when the
5 fourteen 911 trunks are full it rolls over to
6 our non-emergency lines, so on that day not
7 only were 911s ringing but if all the fourteen
8 lines were full it would roll into our other
9 non-emergency lines. And what we're trying to
10 build now with the County, we've been working
11 together since the incident, is we're trying to
12 have it that if it overflows the 911 trunks it
13 would flow into Plantation's PSAP, and if not
14 the regional 911 center.

15 MR. DODD: And so that was a problem with
16 your PSAP and the way it was structured, there
17 wasn't knowledge of how this was all taking
18 place.

19 MS. LIRIANO: Exactly.

20 MR. DODD: So, you're learning this --

21 MS. LIRIANO: It's been a learning
22 experience seeing how decisions were made in
23 the past that I'm not sure who the decision
24 makers were, if it was through Coral Springs or
25 it was through the E911 office back before it

1 became ORCAT, but that was part of the decision
2 process, where that it would roll over into the
3 non- emergency lines versus rolling over into
4 another PSAP like the regional system. If
5 north doesn't answer it rolls to central, it
6 goes to south, you know, we thought we had that
7 redundancy with Plantation and then the EOC,
8 but that wasn't the case, we were rolling into
9 ourselves.

10 CHAIR: Mr. Schachter, go ahead.

11 MR. SCHACHTER: How many -- how many calls
12 can you get, and what does that mean, you said
13 you have fourteen trunks, that's not fourteen
14 calls, how many calls fill up those trunks?

15 MS. LIRIANO: So, we can -- one call.

16 MR. SCHACHTER: You can only have fourteen
17 calls coming in --

18 MS. LIRIANO: Fourteen 911s plus the non-
19 emergency lines are able to come in. So, once
20 the 911 trunks are full then it starts rolling
21 into our non-emergency lines.

22 MR. SCHACHTER: You just never thought,
23 you thought only that with your capacity you
24 only needed fourteen, I guess, at the time?

25 MS. LIRIANO: Well, that was what the

1 County recommended to us because of our normal
2 day to day business.

3 MR. SCHACHTER: That's what the County
4 recommended.

5 MS. LIRIANO: And then non-emergency we
6 have an additional twenty-four.

7 DEP. CHIEF BACKER: So, thirty-six total
8 lines.

9 MR. SCHACHTER: So, Chief, I mean this is
10 extremely upsetting obviously, and you know,
11 we're -- this could happen again, and so, you
12 know, I appreciate you guys working with me to
13 fix the, the first issue which was, that we
14 addressed earlier, the, you know, cell phone
15 calls going into Coral Springs and having to
16 get rerouted, we did a temporary fix. I would
17 like your commitment to, to fix this as well.
18 And thank you for working on this on your own,
19 but it definitely concerns me that, you know,
20 if there's another emergency, that we fix this
21 issue, and we don't wait until January until
22 our report comes out.

23 And also, the fact that if there is
24 another incident, or multiple incidents at the
25 same time, you know, all the calls are getting

1 to the right places. So, Chief, you know, I
2 appreciate you said you're going to have that
3 analysis by next week, and when that's done I'd
4 like to have a meeting with you and BSO so we
5 can make sure that this doesn't happen again,
6 and we can fix it. Can you please do that with
7 me?

8 DEP. CHIEF BACKER: Absolutely.

9 MR. SCHACHTER: Thank you very much.

10 CHAIR: Okay, we're going to -- I want to
11 thank all three of you for answering some very
12 hard questions. I appreciate your candor and
13 your professionalism. I know it's tough to
14 answer some of these, and again we appreciate
15 you being here. I look forward to hearing from
16 you later on, and more specifically we'll get
17 into some of the radio. So, at this point
18 we're obviously over on time. If everybody
19 will bear with us on this. I've got 12:40.
20 Why don't we just cut it a little short, and
21 we'll be back at 1:30, and give everybody
22 enough time, fifty minutes for lunch. That way
23 we can try and make up a little time this
24 afternoon. So, we'll be in recess until 1:30.

25 (Thereupon, a break was taken off the record and the

1 meeting continued as follows:)

2 CHAIR: Okay, so we're going to continue
3 on from our discussion this morning and move
4 into a related topic of radio systems. And
5 we're going to begin the discussion this
6 afternoon, the presentations on the technical
7 aspects of radio systems, and also to give a
8 statewide perspective on the state law
9 enforcement radio system, and then the
10 subsequent presentations will focus here on
11 Broward County. The first presenter is Cindy
12 Cast, and Cindy is the Radio Systems Manager
13 for Miami-Dade County, and she also is Chair of
14 the Domestic Security Communications focus
15 group out of the Regional Domestic Security
16 Task Force, and she'll be followed by Nick
17 Simoncini with FDLE to talk about the SLER
18 system, or the State Law Enforcement Radio
19 System.

20 Cindy, welcome. Thank you for being here.

21 PRESENTATION: MIAMI-DADE COUNTY LAW ENFORCEMENT
22 RADIO SYSTEMS

23 MS. CAST: Good afternoon. Good
24 afternoon, commission. So, as an introduction
25 this presentation that I'm going to provide is

1 specifically talking about the technical
2 aspects of radio. Government agencies rely on
3 radio, otherwise known as land mobile radio
4 systems, acronym LMR, and they utilize this to
5 support voice, which is two-way communication.
6 The reason it's two way is because someone
7 speaks is one way, and someone listens is the
8 second way, so it's referred to also as two-way
9 radios. And I'm giving you all these terms
10 because I know the next four presenters are
11 going to be using multiple different
12 terminology, so my presentation is to get you
13 to understand those terms, and to explain the
14 details behind the technology.

15 So, this presentation is going to focus on
16 that technical development of radio systems,
17 and then once you have the radio system
18 developed how does it talk and communicate with
19 other radio systems. I've been in the field of
20 radio technology for the last twenty-three
21 years. So, the specific topics that I'm going
22 to be covering, first is the history of radio
23 communications, second is what is a radio
24 system, and what are the four main elements.
25 There's thousands of elements, but the four

1 main elements on how you build a radio system,
2 which is capacity, frequency, coverage, and
3 type.

4 Then we're going to talk about once the
5 radio system is developed how does it
6 communicate with another radio system, which is
7 known as interoperability, we'll talk about
8 what the definition of that is, how is
9 programming, console gateways, and gateways,
10 console patches and gateways utilized, which
11 are the three most common forms of
12 interoperability. There's several forms, but
13 those are the three most common. So, those are
14 going to be the topics in the presentation.

15 So, the first, radio, the history of
16 radios. So, radios were developed to utilize
17 for government and federal agencies in the
18 1930's. The picture on the left is one of the
19 first -- and I'm going to refer to the pictures
20 on the screens. My understanding is you have
21 the presentations, and they'll be a little bit
22 closer to you, so you could understand some of
23 them. So, the picture on the left of the
24 screen is one of the local agencies, one of the
25 first ones that had a radio system and utilized

1 it to support the citizens out there in the, in
2 the area.

3 Now, a radio system, basically radio
4 communications take place using different types
5 of devices. There are four primary devices
6 that are used. One is known as a portable
7 radio. It's physically something you hold in
8 your hand. You place it on your waist. You
9 could tuck it into your back pocket. It's
10 something that is portable, and you are able to
11 move with it. It has a battery on the back of
12 it that you would remove. The battery needs to
13 be charged. The battery is what gives the
14 radio life.

15 The second device that is utilized for
16 radios is a mobile radio. A mobile radio is
17 installed inside of a vehicle. It has an
18 antenna. It could be inside the vehicle or on
19 top of the vehicle, somewhere in the trunk or
20 on the roof, and that radio is powered by the
21 power of the vehicle itself. So, the power
22 source of the vehicle is what provides that
23 radio with power.

24 The third is a desktop or a console
25 (phonetic). It is the one -- and the first

1 one, the portable is on the right side of the
2 picture. The mobile is on the top of the
3 picture, and it shows it in the vehicle right
4 next to it. The console, or desktop, is on
5 the bottom of the page. It's sort of cream in
6 color, the sample that's here. It could be
7 black. There's multiple colors, or devices.
8 So, this one specifically it needs a power
9 source again, it plugs into a wall, and it
10 provides power from that wall. You can have an
11 antenna right next to the desktop, or you could
12 place an antenna on the top of this building
13 and have that device right next to me, and
14 cabling running through the top of the building
15 all the way to this location.

16 The antennae placement of each one of
17 these devices make a difference on how the
18 device works. In addition, the radio itself
19 works differently based on the device. For
20 instance, a portable radio, depending on the
21 type of radio, could be three watts of power up
22 to five. A mobile could be up to thirty watts
23 of power. The more power the more area the
24 radio could actually cover based on the
25 coverage area of the system, and we're going to

1 talk about coverage in just a little bit.

2 The last type of radio, or device used on
3 a radio system, is the one in the corner, which
4 is a dispatch console. For those who walk by
5 it it might look just like a regular monitor of
6 a computer, and it has different little boxes.
7 Each box is representing a different type of
8 kind of activity for the radio system. So,
9 those are the four types of radios that you
10 could use on a system, those four main ones,
11 and this shows you that the history, again,
12 started in the 1930's.

13 Since the 1930's systems have been
14 deployed nationwide, anywhere from very basic
15 to very complex. So, why would you use a radio
16 system in reference to government agency
17 supporting the citizens out there? So, this
18 graph, I'm going to sort of take you through
19 this, this picture to explain how a situation
20 takes place, or why it gets utilized in an
21 emergency situation.

22 So, the first picture is the emergency
23 situation takes place. Here it's a fire.
24 After the fire situation, the fire starts, a
25 citizen sees it, gets on his phone and calls,

1 makes a 911 telephone call using a telephone,
2 it could be a landline or a cellular device.
3 That 911 call takes him to the nearest dispatch
4 center. If he's talking from a house phone it
5 will take him to the dispatch center that
6 supports that system. If it's from a cell
7 phone, it's just whichever tower is closest,
8 even though it might not be his primary service
9 of 911.

10 Then a 911 call taker answers. If it is a
11 small city, small county throughout the nation,
12 it could be that same person then that simply
13 moves and shifts her body and talks on a radio.
14 However, in large cities, large counties like
15 we have here in South Florida, you're going to
16 the arrow, the green arrow pointing to the top
17 right, is really what takes place.

18 You have a 911 call taker, all they do is
19 answer the phone and type in a CAD system, like
20 you heard in the earlier presentations today,
21 the details of the information from the call.
22 After that CAD system the radio dispatcher
23 hears the calls, or sees the information, I'm
24 sorry, sees the information on the CAD, and
25 then they dispatch the nearest public-safety

1 agency to respond to the service, whether it be
2 fire, or police, or any other public-safety
3 agency that needs to respond. Once they
4 respond they go in a route to support the
5 incident that takes place. Throughout that
6 process they are communicating back and forth
7 with either other individuals on the field also
8 responding or back to the dispatch center.

9 Now what is a radio system? A radio
10 system, they are basically complexed wireless
11 communications systems. Not all radio systems
12 are the same. It's very hard pressed to find
13 anywhere two systems that are identical. And
14 they reason they are referred to, again, as
15 two- way radios, because they transmit and
16 receive. When developing a radio system, the
17 four primary areas is capacity, frequency,
18 coverage, and type, and we're going to go
19 through each one of them. And they all play a
20 role because they all make a difference on how
21 the radio system operates.

22 The first thing when developing a radio
23 system is what is the capacity. Its capacity
24 relates to the capability of a radio system to
25 sustain a given number of conversations at the

1 same time. So, when you have a radio system
2 the first thing you want to know is how many
3 people need to use it, so you start asking
4 yourselves questions from an agency
5 perspective. Every agency does this when they
6 develop their system. How many departments or
7 agencies are going to be on the system,
8 specifically how many separate talk paths are
9 needed. A talk path is a separate conversation
10 between two or more individuals. When you
11 build a radio system prior, prior to building
12 it you need to know how many of these
13 concurrent calls, or conversations, do you want
14 to take place.

15 Then the next question is how many radio
16 devices will operate on a system. Again, a
17 device could be a portable, a mobile, a
18 desktop, or a console. Some agencies, cities,
19 county, state, federal, use both. Everybody is
20 assigned a portable radio and one in their car,
21 so one person could technically be two separate
22 devices depending on the agency. Every agency,
23 again, handles this differently. So, how many
24 devices do you want to run on the system.

25 And then the last one, and this is the

1 hardest one to find the information,
2 specifically in the beginning, is what is the
3 average length of call. So, how, when they
4 press the button to talk how long do you want
5 them to be able to talk before they're timed
6 out. Again, when they're timed out all they do
7 is press the button again and they can talk
8 again, but when they let go of the button it
9 could allow someone else to talk also.

10 So, those are the four primary things that
11 you look at regarding capacity of the system,
12 and capacity, once you build it it's not
13 something that stays the same. Every time I
14 add more agencies, or I add more users, or add
15 more radios, it could affect the capacity of
16 the system, so you're always having to look at
17 reports, looking at information to determine
18 does the system handle the capacity that's
19 necessary in order for us to provide the
20 service.

21 After capacity the next one is frequency.
22 Within a government agency you are only
23 allotted certain frequencies in order for a
24 radio system to operate. The different types
25 of spectrums that you could utilize is VHF,

1 which is in the lower end, then UHF, 700Mhz,
2 and 800Mhz. You might think why does
3 frequencies matter, they all operate, the
4 different frequencies, differently on the way
5 the radio system functions, how far the actual
6 signal carries. And they also all have
7 different rules and regulations.

8 You cannot acquire as many frequencies as
9 you want, you have to ask the Federal
10 Communication Commission, the FCC, who
11 regulates frequencies for the nation. The
12 chart on the right explains for the United
13 States all the different frequencies that are
14 out there, but within the spectrum you only
15 have those four that I referred to that you
16 could utilize for radio systems for government
17 agencies. And again, each one works
18 differently. If you're in a very urban area
19 frequencies are even more saturated, and more
20 utilized than in other areas that might have
21 less agencies responding, so the amount of
22 frequencies you have on a system, how many you
23 need to run the system, depends on the capacity
24 that you're looking for the radio system to
25 provide.

1 Also, the radio devices work differently,
2 so a radio portable mobile could work on VHF,
3 but it might now work on UHF. It could work on
4 700, it might not work on 800. So, depending
5 on when you buy the device, the portable, the
6 mobile, the desktop, or the console, you have
7 to already know what frequency the system is
8 utilizing. And again, that's for your specific
9 system, and what your radio devices are able to
10 communicate and function on.

11 After frequency you have coverage, and
12 that is pretty much indicating what is the
13 geographical area the radio system will operate
14 and function on, transmitting and receiving,
15 where does it, where does it work. And not
16 only where does it work but specifically how
17 does it work in that area, so some of the
18 questions that are asked are provide a map of
19 the specific area. And then examples in the
20 upper right corner, somewhere in North
21 Carolina, of the area that they want the radio
22 system to function.

23 After you look at the map the question
24 comes does it only work when you are outside on
25 a street level in an open field. The next

1 question, do you want it to work inside of a
2 house, a structure, does it matter if it's a
3 one- story house versus a two-story house, does
4 it need to work inside of commercial buildings.
5 And then it gets even more in depth because it
6 asks how dense of a building structure does the
7 radio have to work. Just because it works
8 inside of a house doesn't mean it's going to
9 work inside of a two-story house, or inside of
10 a hospital, or inside of a jail. The thickness
11 of the wall structure plays a role on if the
12 radio works in that area.

13 So, when before you build a system, or
14 once you have a system and you're analyzing it
15 you're able to look at the coverage to
16 determine where the radio will work and not
17 work, and whether that's the portable or
18 whether that's the mobile radio. A mobile
19 radio might work in a certain area that the
20 portable radio will not work, because again, a
21 portable could be 3 to 5 watts, and the mobile
22 could up to 35 or 30 watts.

23 So, after you talk about -- we talked
24 about capacity, we talked about frequency, this
25 was coverage, we're going to talk about the one

1 that takes the longest, and the most complex,
2 which is type. There are different types of
3 radio systems. The most basic, the first one
4 that came out is known as conventional. A
5 conventional radio system have dedicated
6 frequencies and channels assigned to individual
7 groups, and then an unconventional, there's two
8 types, one is simplex, and the first picture is
9 the one on the left. Simplex means, if you
10 look at the TX, TX stands for transmit, RX
11 stands for receive, so transmit is talking out,
12 receive is listening to the message. It uses
13 the exact same frequency to transmit and to
14 receive. That's the most simplest form of
15 communications. It doesn't even depend on
16 anything else besides having two radios.

17 Then you have duplex, that's the second
18 picture. In a duplex scenario you have two
19 frequencies. One frequency is used when
20 someone talks, another frequency is utilized
21 when someone is listening. Now, within duplex
22 you have two types of duplex, you have full
23 duplex like your cell phone or your phone in
24 your house. When you're on the telephone
25 talking to somebody you start talking, if they

1 want to interrupt they start talking and you
2 both hear each other at the same time, like a
3 conversation face to face. That's called a
4 full duplex, you're communicating at the same
5 time.

6 And then you have half duplex. Half
7 duplex is when you talk and you're not able to
8 respond or interrupt the person, you have to
9 wait until the person stops talking. Once they
10 stop talking then you can start talking. Half
11 duplex is what is utilized in radio today, so
12 basically, it's when someone stops talking
13 you're able to talk. The diagram on the right
14 is showing two portable radios alone without
15 any other infrastructure could utilize a
16 simplex or a duplex conventional system.
17 Basically, all it is is a frequency that's
18 authorized for those two radios to use.

19 The second picture is utilizing additional
20 equipment, such as maybe a console or a mobile
21 radio that has more power, or the example I
22 gave of the console standing right next to me
23 with an antenna outside the building on the
24 roof. It might be able to work in a longer or
25 a further distance area. The two radios, one

1 by themselves, they only work line of sight,
2 you have to be able to see each other. It
3 could be anywhere from a mile, if it's a flat
4 area and there's nothing in the middle it could
5 be up to two miles. In a scenario where you're
6 using a mobile it could be even further because
7 of the power of the radio itself.

8 So, that's the first type. If you want,
9 though, that conventional system to work even
10 further you could add to it a repeater. A
11 repeater basically increases the area of
12 coverage. It sort of amplifies, it repeats,
13 rebroadcasts the information. Now, you could
14 have a repeater on a conventional channel, and
15 it will be able to be utilized within the area
16 of wherever that repeater is located, or
17 multiple repeaters. On the right side it's
18 giving you something that we have nationwide,
19 and this is the 800Mhz mutual aid conventional
20 channels.

21 These are nationwide frequencies that are
22 utilized and set aside for interoperability,
23 for agencies to talk to other agencies
24 nationwide if they're using the 800Mhz
25 spectrum. Again, they have to be using that

1 spectrum, or that frequency. And these
2 frequencies is basically configured for both
3 conventional duplexes, and also for simplex
4 channels. The system is comprised of one
5 calling channel, one channel that they call.
6 Every dispatcher in the area is monitoring that
7 calling channel, and they respond to anybody
8 who calls.

9 Then there's four tactical channels, one,
10 two, three, and four. They have other
11 information. And they're all located in this
12 book, which is a federal book that's come out.
13 It's for every city, every state across the
14 nation. If I take my radio today that I have
15 with me and I go to Nevada, and I turn it on
16 and go to the, the calling channel for 800Mhz
17 mutual aid, and key up and ask for the dispatch
18 center, if the dispatch center uses 800Mhz
19 frequencies they will respond. And it is a
20 sworn person that needs assistance they will
21 tell them to move to the tactical channel, one,
22 two, three, or four, that has coverage in the
23 area that I need assistance in. The dispatch
24 centers are the ones that know where the
25 coverage of the areas are.

1 In the state of Florida, the calling
2 channel, and the first one, the calling channel
3 is called 8CAL90, and the first tactical
4 channel is called 8TAC91, it statewide, and it
5 is maintained, all the infrastructure, by the
6 State of Florida. Then the next three tactical
7 channels, which is 8TAC92, 8TAC93, and 8TAC94,
8 are utilized and maintained by the local
9 counties, so every county has those three
10 channels, and they maintain those frequencies,
11 and they might have different coverages within
12 the county, all depending on what's the
13 utilization, or the need within the county
14 itself.

15 So, again conventional is the first type
16 of systems that came out. And those mutual
17 aids, again, are within the state of Florida
18 available, and they are in pretty much every
19 other state within the nation. They are not to
20 be utilized on a daily basis. It's not in
21 order for you to conduct your regular business,
22 it's only for incidences that require multiple
23 disciplines, or multiple geographical areas to
24 respond.

25 After conventional the next type of system

1 you could have is trunked. Trunked was not
2 available in the beginning when radio came out.
3 A trunked system, or a trunking system came out
4 in the 1990's, and in the 1990's when it came
5 out it's basically a much more complex system
6 because it has an automated computer control
7 which provides less user intervention to
8 operate. All frequencies are grouped in a pool
9 and utilized as needed. This provides greater
10 spectral efficiency, the frequencies
11 themselves, when there is a large number of
12 users. Instead of assigning, for example, a
13 radio channel to one particular agency at a
14 time, users are instead assigned a logical
15 grouping known as a talk group. These talk
16 groups may have as many conversations
17 simultaneously based on the amount of frequency
18 pairs in the radio system.

19 So, let me explain a little bit of what
20 that means. So, the first picture you're going
21 to see on the left is a conventional system.
22 You have a frequency set for every channel, so
23 if you have -- like the example I gave with the
24 mutual aids, each mutual aid channel 8TAC91,
25 92, 93 and 94, all have different receive and

1 transmit frequencies. If you want to use your
2 radio and talk on 8TAC91 you physically have to
3 move something on your radio in moving to that
4 channel. If there's a huge scenario going on
5 and we need to use 8TAC92 and 8TAC93, and
6 there's a lot of people talking back and forth
7 on 92 and 93 but nobody's using 94 or 91, well
8 then those are frequencies that aren't
9 utilized, there's no additional communication
10 that's taking place on those frequencies.

11 In a trunk scenario, on the right, you get
12 a pool of frequencies. So, if go back to the
13 mutual aids, the mutual aids, you have the call
14 and the four TACs, so it's five different
15 frequency pairs, again a transmit and a
16 receive. So, technically it's ten frequencies
17 but only five pairs that you could use
18 simultaneously at the same time. If you have
19 those same five frequencies in a trunked system
20 one of them becomes the controller, so you lose
21 it, you have four available channels. Those
22 channels, again frequency pairs, get utilized
23 as many times as needed.

24 For instance, if you have a fire group,
25 you create FIRE1. If you need a group for

1 police, you could create POLICE1. If you need
2 one for police, you created POLICE2. I could
3 create ten groups, and every time a group needs
4 to talk, they press the button on their radio,
5 they use a frequency, they ask the control
6 channel, the one that's not used anymore for
7 talking, they ask the control channel can we
8 talk, the control channel says yes, gives them
9 which one of the four available frequency pairs
10 can it use. So, for instance if I'm talking on
11 POLICE and I transmit, it gives me frequency,
12 or assigns me frequency number one because it's
13 free. When someone comes to respond, again
14 they're pressing the button, asking the
15 controller which frequency is next available,
16 they might use frequency number three. So,
17 it's not necessarily responding and receiving
18 information on the same frequency, it's the
19 next available frequency, and that means you
20 can have ten groups versus just five. However,
21 the group is called a talk group, which is a
22 virtual number associated to a group of
23 individuals or agencies that you want to
24 communicate together.

25 Now, again, trunked radio systems take

1 advantage of the probability that all ten of
2 the examples groups that I created are not
3 going to be talking at the same time, because
4 if all ten groups needed to talk at the same
5 time, how many channels, pairs do I have, four,
6 they would not be able to talk at the same
7 time, only four could. Now, as soon as one
8 group stopped talking the next group that was
9 in line waiting to talk would be coming up.
10 Sort of like a bank at a teller, when you walk
11 into a bank you get into one huge line,
12 everybody stands in line, which is what's
13 depicted here sort of on the picture, and you
14 wait until the teller is free, four tellers in
15 front of you. As soon as the teller is free
16 you go to the next available teller, it doesn't
17 matter which one of the tellers is actually
18 working with you. The same as a trunked radio
19 system, it doesn't matter which frequency pair
20 is being utilized, it's just which one is
21 available.

22 So, again, therefore with a given number
23 of users fewer discreet radio channels are
24 required, so it's more efficient use of the
25 frequencies you have. But again, they are not

1 a dedicated resource to any one specific group,
2 everybody uses the pool of frequencies.

3 So, that might have been a lot so I'm
4 going to give you another picture of it. So,
5 here in this example you have four dispatchers.
6 One is called PD1, one is called PD2, one is
7 called FIRE, and one is called
8 LOCALGOVERNMENT1. This would be a typical
9 radio system for a government agency, whether
10 it be state or law enforcement, or -- so they
11 group them all together, everybody is using the
12 same pool of frequencies within their trunk
13 system, and they're spread across the area
14 where there's coverage. The different
15 vehicles, again, is when they are transmitting
16 they're using the different towers, or the
17 different frequency pairs, it doesn't matter
18 which one it is when they are talking. The
19 user themselves don't know, the system does it
20 automatically, that controller controls which
21 frequency is being utilized within the system
22 itself.

23 Now, the most important thing from this
24 perspective is the fleet map. Okay, that's
25 another one of those key terms. Fleet map is

1 how many talk groups are you using in a trunk
2 system. So, in this example with this picture
3 there are four talk groups, so my fleet mapping
4 could consist of only having four talk groups.
5 In a trunk system, usually there is many more
6 talk groups than there are frequencies
7 available because the probability of everybody
8 talking at the exact same second is minimal, so
9 there is algorithms utilized in order to
10 determine what is the right, most efficient
11 level, or number of talk groups that you could
12 put on any given trunk system.

13 So, to give you more detailed information
14 about trunk systems, what happens when you,
15 when you turn the radio on in a trunk system.
16 So, when you turn a radio on, or you move zones
17 or systems, or talk groups within the radio,
18 the radio itself sends a data message to the
19 control channel, or the controller, computer,
20 and as soon as you turn it or you change
21 groups, it sends a data message. The data
22 message usually contains three things. It
23 could contain more or less depending on the
24 type of trunk system it is.

25 The three things it sends at least is

1 what's the system identification number, what
2 is the unique number of the radio device, and
3 what is the talk group number that I want to
4 talk, I want to listen to, because again you're
5 turning it on. They send all three of those
6 pieces of information to the controller. The
7 controller then looks it up in the system
8 database and says, oh, yeah, that's the right
9 system, that ID number has authority, or is
10 valid to be able to listen to communication,
11 and the talk group that they're looking at,
12 they also can listen to communication on it.
13 So, it sends a data message back to the radio,
14 the radio receives the data message, and it
15 continues to listen to the control channel, the
16 controller. Whenever anybody talks on that
17 talk group the radio receives an actual data
18 message from the control channel telling it
19 that talk group, let's say LOCALGOVERNMENT1 is,
20 right now someone is talking on channel four.
21 It automatically moves the radio to listen to
22 channel four frequency to receive the data
23 that's coming back, the voice that's coming
24 back on it.

25 The radio itself, the user didn't do

1 anything to use any of the four channels. The
2 radio automatically moved based on the
3 information the controller provided it, that
4 data message. Every time they move zone, or
5 move talk group, the radio automatically sends
6 another data message with the same three pieces
7 of information, every time the radio is turned
8 on, turned off, moved. Turned off depends on
9 the type of manufacturer also, and the type of
10 equipment. So, basically that's sort of
11 required in order for the radio system to work
12 appropriately, for someone to listen.

13 Now, if you want to talk it does something
14 very similar. When the user presses the button
15 on the side of the radio, which is known as the
16 PTT, or the push to talk button, it sends again
17 a very quick message. In the message the same
18 information, what's the system ID, what's the
19 unique ID number of the radio, what is the talk
20 group that the radio is going to be talking on.
21 Once it receives all those three things the
22 system again checks the database to see are
23 they able to talk, do they have authority to be
24 on that group, is it the right system. If all
25 of them are correct, then the controller

1 determines what's the next available frequency
2 and it sends it to the radio. The radio then
3 moves to that frequency and allows an open
4 microphone to take place so that the user on
5 the radio could talk back.

6 Now, if you ask I would say thousands of
7 anybody who uses a radio today do they know
8 that their radio sends a data message in a
9 trunked world I guarantee you the majority of
10 them don't, because there's nothing they're
11 doing on the radio side in order for the data
12 message to go on. But yet that's what happens
13 behind the scenes in a trunked radio system for
14 the trunked system to work.

15 Now, some of the terms I use, talk group,
16 you might not ever hear someone who uses a
17 radio refer to talk group. Again, trunking, or
18 trunked radio systems didn't come about until
19 the 90's. If you have someone in law
20 enforcement that was here before the 90's they
21 know channels, which is really a conventional
22 term. When you're talking about trunked, or
23 trunking radio systems you don't use channels,
24 everything uses the same frequency pairs, you
25 use talk groups. So, again when you hear

1 someone refer to channels don't think that
2 they're talking about conventional, because
3 depending on their knowledge, or where they,
4 their experience came from, they could use the
5 word channel interchangeable with the word talk
6 group, but yet they're referring to possibly a
7 trunk system.

8 So, again that was what happens when you
9 want to access the system, and what happens
10 when someone wants to actually place a call.
11 There's one more slide on trunking. This one
12 talks about the different abilities of the
13 trunking system. So, trunking refers to the
14 ability of transmissions to be served by free,
15 or unused frequency pairs. Now again, the
16 availability is determined by algorithms, or
17 protocols. The reason this is important is
18 because when trunking came out in the 90's
19 every different manufacturer or vendor that
20 sold trunking radio systems created their own
21 proprietary, their own design in order for
22 trunking to work, for that protocol to work.

23 So, vendor X created their own algorithm
24 in order for the trunking controller to work.
25 Company Y, separate algorithm. And when they

1 created these algorithms they did so in a
2 fashion that required you to buy the same
3 manufacturers radio devices. So, if you bought
4 a trunking infrastructure that used by
5 manufacturer X all the radios that used that
6 system had to be manufacturer X. If you bought
7 the infrastructure for a trunking algorithm
8 from manufacturer Y all the radios have to be
9 from manufacturer Y.

10 If a radio from manufacturer Y wanted to
11 talk or listen to one on manufacturer X it
12 could not, which is huge interoperability when
13 two different radio systems that could be
14 neighboring cities, neighboring counties,
15 neighboring states, they couldn't talk to each
16 other. So, what was created was, in early
17 2000's APCO came out with a design for what's
18 called a Project 25 Algorithm for Trunking.
19 Now, this Project 25 algorithm for trunking
20 allows the capability of, you could have the
21 infrastructure from manufacturer X, it doesn't
22 matter what manufacturer you utilize you could
23 utilize any of the other manufacturers' radios
24 as long as they have Project 25, or P25
25 trunking algorithm in it in order to work on

1 that other infrastructure.

2 Now it gets a little bit more detailed
3 because not everything might work in the radio.
4 When you -- even in P25 when you cross
5 different features, or functionalities of
6 radios, they might not work, but the basic
7 feature of talking and listening works, it
8 doesn't matter what manufacturer radio device
9 you have. And again, that plays a role just
10 like the frequencies. If the radio doesn't
11 have the right frequencies, it doesn't have the
12 right capability, it won't work on even someone
13 right next to you's radio system.

14 So, when a trunked radio control channel,
15 that controller computer, gets too many
16 messages at the same time it might not have the
17 capacity to keep up with the amount of messages
18 coming in, because again it only has the
19 capability within itself. One thing I did not
20 mention was that whole process I talked about,
21 how a radio, every time it turns on or turns
22 off you change groups, it sends that little
23 data message, every time you key up it sends
24 another data message. That data message, that
25 whole process takes 300 milliseconds. So,

1 again the radio user doesn't even realize that
2 message is going because it's only 300
3 milliseconds in order for the data message to
4 go out to the infrastructure and the
5 infrastructure to come back. So, it's a very,
6 very quick process that takes place within
7 trunking world.

8 But if you have too many messages within
9 the control channel the control channel itself
10 might not be able to handle the capacity of the
11 request to the control channel. And again,
12 request could be somebody listening, turning
13 the radio on, switching groups, or trying to
14 actually talk. Those are the three most basic
15 messages. There are more than that, those are
16 just the three most basic.

17 So, again there is the, the trunk to radio
18 systems rely on this centralized computer
19 controller to make channel assignments and
20 grant radios access. Trunk systems may be
21 impacted if malfunctions happen within that
22 controller, or that control channel. Problems
23 with radio, with the controller, could affect
24 all the radio users in a large radio system,
25 because again the control channel is what is

1 deciding which frequency, or which channel is
2 being utilized, which frequency pair for the
3 different talk groups.

4 If too many users try to access the radio
5 system at the same time, those are people
6 actually trying to talk, the system goes into
7 what's called queuing. It doesn't matter which
8 trunked system you're using, in trunking in
9 general if, again, you have the four channels
10 that you could use, different four frequency
11 pairs that are available to the different talk
12 groups. If too many people press, all ten
13 groups press the button at the same time to
14 talk, only four will actually talk first, the
15 rest are standing in line. Depending on the
16 way the radio is configured, radios usually
17 have a beep, the beep occurs saying no, there's
18 no available frequency pairs in order for you
19 to talk. When it beeps, again depending on the
20 way the radio is configured, one way is you
21 could continue pressing the button and then
22 when a channel becomes free you're first in
23 line, the radio will let you know you have the
24 frequency available and you'll be able to
25 communicate. That's one way of programming.

1 The way you program a radio, and the different
2 manufacturer, plays a role also on what happens
3 when the radio goes into queuing.

4 Now, besides queuing there is another term
5 that gets utilized often, and that's when a
6 system goes into throttling mode. Throttling
7 mode, which is a safety mechanism used by some
8 manufacturers, not all manufacturers use this
9 term, and it prevents the system from shutting
10 down completely if the control channel or the
11 controller gets inundated with different
12 messages. Again, in this case it's different
13 than queuing because queuing is just for people
14 who want to talk, there are four frequencies,
15 ten people trying to talk at the same time,
16 they have to wait in line, you're in a queue.

17 Throttling is when data messages, again
18 turning the radio on, switching zones,
19 switching talk groups, switching, switching
20 different things on the radio, every time it
21 switches it sends a data message, so those in
22 addition to the PTT talks, pressing it for the
23 acknowledgment, altogether could impact the
24 control channel, and the control channel for
25 some manufacturer, for a manufacturer indicates

1 the work throttling, which is that it goes into
2 a safety mode and says it's not going to work,
3 and it sort of waits, and that could be a
4 second, it could be a couple seconds, it could
5 be a couple minutes depending on the amount of
6 traffic, and depending on how it's configured.

7 So, what's another type that takes place
8 with the system itself, and that is -- we
9 talked about convention, we talked about
10 trunking, but how do we expand the coverage.
11 If you want to talk about the coverage of the
12 system itself, you could have one tower, a
13 tower is a big huge structure generally, or it
14 could be on top of a building, multiple
15 antennae, and this basically allows coverage,
16 or increased capacity, similar to the repeater
17 that we talked about in the conventional
18 system.

19 So -- and the example is the picture on
20 the top left. This is a single site, one tower
21 alone, and everybody talks on that one tower in
22 order for the system to have coverage. And
23 again, it depends on the type of coverage,
24 whether that's inside of a house, inside of a
25 construction building, inside of a hospital,

1 and how big of an area, how many miles do you
2 need the system to cover.

3 Another type is a multi-site, and that
4 means the coverage area you want to cover, one
5 tower won't cover it. So, you then have two
6 different capabilities, you have simulcast, and
7 you have multicast. So, I'll talk about what,
8 the two different ones. Simulcast is the first
9 one, it's sort of the one in the middle there
10 in the picture. You have in this example three
11 different towers that make up a simulcast
12 system. Each of the towers are connected to
13 each other. They're connected in the middle.
14 It looks like a little circle in the design.
15 That little circle is a microwave dish. The
16 microwave dish looks like a big huge doughnut.
17 They're actually attached to the towers
18 themselves, and that microwave, which is a
19 different frequency, connects to another tower,
20 and that's constantly sending information back
21 and forth between the two towers.

22 Then you have to have the same
23 infrastructure that you have in the bottom of
24 one of the towers inside of a facility at the
25 other location. And in this example, again,

1 there's three, so you have another microwave
2 dish on the other side of the tower connecting
3 to another tower structure, and again in the
4 bottom in the building it has a whole bunch of
5 different cabinets with radio infrastructure
6 equipment. The reason it's simulcast, because
7 they're all using the same frequencies.

8 So, going back to my example, if we have a
9 trunk system of five channels one is the
10 control channel, four working channels, all
11 five of those channel pairs, so it's really ten
12 frequencies, one receive one transmit for each,
13 ten different frequencies in the infrastructure
14 cabinetry in the bottom of each of those
15 buildings using the exact same frequencies.
16 Now, why does it matter if they're using the
17 same frequencies or not, because remember we
18 don't, as government agencies we don't choose
19 how many frequencies we have, we have to
20 request them from the FCC. And you have to
21 have capacity, you have to have so many users
22 in order to use a frequency in order for it to
23 work. They won't grant you as many that you
24 want, you have to say I have thousands in order
25 to get different frequencies available.

1 So, that's the example in the middle,
2 bigger coverage area, multiple towers connected
3 to each other. In this example it's with
4 microwave dishes. If you don't have microwave
5 dishes you could connect them with telephone
6 lines, T1s from like AT&T in my example here,
7 in your local area. You can have an AT&T
8 circuit connection between both of them instead
9 of microwave dishes. There's many different
10 types of technology that you could use for
11 connections.

12 The one below that is a multicast system.
13 In that system you have three, exactly the same
14 scenario, three different towers, but you don't
15 need everybody to talk on all three towers all
16 the time, so you have different frequencies in
17 each one of the three towers. Now again
18 different frequencies in each one means that if
19 they're talking on the first tower only the
20 people in the first tower are going to hear.
21 It's like three separate stand-alone radio
22 systems.

23 But if you notice in this example we still
24 have those microwave dishes, and a connection
25 between the sites. Sometimes you want to

1 multi-site, which not every communication you
2 want to talk to each other, but you might want
3 one talk group to be utilized on another system
4 that's out there. Now, when that happens it
5 utilizes a separate frequency pair from the
6 first system, the one in the middle, to the one
7 on the left every time it communicates, so it's
8 utilizing four frequencies every time someone
9 transmits and receives on one of these talk
10 groups that they want to be covered in both
11 areas. Whereas you might not want that, the
12 majority of the time you might want them
13 independent, not having to communicate with
14 each other, so that would be the reason why you
15 would do a multicast versus a simulcast.

16 An example is if you have a very large
17 city. Everybody in the city you want to be
18 able to communicate so you might have a
19 simulcast system there, but you have another
20 area that you have to respond to, but there's
21 not a lot of people out there so you can put
22 another tower there with separate frequencies.
23 So, everybody in that area normally talks to
24 themselves, but every once in a while, someone
25 in the city might need to go to that area,

1 they're able to communicate but it ties up both
2 frequencies. It would be another example of
3 why you would do that. So, again, you can have
4 a mixed configuration depending on your agency
5 and your need.

6 So, we talked about conventional, trunked,
7 we're still in types. We're almost done. What
8 is how you talk? You have analog and you have
9 digital communication. Analog is the symbol on
10 the top, and it basically shows you it's a
11 regular type of communication. Public safety
12 analog systems use frequency modulation FM
13 similar to regular FM broadcast radio.
14 Simultaneous users transmit will result in a
15 squelch or muffled sound. There is a gradual
16 increase in noise level and loss of audio
17 clarity as the signal strength decreases. In a
18 high noise environment, the background sounds
19 will be transmitted along with the voice
20 message.

21 So, an example of analog is right now
22 you're hearing my voice analog. Or actually if
23 I'm talking to you you hear my voice analog.
24 I'm not sure if the microphone has a digital
25 delay, or a digital configuration, so I'm not

1 sure about that. So, basically analog is a
2 clear message. If you're talking about the
3 tower in a radio system the tower structure,
4 the further you move away from it the radio
5 will continue to work but you'll start hearing
6 noise while you need to transmit. So, you know
7 the more noise you hear the further from the
8 radio system, or the tower, that you're getting
9 from. So, anybody who uses the radio might not
10 know where the towers are located, but they
11 know when they start hearing the noise the
12 radio might stop working. That was the
13 original form of radio signal, was analog.

14 Then we moved into the one that came after
15 it, which is digital. A digital system uses a
16 voice encoder and decoder, it's called a
17 vocoder, to convert human voice into ones and
18 zeros. Digital systems are designed to provide
19 clearer audio by digitally correcting errors in
20 low signal levels. Your cellphone would be a
21 digital communication. There's a delay. When
22 you say one, if both of you are standing next
23 to each other, both on speakerphone, you would
24 hear the delay when you talk versus how it
25 comes out on the other end.

1 If you're P25, P25, Project 25 is digital
2 by default, so you don't have a choice of being
3 analog or digital. So, if you have a P25
4 system it is digital. Now, digital works a
5 little different. You don't have that noise as
6 you're going further away from the radio
7 system. Instead because of the auto correction
8 of the vocoder the radio will correct it, make
9 it sound better, eliminates all that background
10 noise, but there comes a point where the
11 vocoder cannot correct it so therefore the
12 radio will just stop functioning, you won't
13 hear any noise from the radio anymore.

14 Now, a lot of society today, you're going
15 to hear as they are moving into the digital
16 world that they have a big adjustment that they
17 have to do because they were used to hearing
18 that noise when they moved away to a bad
19 coverage area, and in P25, again, it doesn't
20 exist, so you, they have to get used to where
21 is the actual coverage area of the radio system
22 itself. Also, the vocoder for digital, it
23 allows for noise cancellation. Like a lot of
24 you might have for your cellphones or your
25 radio devices, noise cancellation will

1 eliminate all the background noise so that my
2 voice sounds clearer when I'm communicating,
3 easier for someone to listen and respond to.

4 And the last two on type is encrypted and
5 programming. Once you decide if it's going to
6 be analog or digital you have to decide whether
7 you want to encrypt the actual communication.
8 Encryption means that the radio has to be
9 loaded with an encryption key. The radio
10 message, or voice, gets heard on the other
11 side. The encryption key because it's in the
12 radio will de- encrypt it so you're able to
13 hear the audio. Public safety has always tried
14 to secure, moving into a secure environment,
15 and protect the sensitive information that
16 might be utilized on a radio system, so there
17 could be encrypted talk groups, or encrypted
18 channels if you're on a conventional system.

19 And then the most different of all of them
20 is once you've decided what type of system, the
21 capacity, the coverage, the frequency, is you
22 have to actually program the radios. They're
23 like little side computers, and the, how do --
24 when you program it, first off you have to buy
25 it with the right frequencies, the right

1 configuration, the right features, but then you
2 have to decide what talk groups are you going
3 to put next to each other, which ones get used
4 the most often, what different talk groups do
5 you want installed in the radio in what order.

6 So, each radio must be programmed. The
7 radio programming is a very complex process.
8 Generally, agencies either have internal staff
9 or they hire a vendor to do it for them, but
10 they have to give them the guidelines of what
11 to put in the radio, what that fleet map
12 exists. In the fleet map if you have ten talk
13 groups does every radio that work for that
14 agency get all ten talk groups, or does one
15 person get 1 and 2 and another person get 3 and
16 4? So, the way the radio is programmed plays a
17 very strong role on how the radio works. The
18 radio itself could look identical to another
19 radio but it might not have the same
20 functionality or talk groups in it.

21 So, right now we just went through the
22 basics of radio systems. Again, it's a very
23 complex infrastructure. There is not one that
24 I could find out there that is exactly the
25 same. They all have different unique features

1 that have been set up by the agencies that
2 install the radio systems out there. The four
3 primary areas is the capacity, which was the
4 number of talk groups, the number of devices,
5 and the average length of the conversation, the
6 frequency, either VHF, UHF, 800 or 700. 700 is
7 last because it's the last one that became
8 available. 800 frequencies became inundated,
9 they weren't available anymore, the FCC didn't
10 have any more so they started giving 700 to
11 government agencies. So, it's actually in the
12 order that they were available out there to
13 different government agencies. Coverage,
14 whether it's in the street level, inside of
15 buildings, the density of the level of the
16 structure. And then types, conventional,
17 trunked, single site, multi- site, analog,
18 digital, encrypted, or programming.

19 The last topic is interoperability. So,
20 what does the word interoperability, which I
21 know you've heard in previous sessions, in
22 previous meetings, what does it mean, and it's
23 basically defined as the ability of
24 public-safety responders to share information
25 via voice and data communications systems on

1 demand in real time when needed and as
2 authorized. Now, why would it say when needed
3 and authorized, because you don't necessarily
4 want everybody talking to everybody at the same
5 time on the same talk group.

6 Interoperability is not putting everybody
7 on one talk group and having them all talk and
8 communicate. It's again, as needed, and as
9 authorized based on the chain of command and
10 the different procedures that are out there for
11 each agency, or each jurisdiction. In landmark
12 events such as 911, Hurricane Katrina, and
13 others, communication interoperability between
14 emergency responder agencies has been
15 identified as a critical component of incident
16 response.

17 The Department of Homeland Security, DHS
18 in 2005 with the SafeCom program developed and
19 released the Department of Homeland Security
20 interoperability continuum framework for
21 accessing and augmenting communications
22 interoperability capabilities. Now, DHS didn't
23 design this by themselves, they brought myself
24 and lots of other intricate individuals from
25 different cities and counties throughout the

1 nation together, multiple meetings to design
2 how is that we could bridge this gap.

3 Now, an example of the continuum, or the
4 continuum itself is the next slide, and if you
5 notice it's not just technology. On the left
6 there are five main categories. One is
7 governance. Second is standard operating
8 procedures. The third is technology. The
9 fourth is training and exercise, and the last
10 is usage. The technology alone doesn't fix
11 anything. If you don't have the governance in
12 place, the standard operating procedures for
13 people to know how to use it, training and
14 exercises, because even if they have a radio
15 that has hundreds of conventional channels,
16 hundreds of talk groups, unless they know how
17 to use it, and know where to go, it's not going
18 to do any good, so training and exercises have
19 to be part of the process, and that's what's
20 indicated in the continuum. And the last is
21 the actual usage.

22 The continuum starts, it has five
23 different columns. The columns go from left to
24 right on the different types of communications
25 that took, could take place for

1 interoperability. And I'll go down the
2 technology just very quickly. So, technology
3 is broken into data and voice. An example of
4 interoperability could be swap radios. That
5 means I have ten spare radios, your agency
6 comes to respond to something to help me, I
7 give each one of them a radio. That's swapping
8 radios in order to fix the radio issue for them
9 to be able to talk in my area.

10 The next would be we want to connect to
11 different infrastructures, we could do a
12 gateway. The next is shared channels, use
13 channels or frequencies from one system on
14 another system. Then is proprietary shared
15 systems, so have a radio with the right
16 frequency set, with the right functionality and
17 features to work on other radio systems, you
18 add those talk groups or systems into the radio
19 by programming. And then the last one is
20 shared based, standard based shared systems.
21 And this is where it comes to P25, or Project
22 25, where it doesn't matter which manufacturer
23 radio you use you're able to utilize it on one
24 system or another.

25 For each one of the different five legs,

1 whether governance or usage, there is the same
2 information for each one on the different areas
3 of how you get to where you need to depending
4 on your agency and what's needed for
5 interoperability. So, staying with radio, if
6 an agency which operates on a separate radio
7 system wants to be interoperable there are
8 different methods to accomplish this.

9 The first is programming. They have to
10 have the authorization of the other
11 infrastructure manager to add those
12 frequencies, or channels, or talk groups within
13 the radio itself, because the radio, when
14 again, when it presses the button it needs to
15 ask, if it's a trunk system it asks for that ID
16 number, that talk group, and that information
17 saying, yes, that unique ID number will work on
18 that other infrastructure. It has to also be
19 within the coverage footprint of that other
20 radio system. So, for instance, if Palm Beach
21 has a radio and the radio is in Palm Beach, and
22 Broward has authorized Palm Beach to use their
23 radio, if a radio is in Palm Beach and it's
24 outside of the coverage footprint of the
25 Broward radio it won't work because it's not

1 within the coverage area of the system itself.

2 So, programming will only work if you're
3 physically in the area of that system.

4 So, because of that you could also have
5 console patches, it's another example. A
6 console patch is that you have to have some
7 form of communication between the system. So,
8 I'll give you the most basic. That console
9 that I said could be sitting next to me with a
10 cable to the top of this building, that
11 console, as long as it's within an area, or
12 the antennae on the top of the building is in
13 an area where it gets access to that system,
14 could be on the outskirts of Palm Beach in my
15 example, outskirts of Palm Beach sort of on the
16 south side has a console with an antennae on
17 the top of the building, it gets access to the
18 Broward system, then it could then go through
19 microwave back to the dispatch center and be
20 connected to her console, which again is the
21 fourth radio device.

22 That console then will have a little block
23 that says Broward, and then they could take
24 that a patch it to any other talk group that a
25 regular Palm Beach officer might have in their

1 radio, and they will then be able to listen and
2 talk to Broward even though they're outside of
3 the coverage footprint of the radio system
4 itself. Now, the patch process itself is on
5 the console to different boxes, they press a
6 couple of buttons, connect it, it takes a few
7 seconds.

8 The last one is a gateway. And there's a
9 picture of a gateway because it's sort of the
10 hardest one to explain on the top right. You
11 have a vehicle with a bunch of equipment in the
12 back of the vehicle. You basically take two
13 different radios that are in the same coverage
14 footprint, you connect them into this piece of
15 technology device. Because you're putting them
16 in there together whatever talk group or
17 conventional channel is configured on the radio
18 when you place them in the device and connect
19 them, then those two will be working together,
20 and when one talks on one of the talk groups or
21 convention channels they will be able to talk
22 to the other one at the same time because this
23 device allows them. Again, it has to be, both
24 them would have to be within the coverage
25 footprint of each of the separate radio

1 systems.

2 So, as a summary -- I talked a lot, so
3 hopefully that was okay. I gave you a lot of
4 information about the detailed technology that
5 goes around with the history of the radio
6 system, the radio system four main aspects,
7 which are capacity, frequency, coverage and
8 type, interoperability in order to connect two
9 separate systems, and the three most common,
10 which are programming, console patches, and
11 gateways. Thank you.

12 CHAIR: Okay, thanks, Cindy, that's a
13 great job, and we appreciate you taking the
14 time and sharing all of that with us. So, the
15 way we set this up is to have Cindy provide
16 this framework background information. The
17 next presenter is going to be Broward County
18 Government, is part of Broward County --

19 MS. CAST: State of Florida.

20 CHAIR: I'm sorry. You're right. I'm
21 sorry, okay, is the State of Florida, because
22 we're going to take it to the high level. So,
23 we got the background, we got the framework.
24 We're going to hear from Nick about how the
25 radio systems operate in Florida under SLERS,

1 or the Statewide Law Enforcement Radio System.
2 So, Nick will talk about that for a little bit,
3 and I don't anticipate from discussions that
4 that presentation is going to be very long.
5 It's going to give you the framework.

6 Then it will be from Broward County
7 Government. Within the Broward County
8 Government presentation, you're going to hear
9 again from Tracy Jackson a little bit, but also
10 from Daniel Sanchez, who is with Motorola, and
11 the Broward County system is a Motorola system,
12 so you'll have some expertise from Motorola,
13 and then also from Jose De Zayas, who is a
14 Broward County radio systems administrator.
15 Then from there, after that then we're going to
16 hear from Broward County Sheriff's Office
17 again, and then the plan is tomorrow morning to
18 hear from Coral Springs on their radio system.

19 And then Cindy has agreed to remain and
20 come back to act as a subject matter expert to
21 answer any questions that you have, or
22 clarifications, because we might here, and I
23 don't know, we might hear some differences of
24 opinion, or some inconsistencies, or some, just
25 different perspectives from some of the

1 stakeholder providers. Cindy is neutral. She
2 is not attached. She is from Miami-Dade
3 County, and she's here representing the
4 regional domestic security task force, and she
5 truly is an SME.

6 So, if you're hearing different things, is
7 we have a lot of questions I know about
8 throttling, and about all, some of the things
9 she touched on, so Cindy will come back and be
10 able to answer any questions that aren't
11 already answered, or that you need further
12 clarification on based on the others'
13 presentation. So, I wanted to share that with
14 you because I'd like you to keep that in mind.
15 If you have any questions now for Cindy is that
16 just ask that you keep them kind of limited
17 because she will be back, and that way we're
18 not spending too much time right now on
19 questions, because let's see what the other
20 presenters have, and then she will come back as
21 that subject matter expert and be available to
22 you.

23 So, with that said that's the plan, and
24 for right now does anybody have any questions
25 of Cindy for now? Senator Book.

1 SEN. BOOK: Thank you, Mr. Chair. And
2 it's a basic one -- and thank you so much for
3 your presentation, that was very, very
4 thorough, and I feel like I'm a halfway expert
5 in radios. But as far as the FCC goes, you
6 said that we're out of 800, what is it, 800Mhz
7 channels so we're in 700's now. Is there only
8 so many?

9 MS. CAST: So, there's -- there's a
10 limited amount of frequency. 800s are utilized
11 throughout the nation, and they're using them,
12 and they continue to use them. But if you have
13 a new system, or if you wanted to increase
14 capacity by having more frequencies added there
15 isn't available, in a lot of urban or very
16 large city areas. If you're in a rural area
17 you might still have 800 available nationwide,
18 but like in our area, Miami-Dade, I can't get
19 an 800 frequency if I wanted. So, when we
20 needed to expand we went to 700 because it was
21 the new spectrum that became available to be
22 able to be utilized. And the way the new radio
23 technology was built our radio itself does
24 both, 700 and 800 together, the same radio
25 device.

1 SEN. BOOK: And they release these
2 frequencies.

3 MS. CAST: You have to ask for them. As a
4 government agency you make a request for them.
5 You have to give them all sorts of technical
6 details of where you're going to use them.
7 They do a lot of analysis and engineering work
8 to make sure that there's, that it's not being
9 reutilized in another area that could interfere
10 from one to the other.

11 SEN. BOOK: Thank you.

12 MS. CAST: But they're the ones -- the FCC
13 is the ones who make the determination and
14 grant you access, yes or no.

15 CHAIR: Does anybody have any other
16 questions that they feel they need to ask Cindy
17 right now? Mr. Schachter, go ahead.

18 MR. SCHACHTER: Bertha Henry told me that
19 all radios throttle; is that true? And she
20 told me that in New York City those radio
21 systems throttle; is that true?

22 MS. CAST: So, a radio system, the only
23 thing that could throttle is one that's
24 trunked, so if it's a conventional system it
25 can't throttle because there's no control

1 channel. So, the control channel is the one
2 who makes throttling happen when it gets
3 overfilled with capacity. The term throttle,
4 again, is only a certain manufacturer. If you
5 have other radio system trunked, trunking
6 systems, they won't use the term throttling,
7 but the control channel, depending on the
8 frequency, the capacity, the design, unique
9 design of the system itself, a trunk system
10 control channel could get inundated by too many
11 messages.

12 However, if you design the system, and you
13 continue to evaluate the system on a regular
14 basis you could make different steps to insure
15 that those type of scenarios are less likely to
16 occur. But every trunk system a control
17 channel could get inundated with data, yes.
18 The answer is yes, every truck system could get
19 inundated with data.

20 MR. SCHACHTER: And I understand what
21 you're trying to accomplish here, but I've
22 already gone through this so I'm going to, I
23 probably need like a couple bites of this
24 apple, you know, because I know I'm going to
25 ask her, and then I'm going to, the other

1 people are going to come up, they're going to
2 say different things, so I mean it's very
3 helpful that you're going to have her
4 afterwards, but --

5 CHAIR: Yeah, so what do you mean, because
6 we need to streamline this, so -- so let's not
7 get too deep into this with Cindy now, let's
8 let the others talk, and then you can --

9 MR. SCHACHTER: No problem.

10 CHAIR: -- come back at the end and ask
11 her if you want to get detailed with her, but
12 let's just keep it on the, on the surface for
13 right now.

14 MR. SCHACHTER: You obviously know that we
15 had some problems here. In your opinion if we
16 would ink off those non-emergencies off of our,
17 off of county radio system, do you think that
18 would have fixed the problem?

19 MS. CAST: So, I don't have detail on the
20 County's, Broward County's radio
21 infrastructure. I've never seen their
22 capacity, their systems --

23 CHAIR: Okay, so -- so -- so let's -- so
24 let's just stop, because they're going to talk
25 about that --

1 MR. SCHACHTER: I know. I know. I know.
2 I know.

3 CHAIR: -- and you're going to get the
4 Broward County people, and you're going to have
5 Motorola people. You can ask them your
6 questions. So, let's just bring Nick up, okay,
7 and then we'll come back to this, because we
8 got to keep some structure to this or we're
9 never going to get through it. Thanks, Cindy.
10 So, Nick, you want to come up? Nick's with
11 FDLE. Nick Simoncini, who is the statewide
12 communications coordinator for FDLE to talk
13 about SLERS. Welcome.

14 PRESENTATION: FLORIDA DEPARTMENT OF LAW ENFORCEMENT
15 SLERS

16 MR. SIMONCINI: Good afternoon. Thank
17 you. So, I'm going to briefly talk about
18 SLERS, or the Statewide Law Enforcement Radio
19 System that's in place with the State of
20 Florida. So, SLERS is a unified voice
21 communications network that was designed in its
22 current form around 2000/2001, and it was built
23 to provide a unified platform for state law
24 enforcement to communicate from Pensacola to
25 Key West.

1 So, the system uses what Cindy talked
2 about, the 800Mhz and the 700Mhz frequencies.
3 It is a trunked system. It is a, Harris is the
4 current vendor on the system. It is a
5 proprietary network, so you have to use a
6 Harris radio, or Harris device to connect to it
7 and talk on it in its current form. And it
8 uses kind of a mixed platform of what Cindy
9 talked about. We have microwave sites,
10 multi-sites, simulcast, so it's a very complex
11 network with many different types of towers.

12 So, the system covers about sixty thousand
13 square miles within the state, about ninety
14 eight percent of the state of Florida,
15 including twenty-five miles offshore for Fish
16 and Wildlife. At the time I believe it was
17 Marine Patrol that it was designed for. So,
18 the goal of SLERS is to provide State Law
19 Enforcement with a communications system so
20 they can talk to their dispatch center and to
21 one another as needed for patrol cars, boats,
22 motorcycles, and even the aircraft that the
23 state has.

24 So, by providing the system basically we
25 took many dissimilar systems, each state agency

1 had their own radio system, FDLE had a system,
2 Florida Highway Patrol had a system, so we
3 consolidated them. It saved the taxpayers a
4 lot of money, and it enabled us to have
5 interoperability. Before SLERS Fish and
6 Wildlife could not communicate to FDLE, they
7 could not communicate to Florida Highway
8 Patrol. With the SLERS system they're able to
9 do that.

10 So, the SLERS governance is managed under
11 Section 282 of the state statutes. That
12 designates the Department of Management
13 Services to oversee the SLERS network, and it
14 also created an entity called the Joint Task
15 Force on law enforcement communications, so the
16 JTF as we refer to it, was designed to the
17 governance model, and the driving force to
18 allow DMS to manage the system. The JTF
19 comprises of the agencies you see on the screen
20 there, FHP, FWC, FDLE, and many others. I
21 believe there's seven of them.

22 There's also what we call partner agencies
23 that are involved, any other state agencies, or
24 local agencies that are on the system. So,
25 it's not just limited to state law enforcement,

1 we have several counties on the system, Walton
2 County Fire, a couple of them, federal agencies
3 as well. I believe railroad police is on the
4 system as well, so it's not just state law
5 enforcement.

6 So, the beauty of the system, it was
7 designed for statewide coverage, so we can talk
8 from Pensacola to Key West flawlessly,
9 seamlessly. The system does, was designed
10 capacity wise just for state law enforcement.
11 So, Cindy was talking about your system could
12 have four channels, or five channels, or twenty
13 channels depending on how many concurrent calls
14 you need, so depending on the population of the
15 areas, for example here in Broward County I
16 want to say there's a fourteen or nineteen
17 channel system, so nineteen concurrent calls
18 can happen on the system. But if we go to the
19 Ocala National Forest there could be four
20 channels that are used, because the number of
21 users in those areas are much less than they
22 are in the large metropolitan areas.

23 So, the system, again, every system is
24 different, it can be designed totally
25 different, and this system was built at the

1 time for the needs of state law enforcement.
2 Since then these partner agencies have come on,
3 the small counties, some large counties, and
4 we've increased that capacity of the system
5 maybe from a four-channel site to a ten-channel
6 site so the county can use it as well.

7 So, total sites, we have just some
8 statistics here on the system. There's two
9 hundred nineteen radio towers on the SLERS
10 network spread throughout the state. There's a
11 hundred ninety-seven RF sites, RF being radio
12 frequency, so sites that the actual radios will
13 talk to. There's twenty-two microwave relay
14 sites. So, we don't rely on anybody's
15 infrastructure to provide the backbone or
16 connectivity to our sites, we use our own
17 microwave network. So, there's twenty-two
18 sites that are just microwave, just to make
19 that relay so each site can communicate with
20 each other.

21 Cindy talked about multi-site and
22 simulcast systems, the numbers are there.
23 There's a hundred thirty-one multi-site and
24 twenty-one multicast systems on the system, so
25 it's a big mix. The next slide shows a

1 fifty-thousand-foot view, if you will, of the
2 system. It's a very complex system of
3 microwave sites, T1 lines and such that, that
4 connect all two hundred plus towers together.

5 So, some more statistical data. Year to
6 date there's been over two hundred ninety-one
7 million push to talks, to two hundred
8 ninety-one million times someone has pushed
9 that push to talk button on the system. There
10 are eighteen thousand and change state agency
11 radios on the system, and five thousand local
12 agencies on the system. Twenty-four state
13 agencies, and a hundred twenty local agencies
14 on the system, so again the agency supports a
15 large number of users.

16 Part of the system is dispatch, so state
17 agencies are all dispatched by the Florida
18 Highway Patrol, with the exception of Fish and
19 Wildlife, they have their own dispatch centers.
20 They're also co-located with Highway Patrol.
21 There's seven regional communications centers
22 in the state, one for each RDSTF region give or
23 take. In those regional communications
24 centers, or RCCs, are connected with
25 interoperability to most of the local agencies

1 in its region. So, the Tampa RCC can
2 communicate with Pinellas County Sheriff
3 through an interoperability network, or the
4 Miami RCC can contact any one of the counties
5 in, in this region as well as needed, and they
6 can patch these state radios into the local
7 radios through those dispatch centers if
8 needed.

9 The system also what we call interagency
10 communications. So, typically, for example,
11 Florida Department of Law Enforcement usually
12 isn't going to talk to Florida Highway Patrol
13 unless there's an incident, so we don't have
14 their channels or talk groups on our radios.
15 But we do have a shared group of talk groups,
16 what we call IA, or interagency channels. So,
17 every one of those twenty thousand users,
18 whether they be a local, state user, or federal
19 user, has the same bank of six or eight
20 interoperability talk groups so we can talk to
21 each other if needed on an incident. And
22 again, it doesn't matter who you are, if you
23 have a SLERS radio you have these talk groups,
24 you can talk to each other. So, we have that
25 internal interoperability as well.

1 And those SLERS IA talk groups can also be
2 patched outside of the network, so if we need
3 to communicate to another agency that's not on
4 SLERS we can do that through the, the
5 communication centers can make that patch.
6 Cindy had mentioned the mutual aid
7 communications, that the State of Florida
8 maintains the 8CAL90 and 8TAC91 repeaters.
9 Those are actually part of the SLERS system.
10 Harris, the current vendor maintains those for
11 us. So, there's statewide coverage on 800Mhz
12 on the calling channel we refer to as 8TAC90,
13 so anywhere you go in the state of Florida you
14 can turn your radio to 8TAC90 and communicate
15 with any of the seven regional communicate
16 centers, in addition to the locals. And the
17 State of Florida also maintains one of those
18 TAC channels, like Cindy mentioned. The 8TAC91
19 the State maintains statewide coverage. So,
20 there's two talk paths that can be used any
21 time by anybody who has an 800Mhz radio on the
22 field.

23 And those repeaters are accessible through
24 the regional operations centers, the regional
25 communications centers, and the Florida

1 interoperability network to activate those
2 repeaters, to turn them on and off. A lot of
3 stuff real quick. I hope I didn't talk too
4 fast. Any questions of me, or are we going to
5 wait until tomorrow?

6 CHAIR: Any questions you have for Nick
7 now, anybody's got questions on the statewide
8 system. Go ahead Commissioner.

9 MS. LARKIN SKINNER: Question. I am
10 completely ignorant about all these things.
11 I've never felt so dumb in my life. But my
12 question is would it even be viable, could you
13 even increase the capacity to a point where all
14 law enforcement could be on your system, and
15 fire rescue?

16 MR. SIMONCINI: I would say it comes down
17 to money. Communications systems are very
18 expensive. The technology is there to make it
19 happen, absolutely, it's how much money would
20 it cost to build that capacity to put X number
21 of channels on each site. That would be the
22 delimiting factor.

23 CHAIR: Mr. Schachter, go ahead.

24 MR. SCHACHTER: Does Harris' system have
25 a, what happens if it gets overloaded? I

1 understand the Motorola, that's the throttling,
2 does Harris have anything like that, or does
3 that not happen with Harris?

4 MR. SIMONCINI: The Harris system, we have
5 queuing, which is when too many users try to
6 transmit at the same time. To my knowledge we
7 have not had an incident of throttling on the
8 Harris system.

9 MR. SCHACHTER: Have you ever had a, you
10 know, a mass casualty incident using SLERS?

11 MR. SIMONCINI: Absolutely. SLERS has
12 been around since 2001, so any incident then,
13 and to my knowledge we have not had any, any,
14 the throttling term. And again, the throttling
15 term is vendor specific to another vendor, but
16 that function to my knowledge has not happened
17 on SLERS.

18 MR. SCHACHTER: And the fact that Coral
19 Springs and BSO could not talk, was that
20 throttling, or that's a separate, separate
21 issue? That's because they're not on the E911
22 system, right?

23 CHAIR: We're going to get to that.
24 That's a separate issue, because they couldn't
25 establish, on that day they couldn't establish

1 interoperability.

2 MR. SCHACHTER: Right. Right. On SLERS
3 that's not a problem at all because everybody
4 is on the same system, right?

5 MR. SIMONCINI: It hasn't been a problem
6 in the past. I'm not saying it can't happen.

7 CHAIR: No, because -- because -- anybody
8 that's on the system, okay, anybody who is on
9 the system. But if you take FHP as an example,
10 and talk about to Broward County, FHP is on the
11 Harris system, Broward County is on the
12 Motorola system, and so they're not on, Broward
13 County is not on SLERS, and in order for
14 Broward County and FHP to be able to talk you'd
15 have to patch it?

16 MR. SIMONCINI: Correct. So, the radio is
17 organically, and Broward County radio cannot
18 talk directly to a Florida Highway Patrol
19 radio, so there has to be a patch in the
20 middle, so the Broward County dispatch center
21 would have to make a patch to SLERS, or SLERS
22 would have to make a patch to Broward County in
23 order for them to communicate. And that could
24 be a simple couple clicks of the mouse to make
25 that happen.

1 MR. SCHACHTER: Obviously I'm not a radio
2 expert, but I know that there's technology out
3 there that, that enables all interoperability
4 in all radios from different, from different
5 communities and cities to talk, and transmit
6 video, and data, and -- no, you're saying, no,
7 it doesn't exist?

8 CHAIR: No, come back -- let's get through
9 it and then come back tomorrow. You can talk
10 to Cindy about it. It's just not that simple.
11 It just doesn't work that way. So, I mean it's
12 not -- remember what she said in the
13 presentation, you have different forms of
14 interoperability, and in the simplest form is,
15 is that, one, is that I can have programmed in
16 this radio the same talk group that he has in
17 his radio, and we can both go to the common
18 talk group and we can just talk back and forth.
19 But if I don't have in this radio what he has
20 in his, and I have channel 1, and he had his
21 channel 8, is that somebody can click some
22 mouse buttons and connect, okay, and connect
23 channel 1 and channel 8 together, and then
24 everybody on channel 1 and channel 8 are
25 talking as one, and that's the patch. So, it's

1 taking two and putting them together as one as
2 opposed to I can just turn on my radio, he can
3 talk on, he can turn on his, and we can talk
4 back and forth by going to the same talk group.

5 And so that's -- that was the -- that's
6 the issue for February 14th, is, is that they
7 didn't have -- and this is something -- and you
8 can ask this. This is something that will come
9 up, is, is that the question has always been,
10 and this is something we'll get into with
11 Broward next, and with Coral Springs, is, is
12 that one, was, was there a common channel that
13 everybody could have gone to, number one. And
14 some people were aware that there was, and some
15 people were unaware. And then -- and this will
16 also come up, about whether they should have in
17 an event like that because it is so difficult
18 to make that switch tactically in the middle of
19 an active assailant situation.

20 So, those are all the questions, and I
21 think you'll hear more about that as we get
22 into the presentations.

23 MR. SCHACHTER: I mean -- I mean as far as
24 I know patches happen all the time normally,
25 but they didn't happen here, so that's why I'm

1 trying to find out why.

2 CHAIR: We'll get into it. We'll get into
3 it. Does anybody have any other questions for
4 Nick? Sheriff Ashley?

5 SHER. ASHLEY: I do. I don't want us to
6 walk away from here thinking SLERS is the cure
7 all. I mean it has its own set of, you know,
8 problems, or maybe I'm mistaken, as far as sun
9 spots, or bouncing signals off of high-rises,
10 or -- do you have -- I know at some point there
11 was a discussion about legislation, or local
12 ordinances to have new code for new high-rises
13 to include amplification, or transmission
14 applications on top of those buildings. Do you
15 know if that's still?

16 MR. SIMONCINI: To my knowledge there are
17 some local codes and some local ordinances that
18 require you to put like a bidirectional
19 amplifiers in high-rises. You have to ask your
20 local entity on that one. They're different
21 from county to county.

22 SHER. ASHLEY: That's -- that's what I
23 wanted. Thank you.

24 MR. SCHACHTER: And can -- can -- I'm
25 sorry, Chairman, can I ask a question?

1 CHAIR: Go ahead.

2 MR. SCHACHTER: Can you help me
3 understand, you've got, you know, twenty five
4 thousand radios on SLERS, or something, you
5 know, extremely large, but here in this
6 incident we had, you know, I don't know however
7 many they normally have on the Motorola system,
8 and then you had extra, but that system, maybe
9 it's because it wasn't designed properly to
10 handle that, I don't know, but, you know,
11 that's what I don't understand, why this system
12 works but ours didn't.

13 MR. SIMONCINI: So, there's -- those
14 twenty- five thousand units are spread over two
15 hundred towers, over sixty thousand square
16 miles, so there may only be forty users on a
17 tower. So, because we have a small number of
18 users per tower we don't run into the issues of
19 the saturation that other systems may have.

20 MR. SCHACHTER: But it wasn't on together
21 --

22 MR. SIMONCINI: Correct. If all twenty
23 thousand were on the same tower we'd have
24 problems, but the likelihood of that happening
25 is pretty slim to none.

1 CHAIR: Does the -- does the Harris
2 system, even though they don't call it
3 throttling, does the Harris system have the
4 same, I think it's what you just said, so
5 clarify this for us, is, is that the Harris
6 system does have capacity issues like the
7 Motorola system has.

8 MR. SIMONCINI: Correct.

9 CHAIR: They may not call it throttling,
10 but the effect is the same, and there are
11 limited capacities on the Harris system.

12 MR. SIMONCINI: I'm not aware of any
13 mechanism that would be similar to throttling
14 for the Harris system.

15 CHAIR: And going back to what she talked
16 about, and what Cindy explained was, is that
17 the queuing is the inability to talk, and you
18 get the buzz, and the feedback if two users are
19 trying to talk at the same time.

20 MR. SIMONCINI: Correct.

21 CHAIR: And throttling is, is that the
22 radio merely being on, or the channel selector
23 being changed, will cause that type of -- but
24 you don't have that type of a thing with Harris
25 --

1 MR. SIMONCINI: Correct.

2 CHAIR: -- but if they were to talk the
3 effect would be a bar to communicating because
4 you would get the queuing.

5 MR. SIMONCINI: Right. So, we do have
6 queuing, which is if we'll have four channels
7 and five people try to talk at the same time we
8 get queued. You basically get a fast busy,
9 with the equivalent to your telephone if you
10 tried to call somebody, but the, the control
11 channel, getting a little technical, is
12 9600bod, which is the speed the control channel
13 works at, and to my understanding that's fast
14 enough to accommodate the number of users we
15 have per site so the, the throttling would not
16 be an issue.

17 CHAIR: To wrap this up with -- you said,
18 and just to lead into the next, you said Walton
19 County, and there are some local agencies --

20 MR. SIMONCINI: Correct. And we can
21 provide that to the board, the list of local
22 agencies.

23 CHAIR: But in the places where there's
24 not, just to lead into this, is, is that in
25 counties, Palm Beach County, Miami-Dade County,

1 Broward County, Orange County, et cetera, is,
2 is that the radio systems are generally county
3 run systems, is that accurate?

4 MR. SIMONCINI: It depends. County runs
5 them. Regional utilities, the power company in
6 Gainesville, for example, runs their system.
7 So, most of the time it's a government,
8 government entity that runs the system, a
9 local.

10 CHAIR: So, there's a control operator of
11 the system at each county.

12 MR. SIMONCINI: Correct.

13 CHAIR: That are not on SLERS.

14 MR. SIMONCINI: Correct.

15 CHAIR: Okay. All right --

16 MR. SCHACHTER: And -- and I'm sorry, the
17 reason this is so important is because Broward
18 County is going to spend another \$50 million on
19 this new radio system which is Motorola.
20 Miami- Dade County has Harris, and to my
21 knowledge they have had mass casualty incidents
22 and they haven't had the problems that we've
23 had on this system, so it's something that we
24 need to consider, and that's why I'm trying to
25 figure out.

1 CHAIR: All right, thank you, Nick. We
2 appreciate you being here. Why don't we do
3 this? It's 3:00 now. We've got two more
4 presentations today, one from Broward County,
5 the other from the Broward County Sheriff's
6 Office. I anticipate that both of those are
7 going to take time, so why don't we take a ten,
8 fifteen-minute break, and then we'll come back,
9 and we'll be able to go continuously through
10 both of those presentations that will take us
11 to the end of the day. So, take about ten,
12 fifteen minutes, and we'll convene about 3:15.

13 (Thereupon, a break was taken off the record and the
14 meeting continued as follows:)

15 CHAIR: Okay, so we're going to hear next
16 from Broward County Government. Again, Ms.
17 Henry, the County Administrator, was going to
18 be with us, but she was unable, so we're going
19 to again hear from Tracy Jackson, and as I
20 mentioned previously he's going to be joined by
21 Daniel Sanchez from Motorola and Jose De Zayas
22 from Broward County. I just want to, just for
23 to make sure we're clear on this, because there
24 was some reference made at the end of the last
25 presentation, is on the statewide law

1 enforcement radio system that is now a Harris
2 product is, is that the statewide board that
3 governs that has made a recommendation that the
4 contract be awarded to Motorola. They're going
5 through a process, but they have recommended
6 that, so that will probably, at least there's a
7 chance, and the controlling entity has
8 recommended that it move to the Motorola
9 system, so it's probably not going to stay on
10 the Harris platform, and the Harris system, so
11 just for clarification purposes.

12 So, Mr. Jackson, welcome back.

13 PRESENTATION: BROWARD COUNTY RADIO SYSTEM

14 MR. JACKSON: Good afternoon, thank you.

15 So, the good news is that you had such
16 brilliant technical people presenting already.
17 We're going to try to stay at a high level,
18 present some bit size pieces of information
19 that hopefully will help you to understand the
20 decisions that you all are making for the rest
21 of us. And we appreciate your service. That
22 said, moving into the afternoon presentation.

23 On the County radio system, it's a
24 regional system. There's several different
25 participants. You have a list there of some of

1 the people who are currently part of the system
2 in addition to law enforcement, fire, and
3 emergency medical services. You'll have it.
4 You're free to look at that at your leisure.
5 In the interest of time we'll step forward.

6 I want to move forward now to a system
7 that was begun, the work begun on that in 2015,
8 and we're going to talk for a few minutes about
9 how that's going to look and how it's going to
10 work. So, the proposed new public-safety radio
11 system exclusive to public-safety users,
12 operational fourth quarter 2019. We're working
13 diligently with many teams, and many partners,
14 on achieving that time frame.

15 There's also a new local government radio
16 system, which for those of you who may not know
17 would be all the people who are not directly
18 related to public-safety. It would differ with
19 the different municipalities, but as a ballpark
20 you could say that direct public-safety tend to
21 be fire, police, corrections, that type of
22 thing, law enforcement and fire. Indirect, or
23 non- public-safety might be public works,
24 parks, that type of thing, the airport, so
25 forth and so on.

1 So, here in Broward County that system is
2 going to become operational the first quarter
3 2019 for the county agencies. And it's
4 scalable, it will be able to adopt and accept
5 other people who want to come onto the system.
6 The last bullets list a few people who have
7 expressed an interest in participating in that
8 program.

9 The design process, excuse me, the County
10 hired mission critical partners to engineer the
11 new system after consultation with police,
12 fire, and all the communications disciplines,
13 user interviews, focus groups, online user
14 surveys. The design process included the user
15 community every step of the way.
16 Specifications were developed based on input,
17 based on user communities, and a recommendation
18 was made after needs assessment in September.
19 The recommendation was to go with a trunked
20 system.

21 System size considerations, again you've
22 had all this information from the other
23 presenters, but these are several of the
24 factors that went into the selection. Based
25 again on input from the end users, designing a

1 system that would work for them, and well into
2 the foreseeable future, these were deemed to be
3 very important pieces of that puzzle.

4 Now Slide 6. The next slide, system right
5 size. No system has unlimited capacity.
6 Again, you have some brilliant technical
7 people, I'm sure if you asked them this
8 question they would answer you no system has
9 unlimited capacity. It's important to note
10 that as we are going forward and making
11 decisions. Every system has trade offs. Some
12 of the advantages of trunked systems were
13 already iterated. I do want to highlight that
14 the FCC requires trunking if you're going to
15 use more than five frequencies overall in your
16 system. And Jose when he comes up here will be
17 able to speak a little more to that.

18 At this moment, I'll call for Daniel, who
19 is our representative from Motorola Florida
20 Government and Public Safety from Motorola
21 Solutions to help us out.

22 MR. SANCHEZ: Good afternoon, Commission.
23 I'm Daniel Sanchez. I'm the State and Local
24 Government Sales Vice President and Director
25 for Florida at Motorola Solutions. Thank you.

1 I have a background in -- I have a master's in
2 Computer Engineering out of Florida
3 International University. I'm a Broward
4 resident, and I've been at Motorola for
5 fourteen years, mainly serving the land mobile
6 radio public-safety market in different
7 functions, as a product manager, engineer, and
8 most recently I'm the sales vice president here
9 in the great state of Florida.

10 This afternoon I want to share and
11 overview of both the new P25 radio system that
12 Broward County procured as of May 2017, and
13 also a little bit of the, again going over the
14 current radio system and how it operated on the
15 day of the massacre. So, the new P25 radio
16 system that Broward County purchased from
17 Motorola Solutions is what we call the Astro
18 25M3 trunked core. So, I'm going to explain a
19 little bit about what that means so everybody
20 understands what Broward County is moving to,
21 moving towards from that P25 radio system
22 functionality perspective.

23 First of all, this is the highest tier in
24 Motorola's radio system portfolio today. It
25 offers the latest and greatest in terms of

1 software functionality, interoperability,
2 redundancy, security, capacity, coverage, and
3 all of the capabilities that public-safety has
4 asked for over the many years that P25 has now
5 been available.

6 In addition to buying the system itself
7 Broward County also procured an option that
8 over the ten years of the contract it is going
9 to receive a refresher, an upgrade every two
10 years to its hardware and software to make sure
11 that the system becomes an evergreen platform,
12 and it never becomes obsolete. And that's
13 obviously a contract that can be extended into
14 future years beyond the initial ten years.

15 And I also wanted to kind of give you for
16 comparison's sake at a high level what the new
17 system brings to the table, right, and Cindy
18 did a great job explaining some of those key
19 factors, so I'll allude to those. From a
20 coverage perspective the new system is going to
21 effectively provide almost a fifty to sixty
22 percent increase in coverage, since the current
23 system is about ten sites in coverage, ten
24 tower sites, ten radio tower sites, and the new
25 system will be fifteen simulcast sites, in

1 addition to one of those stand-alone sites.

2 So, sixteen versus ten today.

3 From a capacity perspective, this is the
4 number of simultaneous conversations that the
5 different radio groups, the talk groups can
6 have at the same time. The current system
7 offers twenty-nine talk paths, the new system
8 offers thirty-six talk paths, so Broward County
9 is increasing their capacity by approximately
10 thirty percent from a simultaneous
11 conversations perspective.

12 And then the third very important
13 component is this thirty-year-old system that
14 is in place today, the legacy system from,
15 technology from the early '90's, like Cindy
16 said when trunking first came about, it has a
17 control channel processing power of about
18 thirty-six hundred bits per second. The new
19 system has processing power of ninety-six
20 hundred bits per second. With that greater
21 bandwidth in the control channel, and the
22 processing power of the modern state of the art
23 servers, computers that that's going to be
24 housed in, the new system is going to have
25 approximately three hundred percent increase in

1 bandwidth, accepting three hundred percent more
2 inbound requests simultaneously. And that
3 speak to what, what Cindy mentioned, as far as
4 the turning the radio on, changing talk groups,
5 or even pushing to talk, any one of those
6 activities that would send a signal up to the
7 controller. The bandwidth to handle that is
8 now going to be three hundred percent bigger.

9 So, from the actual solution that Broward
10 County is purchasing from Motorola, again you
11 can see it in the diagram, these are the six,
12 the six columns represent the six tiers of
13 Motorola solution systems available for
14 public-safety radio systems today. Broward
15 County is buying the most sophisticated one,
16 which is in the far right, which is the M3
17 Core, which supports up to a hundred fifty
18 sites per zone. It supports up to two hundred
19 fifty thousand users. This is the same
20 architecture that the State of Florida
21 Department of Management Services has made an
22 intent to award Motorola for for the next
23 twenty- five-year contract timeframe, as, as
24 you just mentioned, Sheriff.

25 And then just by example this is the same

1 system in place in some of the largest counties
2 throughout the state. There's over thirty
3 systems in the state of Florida that Motorola
4 serves, including Pinellas County, Orange
5 County where we have Orlando, Jacksonville,
6 consolidated government with Duval County, and
7 many several others.

8 This next slide is really just to
9 reiterate the option that the County procured,
10 which is something very important, not to be
11 understated, to make sure that the new system
12 stays evergreen, refreshed, up to date with the
13 latest and greatest technology. Broward County
14 purchased an option to make sure that every two
15 years they upgrade the system to the latest and
16 greatest hardware and software, providing new
17 security patches from a software perspective,
18 new capabilities that the P25 standards body
19 might publish, new capabilities that we might
20 publish above and beyond the standard, et
21 cetera.

22 Okay, so now I'm going to shift gears a
23 little bit and address the topic of the control
24 channel saturation, or the queuing of
25 activities going into the control channel or

1 throttling. Whatever you call it what we're
2 talking about is a situation where an unusually
3 large number of activities or requests go into
4 the system at the same time. I think someone
5 else said it just a few minutes ago, Tracy, Mr.
6 Jackson, no matter what technology you're
7 talking about every technology does have an
8 upper limit, every technology is a finite
9 resource.

10 But what we're talking about here in
11 particular from a Motorola perspective, this
12 throttling, or control channel saturation, is
13 actually a protective mechanism designed into
14 the system so that it does not crash when it is
15 overwhelmed by an unusually large number of
16 activities. So, the example could be, we
17 talked earlier in the morning about the 911
18 system effectively shutting down for an hour,
19 and that was very unfortunate.

20 By the way, Sheriff, you also pointed out
21 there's three buckets, 911 phone system,
22 dispatch, computer aided dispatch, radio
23 system. Motorola is the vendor for the CAD
24 system and for the radio system. When the
25 phone system crashed, and it was down for an

1 hour no calls could be made, no calls could be
2 handled. In the throttling scenario that's not
3 the case. Throttling kicks in so that the
4 system does not shut down. The calls that were
5 active remained active on the radio system.
6 Calls could still take place, they just might
7 have been a little bit slower to get in than
8 usual.

9 And Cindy I think mentioned it could be
10 two seconds, it could be two minutes, it varies
11 by the number of inbound activities happening,
12 and the queue, as the gentlemen from the State
13 from the SLERS Department mentioned the queue
14 that starts to build up of those inbound
15 activities. So, that control channel that
16 today is about three thousand six hundred bits
17 per second processes what it can, continues to
18 work. There's a line, there's a line of
19 radios, or radio users in line waiting to be
20 served by the system. The system keeps
21 processing them until it can deal with the
22 entire line, or the queue of radio users
23 wanting to talk, wanting to communicate on the
24 system.

25 The system itself is also designed so that

1 it can handle peaks of these kind of unusually
2 large number of requests within a few seconds
3 and not go into throttling, but when that
4 condition expands over many, many minutes, and
5 in this case it lasted for a couple of hours,
6 then that's when the throttling condition, or
7 the queuing condition, or the control channel
8 saturation condition does happen, keeping the
9 system running, not letting the system shut
10 down to the point that nobody can talk and
11 calls are dropped.

12 This next slide is really, we talked about
13 what it is, why it happens. This slide speaks
14 to where it happens in the context of the
15 system architecture. So, the throttling, the
16 control channel saturation itself happens in
17 the box towards the lower left called prime
18 site controller. This is the controller that
19 manages the radio traffic, or the voice traffic
20 from the radio users at the different tower
21 sites. There can be multiple of those prime
22 site controllers, one for each of the systems
23 that is managed by that superior zone
24 controller which is the master site. We've
25 also referred to it today as the hosted master

1 site.

2 In the case of Broward County Motorola
3 built a master site that we are hosting, and
4 Broward ORCAT radio system is on that.
5 Plantation, Coral Springs, and Fort Lauderdale
6 are all different prime site controllers that
7 are hanging off, connected into, and managed by
8 that zone controller master site. So, the
9 Broward radio system prime site controller was
10 the one that experienced the throttling, that's
11 where the throttling happens, in those lower
12 left boxes where the radio sites are being
13 managed by the prime site controller.

14 As you see on the far right the red box is
15 the consoles, which Cindy mentioned was that
16 fourth type of radio that's on the system,
17 which live at the dispatch center, and operated
18 by the dispatchers, those are the radio
19 consoles that they speak to the officers down
20 in the street. The consoles are interconnected
21 to the prime site controller via networking
22 that is managed at the zone controller level.
23 And the reason I expand on this is because
24 while the prime site controller experiences the
25 control channel saturation condition it does

1 not impact the zone controller operation at
2 all, therefore it does not impact negatively
3 any of the patches that may have been in place
4 by the dispatchers at the console.

5 Again, the conversations are going to be
6 slower than usual, so there could be a
7 noticeable time delay between when people talk
8 and when they get a response, but the actual
9 interconnections will not be dissolved, will
10 not be dropped, will not be broken because they
11 are managed by the zone controller at the top
12 level, and that controller does not get
13 impacted in the throttling condition.

14 In closing -- in closing I'll just say
15 that the, you know, as Motorola, representing
16 Motorola, we're very, very confident that the
17 new P25 radio system that Broward County has
18 procured is going to be a lot better than
19 what's there today. It's modern. It's new.
20 Very unfortunate, but short, you know, in a few
21 months ago we had another unfortunate incident
22 in Santa Fe, in Texas, and the system that was
23 being operated there during that shooting was a
24 Motorola P26 trunked system like the one that
25 Broward County has procured here, and that

1 system did not experience any throttling, and
2 that system had over twenty-one different state
3 and local agencies converge on the scene within
4 minutes after that unfortunate event started to
5 unfold.

6 So, again, every system is a limited
7 resource, every system is a finite resource,
8 but the P25 capability, the control channel
9 superiority, the higher bandwidth, the three
10 hundred percent improvement, all of that is
11 what helps us be a lot more confident that this
12 can never, that this should never happen again.
13 Thank you.

14 CHAIR: Okay, so why don't we do this.
15 Since this throttling issue and capacity issue
16 is such an important topic for everybody, and
17 while it's fresh just after this presentation,
18 before we go on to the next speaker why don't
19 we ask Mr. Sanchez the questions that
20 everybody wants to ask him on the throttling
21 issue while he's here.

22 So, just to make sure that I get this, and
23 then we'll go on is, is that every system has
24 capacity. There is no system that is limitless
25 with capacity. The way to minimize -- because

1 throttling occurs when there is capacity
2 reached; is that a correct statement?

3 MR. SANCHEZ: And that's inbound requests
4 into the controller.

5 CHAIR: Right. Right.

6 MR. SANCHEZ: Not simultaneous
7 conversations.

8 CHAIR: Right. Right. No, I get it,
9 right. But it -- the concept of throttling
10 occurs because there's a capacity that's
11 reached, is that right? Is that accurate?

12 MR. SANCHEZ: Right. Yes. Yes.

13 CHAIR: So, the way to minimize throttling
14 is with higher capacity?

15 MR. SANCHEZ: Yes.

16 CHAIR: And so, the new system that is
17 going to be in place now is going to have
18 higher capacity than the current system.

19 MR. SANCHEZ: Three hundred percent more,
20 yes.

21 CHAIR: Right. So, if the new system was
22 in place, either at the airport or at Stoneman
23 Douglas on the 14th, you can't say that there
24 wouldn't have been throttling, but it wouldn't
25 occur, it would not have occurred as fast; is

1 that correct?

2 MR. SANCHEZ: Based on the preliminary
3 data that I have seen by, by collaborating with
4 the County, it probably would not have happened
5 because the threshold for throttling would have
6 been so much higher. Based on the activity
7 that we did see happen, based on the number of
8 users that were -- so -- so to answer your
9 question the answer is yes, it probably would
10 not have happened with the new system. But
11 again, there's other factors besides the better
12 technology that also can be looked at to impact
13 the system so that throttling doesn't happen.

14 CHAIR: So, based on the data you've seen,
15 and knowing what the new system's capacity is,
16 you don't believe that the new system's
17 capacity would have been hit by the number of
18 users that were at Parkland.

19 MR. SANCHEZ: Correct.

20 CHAIR: Okay. All right, who else has
21 questions? Senator Book.

22 SEN. BOOK: Thank you, Mr. Chair. And
23 thank you, Mr. Sanchez. A quick question to
24 talk through the trunking control computer that
25 routes all of the situations. It's not just

1 that you push that and then you talk, it's also
2 people who are maybe listening, right, because
3 when it, that, that takes up a space I guess.

4 MR. SANCHEZ: Yes.

5 SEN. BOOK: For my layman's radio, a
6 trunk. It's my understanding that there were a
7 lot of folks who just were on the channels.
8 What can be done before we move to the new
9 system to alleviate some of that, if God forbid
10 something were to happen between now and that
11 time? And maybe that's not -- I see that --
12 there's a phone a friend.

13 MR. SANCHEZ: Yeah, I think --

14 MR. JACKSON: We're actually going to get
15 into stopgap measures, and what to do going
16 forward until we get the new system online.
17 That's actually going to be coming up.

18 MR. SANCHEZ: Yeah, I mean I think you hit
19 on a great point, Ms. Book, which is about
20 standard operating procedures and, and how you
21 use the system. And I think ORCAT has that
22 very well documented in their, in their
23 presentation, with different recommendations
24 that have already been presented May 23rd, and
25 even prior to that. And now there's training

1 and documentation that that's been being
2 published and all that, so I'll let them speak
3 to it.

4 CHAIR: Anybody else? Go ahead, Chief.

5 CHIEF NELSON: Thank you, Mr. Chair. How
6 old is the current system that's in place right
7 now?

8 MR. SANCHEZ: I think it's -- it's nearly
9 thirty years old. It's in the high twenties
10 for sure.

11 CHIEF NELSON: And when was the new system
12 purchased?

13 MR. SANCHEZ: May 2017.

14 CHIEF NELSON: So, shortly after the Fort
15 Lauderdale Airport shooting, which was in
16 January of '17. What does it take to achieve
17 this control channel saturation, is there a
18 magic number of requests, or how does that
19 work?

20 MR. SANCHEZ: Yeah, there is a -- there's
21 a -- there's a sort of a magic number. In
22 today's system it's about two hundred and fifty
23 inbound requests per minute. In the new system
24 it will be about seven hundred and fifty
25 inbound requests per minute.

1 CHIEF NELSON: And from on the February
2 14th, is there any way to tell how many
3 requests the system received during the time
4 that it went into this, this mode?

5 MR. SANCHEZ: Yeah, I think the -- I'll
6 let ORCAT speak to that, but I think the
7 average was about seven hundred per minute.
8 And they can correct me if I'm wrong, but
9 that's kind of the high-level data that I think
10 is going to be shown here today also in a few,
11 in a few slides.

12 CHAIR: Mr. Schachter, did you have a
13 question about throttling for Motorola?

14 MS. SCHACHTER: Only about throttling?

15 CHAIR: No, anything he talked about.

16 MR. SCHACHTER: Okay. Has there been an
17 analysis of the system, and modeling to show if
18 we would take off the buses off of the radio
19 system to see if it would have throttled?

20 MR. SANCHEZ: I believe the answer is yes.
21 ORCAT has been looking at that data very, very
22 closely with the tools that they have, so I'll
23 let them speak to the answer to that. But the
24 high-level answer, Mr. Schachter, would be that
25 for every large body of users that you remove

1 from the system the chances of experiencing
2 throttling go down. Because nobody is saying
3 that bus drivers inadvertently, you know, they
4 may not have impacted the system at all, we're
5 just saying probability's sake if you have two
6 thousand radios in buses, if you have three
7 thousand radios in the hands of public works,
8 if you have five thousand more in the hands of
9 public-safety, each one of those bodies adds to
10 the total, so the probabilities that you're
11 impacting, that you're getting closer to that
12 magic number is there the more of those users
13 you have.

14 So, the less of those users you have, the
15 more of those groups you can remove and
16 segment, compartmentalize, the lower your
17 chances of reaching throttling. So, I'll let
18 them speak to the detailed model, or analysis,
19 but that's kind of the high-level response I
20 would provide to that. Does that make sense?

21 MR. SCHACHTER: Yeah. So, unfortunately
22 both of the last two mass casualty incidents
23 have been around the times that schools have
24 been let out, and so that's, that's something
25 that needs to be investigated, and, you know,

1 has not been fixed. I would like to ask the
2 County what they did after the airport knowing
3 that we had problems with the system to see
4 what they did as a temporary fix. They knew
5 that the system had problems, or, you know, if
6 Motorola was involved in those decisions, in
7 case we had the same thing, another mass
8 casualty incident, was there anything done.

9 CHAIR: That's coming next, right, Mr. De
10 Zayas?

11 MR. SCHACTHER: He's coming next, okay.

12 CHAIR: Is going to -- is going to address
13 that, so if you can try to keep it to what
14 Motorola knows for right now if you can.

15 MR. SCHACTHER: Okay. How long have you
16 been working on acquiring the land from -- I
17 guess that you're not involved in that, that
18 would be the County, but I want to find out
19 the, the holdup of the new system. And let's
20 see here. Okay, let's just -- okay, I think
21 I'm good.

22 CHAIR: Okay, does anybody -- yes,
23 Commissioner Petty, go ahead.

24 MR. PETTY: Thank you, Mr. Chair.
25 Question about the new capacity, particularly

1 of the signaling channel. So -- and when I'm
2 not acting as a commissioner I work in the
3 telecommunications industry, so it seems every
4 time we add capacity to a system people find
5 new ways, new and interesting ways to use that
6 extra capacity, so I guess my question is from
7 a system design perspective, understanding that
8 we now have three hundred percent more capacity
9 are there new and interesting way that people
10 are going to find to use that that is going to
11 create a limit that maybe we don't see today,
12 that won't give us the full seven hundred
13 fifty? Are we going -- are you going to add a
14 new feature to the system, as an example, that
15 might prevent us from reaching that, that new
16 magic number as, as you --

17 MR. SANCHEZ: Not to my knowledge. There
18 are no new capabilities that are going to
19 inhibit our ability to use that maximum
20 bandwidth that we know have. In the -- in the
21 years that I've been in this industry we've not
22 experienced this happening on any Motorola P25
23 system, okay? And -- and what I wanted to add,
24 and the ORCAT can expand on this, is Broward
25 County also as an option purchased a new system

1 protection mechanism, an additional one from a
2 security perspective which will allow the
3 system to authenticate radio by radio to a
4 degree that will keep out rogue, or, you know,
5 people that are not supposed to have access to
6 the system. It will keep them out so that they
7 don't eat up our, our precious bandwidth of the
8 new system. So, there's a new authentication
9 security measure in the new system that didn't
10 exist, you know, twenty-five, thirty years ago,
11 that will make sure the system is only used by
12 those public- safety first-responders that need
13 to use it.

14 MR. PETTY: Okay, that begs the question
15 who else might be using it? Is this the bus
16 driver example, or who else might be accessing
17 it that's not authorized?

18 MR. SANCHEZ: Evildoers. I mean people
19 today --

20 MR. PETTY: Okay. Denial of -- denial of
21 service.

22 MR. SANCHEZ: -- you have, you have bad
23 people that take radios, and they want to, you
24 know, gang, and gang related activities,
25 they'll take radios and try to get on a system

1 and do stuff to it. That will occupy space --
2 yeah.

3 MR. PETTY: Okay. I'm going to put you on
4 the spot a little bit, and I apologize for
5 doing this in advance, but are there any other
6 -- from a system capacity or system design
7 perspective are there any other things that we
8 should have considered in the, in the
9 acquisition of the P25 System from Motorola
10 that would enhance its capacity, it's
11 robustness, it's resiliency, just go down the
12 list of things we might want to have in an
13 incident like this, is there anything else from
14 that perspective that, that Motorola would
15 recommend that perhaps we didn't take advantage
16 of?

17 MR. SANCHEZ: No. No, the answer is no.
18 There's three reasons why I know that this is
19 the right design, and the right product, and
20 the right solution for the County. Number one
21 starts with ORCAT. Their expertise,
22 experience, the professionalism of their team
23 having worked through the current system for so
24 many years led them to a great research, right,
25 effort, and a great set of requirements that

1 they held ourselves and all the other vendors
2 that bid, like some of the other ones that were
3 mentioned earlier, and so ORCAT did their
4 homework on putting out requirements that were
5 very, very stringent on what they expected out
6 of a new system.

7 Number two, Mission Critical Partners, the
8 consultant that Broward County hired, has a
9 national purview, a global purview, and lots
10 and lots of experience with recommending the
11 right approach, the right requirements, the
12 right design, holding the vendors accountable
13 to what is being offered based on the
14 technology that's available at a given point in
15 time.

16 And number three, it's us, Motorola
17 Solutions. Our intimate knowledge of Broward
18 County, the way its operated for the last few
19 decades, and how its grown, and the fact that
20 we have our system in over thirty, our solution
21 in over thirty systems throughout the state,
22 and hundreds of systems throughout the country
23 in statewide scenarios, in large regional
24 scenarios. So, those three things together
25 help me be very confident in answering your

1 question as a resounding no. There is nothing
2 in addition to my knowledge that could have
3 been purchased in addition or differently than
4 what was purchased for the current solution to
5 make it the best possible system for the
6 County.

7 MR. PETTY: Okay, thank you.

8 CHAIR: Chief Lystad.

9 CHIEF LYSTAD: Thank you, Mr. Chair.
10 Something you said spurred me to ask you a
11 question. In particular you said that you'd
12 not seen the throttling effect with the P25,
13 what you're developing now, which begs me to
14 ask the question have you seen this throttling
15 effect before across the country? Has Motorola
16 seen this occur in other communities?

17 MR. SANCHEZ: No.

18 CHIEF LYSTAD: You've never seen
19 throttling before, Broward County is the first
20 one to experience throttling?

21 MR. SANCHEZ: Correct.

22 CHIEF LYSTAD: Okay.

23 CHAIR: Go ahead, Mr. Schachter.

24 MR. SCHACHTER: Chairman, I've been
25 working on this for a little while, and I've

1 been having difficulty getting these answers.
2 Is there any way that we can subpoena the
3 number of users that are on the system,
4 including how many buses were on the system at
5 the time, because up to this point we've not
6 seen any analysis of the impact of the other
7 non, non public-safety users on the system.
8 Every time you even turn on a bus it keys up
9 the system, so I think that's something that
10 needs to be analyzed, and I'm not having
11 success dealing with the County, so is there
12 any way that we can get that information?

13 MR. SANCHEZ: If I could interrupt.

14 CHAIR: Go ahead.

15 MR. SANCHEZ: To go back to your question
16 -- I might have answered -- so I'm the Florida
17 Sales Vice President and Director, okay, and
18 I've been in Motorola for fourteen years, so
19 I'm just thinking in the back of my mind if
20 there is something out there throughout the
21 country that is outside of my purview I don't
22 know about it, so I think that's a better way
23 to answer your question. We can ask Mission
24 Critical Partners, one of their representatives
25 is in the room, or we can, you know, I can go

1 back and ask my peers. But to my knowledge,
2 just to go back to your question, to my
3 knowledge in my years of experience working
4 here closely with the Florida community I've
5 never seen throttling happen, okay? And I'm
6 not sure if there's any others outside in the
7 rest of the country, there may not be, but I'm
8 not, I'm not aware of any.

9 MR. PETTY: Okay, I asked the question so
10 that if throttling was, if Motorola was aware
11 that throttling could occur did they take any
12 steps to notify their customers that throttling
13 could occur so that agencies would have that
14 understanding going into it, they could
15 properly assess their systems. And your
16 testimony so far has been that you're not aware
17 of any, but --

18 MR. SANCHEZ: Right.

19 MR. PETTY: Which makes me curious as to
20 why Broward would be the only user, with the
21 exception to the fact the system is thirty
22 years old, and I recognize it's thirty years
23 old, it's past its life expectancy, but the
24 question is begging that if throttling does
25 occur, it's never occurred anywhere else, how

1 did it affect only Broward County.

2 MR. SANCHEZ: Yeah, not to my knowledge.

3 CHAIR: But if -- but if the system is
4 thirty years old doesn't that tell us that the
5 capacity of the system was designed thirty
6 years ago when there were many fewer users on
7 the system thirty years ago, correct?

8 MR. SANCHEZ: Yeah, but again like Cindy
9 talked about you have capacity of the number of
10 simultaneous conversations, and then you have
11 the control channel bandwidth. The queuing, the
12 control channel saturation strictly adheres to
13 the control channel bandwidth. To my knowledge
14 the Broward County system doesn't really
15 experience the former, which is capacity issues
16 from simultaneous conversations. So, there's
17 plenty of channels there for conversations to
18 happen, it's really that control channel
19 bandwidth as the limiting factor.

20 CHAIR: Because you got a whole bunch more
21 people today that simply just have their radio
22 on. That alone -- it's not a talk issue, it's
23 a matter of just the radio is on, and you got
24 people moving the channel selector around. So,
25 that's my question, is you have a lot more

1 people today that are issued radios that have
2 the radios on, that are changing channels today
3 than you did thirty years ago, right?

4 MR. SANCHEZ: Perhaps, yeah, I mean --

5 CHAIR: Well, it makes sense, right?

6 MR. SANCHEZ: Yeah. Yeah.

7 CHAIR: As you got growth. So, the
8 question with that is, is that Broward County's
9 system arguably hasn't kept pace with the
10 number of people that are issued radios, and
11 which drives this capacity issue. In other
12 words, it hasn't expanded in, it hasn't been,
13 the design, the capacity hasn't changed in
14 thirty years.

15 MR. SANCHEZ: That's accurate, yeah.

16 CHAIR: Okay, what -- based on your
17 experience, from what you know, and what your
18 company knows, and you know as a, you know,
19 professional expert in the, in the field, what,
20 what is, how does thirty years before you
21 update your system, and change capacity of the
22 system, how does that rate to the average if
23 you will, or what others have done? In other
24 words, is thirty years normal, is it way long,
25 did most --

1 MR. SANCHEZ: It's very common.

2 CHAIR: Thirty years is common.

3 MR. SANCHEZ: Anywhere in the mid-twenties
4 to --

5 CHAIR: Really? Okay. Okay.

6 MR. SANCHEZ: Yeah, we see -- we see that
7 a lot.

8 CHAIR: So, getting back to your question
9 is, is that we're looking at a lot of data now,
10 as I've said many times, and our investigators
11 are going through everything. And just because
12 you don't, don't have it, doesn't mean that we
13 don't it, or we're not getting it. So, we will
14 look at all of that. We know that there were a
15 lot of, and it says right here in the
16 presentation, we know that there were a lot of
17 non-public-safety entities that were using this
18 system on February 14th and before, and that
19 the new system it going to be dedicated for
20 public- safety, so they're in the process of
21 transitioning that.

22 So, they've said that there are non-law
23 enforcement, non public-safety users that were
24 on that system on that day, and your question
25 is, is there a way to determine exactly how

1 many, how many radios were on?

2 MR. SCHACTHER: Well, because I haven't
3 been able to get a straight answer to tell me
4 that the new \$50 million system, it's not going
5 to happen again. There's been no modeling up
6 this point to show us the cause of this, of why
7 it happened in the first place, you know. I
8 think there needs to be analysis to get to the
9 bottom of why it happened so that we can make
10 sure it doesn't happen again. If it's -- if
11 it's as easy as taking the non-essentials off
12 the system that's what should be done yesterday
13 in case there's another mass casualty incident
14 tomorrow.

15 CHAIR: Okay.

16 MR. SANCHEZ: I think the next
17 presentation is going to show modeling, it's
18 going to show data, it's going to show a path
19 moving forward with a comprehensive approach of
20 about four or five things that can be done in
21 parallel.

22 CHAIR: So, why don't we let Mr. De Zayas
23 come on up and give us his presentation, and
24 hopefully it will answer some of those
25 questions.

1 MR. SANCHEZ: Thank you, Mr. Sanchez.

2 SHER. ASHLEY: Chair, can I ask him one
3 question?

4 CHAIR: Mr. Sanchez, hold on one second.
5 Sheriff Ashley, go ahead.

6 SHER. ASHLEY: And only because the Chief
7 brought this up. You say throttling has never
8 happened, or you've never seen throttling
9 happen before, is that, is that correct?

10 MR. SANCHEZ: Yeah, in my fourteen years
11 in Motorola here with a Florida purview it's
12 not come to my attention.

13 SHER. AHSLEY: In the radio communications
14 presentation on, I don't know, Page 8, it says
15 the system may go into throttling mode, which
16 is a safety mechanism used by some
17 manufacturers that prevents the systems from
18 shutting down. Is that something that you're
19 aware of?

20 MR. SANCHEZ: Yes.

21 SHER. ASHLEY: It's a safety system?

22 MR. SANCHEZ: That was in my slide, yes.

23 SHER. ASHLEY: But you've never seen that
24 safety system used before, or it never occurred
25 before.

1 MR. SANCHEZ: So, let me say -- let me --
2 let me add this. And I think Jose is going to
3 expand on this also. The throttling can happen
4 on any given day for a few seconds and nobody
5 is going to notice, so you might have a short
6 burst of a few minutes where all of the sudden
7 let's say everybody turns on their radio at the
8 same time, at 8:00 a.m. sharp. But there was
9 no incident happening so nobody really felt an
10 impact in slowed communications, or that queue
11 building up. So, from a, you know, day to day
12 occurrence it can happen, it happens probably
13 in the background, I'm not sure how many times
14 exactly, but when it happens in those small
15 windows of time when there is no existing
16 incident where nobody feels the impact I have
17 no way of knowing about it, it doesn't become a
18 big issue that, that is publicized and
19 documented.

20 When it impacts during an incident like
21 this then obviously that's when we become aware
22 of it.

23 SHER. AHSLEY: I was just surprised that
24 you, that we'd never experienced that before.
25 I mean you were aware of the report that this

1 reportedly occurred in the airport incident
2 and, and now --

3 MR. SANCHEZ: Yeah. Yeah, but I think the
4 question was prior to those, outside of those
5 two big incidents. That's what I meant, that
6 there have been no other big incidents like
7 those two that, where it's been discussed and
8 brought up like this.

9 SHER. ASHLEY: Thank you. Thank you,
10 Sheriff.

11 SEC. CARROLL: Sheriff, can I -- I just
12 want to follow up real quick. You said you
13 knew the magic number that would bring about
14 throttling, it was two hundred fifty inbound
15 requests per minute. I also heard you say that
16 you thought the number of inbound requests
17 around this was seven hundred, so it --

18 MR. SANCHEZ: The day of the incident, I
19 think what Jose is going to show, it became
20 about seven hundred over the course of those
21 two hours.

22 SEC. CARROLL: So, it didn't exceed
23 capacity, it smashed capacity.

24 MR. SANCHEZ: Correct.

25 SEC. CARROLL: It was pretty significant.

1 And I just find it disingenuous when you know
2 what the magic number is for throttling, you
3 have a definition that tells you what
4 throttling is, it's a safety mechanism built
5 into the phone, and, and that you've never
6 experienced it. I -- what -- also in the
7 previous one there was talk when building a
8 radio system you have to do the probability of
9 how many of these requests are you going to get
10 per minute, so has there -- and you wouldn't
11 know this I guess, but when you're selling
12 these things to different organizations you
13 have what happens every day, but in incidents
14 like this, and that took place in the airport,
15 which are becoming more and more common, the
16 number of inbound requests is going to go up
17 exponentially. Is that factored into the pitch
18 that you make to local communities, to tell
19 them that in the event of something
20 catastrophic you're going to hit that ceiling
21 much quicker? Because there's a big difference
22 between two fifty and seven fifty, it's a three
23 hundred percent increase. But even with the
24 three hundred percent increase you are
25 approaching that based on the number you're

1 giving on seven hundred.

2 MR. SANCHEZ: So, a couple of things, I
3 mean with all due respect we're not making a
4 pitch to anybody. This was an RFP process,
5 like most of them are throughout the country
6 that we're responding to. We're evaluated
7 against a series of other vendors, and we're
8 chosen on best value. Number two, the
9 throttling condition happens after a sustained
10 extended period of time of this extra activity,
11 so if it happens over the course of a few
12 seconds or a few minutes nobody notices it, and
13 nobody, the system is designed to absorb that
14 burst where it may go up to seven hundred per
15 minute, and nobody will feel it if it only
16 lasts a few seconds or a few minutes.

17 If it extends itself to many, many
18 minutes, and well into an hour, that's when
19 everybody is going to start to notice that the
20 communications are slowed down. So, I don't
21 think --

22 SEC. CARROLL: But I beg to differ,
23 because from everything I've heard so far, the
24 throttling, at least the throttling that
25 impacted this, was over a course of six

1 minutes, maybe longer, but I'm talking about
2 six minutes in a building. Stretch that out
3 for the, for the original time that folks were
4 called, and the response time. We're not
5 talking hours, we're talking a short period of
6 time, that burst period of time, and there was
7 clearly throttling in the phone, so, so
8 capacity was clearly exceeded. And I guess the
9 question was has this been experienced in other
10 communities, your answer to that is no. And
11 then the question --

12 MR. SANCHEZ: Not, not that duration of
13 time.

14 SEC. CARROLL: -- is did you know, are you
15 aware of any throttling, and your original
16 response was no, and I just find that hard to
17 believe.

18 MR. SANCHEZ: We've seen no other
19 incidents like this where it's, it's been
20 sustained for that long, or it had that kind of
21 an impact. So, that's -- that's still the
22 case. I think the -- we're getting into a lot
23 of questions that --

24 CHAIR: Yeah, let's let -- let's let Mr.
25 De Zayas go ahead, and then you can follow up

1 with any questions after that. So, Mr. De
2 Zayas, go ahead with your presentation.

3 PRESENTATION: BROWARD COUNTY RADIO SYSTEMS
4 ADMINISTRATOR

5 MR. DE ZAYAS: Good afternoon, ladies and
6 gentlemen. I appreciate being here. I guess
7 I'll figure out how to get this a little
8 higher. That's a high as this will go so I'll
9 bend over a little bit.

10 CHAIR: Thank you.

11 MR. DE ZAYAS: You know, we're going to go
12 -- most of the presentation that I have here I
13 think, and the high level, has already been
14 discussed, and I guess the tech guy is going to
15 cue me up in the cue mic. So, before we get
16 started, my name is Jose De Zayas. I've been
17 with the County since 2006 in the capacity of
18 the Radio System Manager, so I've had the
19 luxury of inheriting this system, and have had
20 the pleasure of finding all its little, I don't
21 want to say shortcomings, but I guess as time
22 progressed and the environment has changed, you
23 know, obviously this system wasn't to the
24 capacity for the growth, so, you know, like any
25 other system it gets built and then eventually

1 you start to notice that technology has changed
2 and we need to move forward.

3 So, the reason why we chose a trunked
4 system basically is because it is the most
5 appropriate system for this environment, and
6 that's why we chose a trunk solution for
7 Broward County, as it was a trunk solution
8 beforehand, and this current system has served
9 the County for many years, and very well
10 actually.

11 And to speak about the current system
12 right now, just a briefing, the system isn't,
13 you know, technically kind of like thirty years
14 old, we bought it thirty years ago, and here we
15 are. It's been involving over the course of
16 the last fifteen, actually twenty years. So,
17 you know, it started with a single site, and as
18 the County grew we kept adding more things to
19 the system, you know, more tower sites. So,
20 back in about 2002, which again is before me
21 getting here, the design was increased yet
22 again to include two more tower sites. One was
23 in the Markham Park location, and the other one
24 was in the Miramar location.

25 So, at that point in time, you know, we

1 also increased capacity, you know, and that's
2 physical channel. So, we went from, you know,
3 being, you know, whatever it was when, you
4 know, it first started, but it evolved, you
5 know, between, you know, nineteen channels to
6 twenty-one channels, to ultimately what it's
7 capped out right now, which is twenty-eight
8 channels in the system. So, it was in
9 evolution to reach to the system that we're at.
10 And, you know, with that we also increased the
11 technology, what was available back then. So,
12 we went with trunked, we went with Smart Zone,
13 and like I said I feel like it's served us very
14 well in, in the county.

15 Maybe I kind of like went a little
16 further. So, you know, again, you know, why we
17 chose the trunk system. I think you guys can
18 read through this, and I believe some of my
19 other counterparts have really gone over this
20 very well. You know, the trunked system is a
21 controller based, and, you know, I want to do
22 make a clarification with regards to the
23 differences between control channel capacity
24 and bandwidth versus system capacity.

25 You know, again, the control channel is

1 what really manages the system, and that has a
2 set level of bandwidth. Right now, it's
3 thirty-six hundred baud. The new P25 system is
4 going to be ninety-six hundred baud, and, you
5 know, our current system has twenty-eight
6 channels, which gives us twenty-seven paths of
7 capacity to have twenty-seven simultaneous
8 conversations. The new system is going to
9 increase that, you know, we're going to be
10 doing P25 TDMA, and it gives us an opportunity
11 of up to thirty-six talk paths of capacity, and
12 to be clear, channel capacity.

13 So, this is a small graph just kind of
14 again showing the differences between
15 conventional and trunking. Again, conventional
16 is a one to one type of conversation. I
17 believe Cindy Cast did a great job in
18 explaining the differences between conventional
19 and trunking, but as you can see the more
20 frequencies that we add we can add, you know,
21 talk groups, additional talk groups to be able
22 to meet the user environment's requirements.

23 So, I believe this is my last slide, but,
24 you know, the current system that the County
25 has purchased is the top of the line system

1 that is currently available. We increased
2 from, you know, ten tower sites right now,
3 which eight of them are transmit receives and
4 two are receives only, and we are going to a
5 fifteen tower site system that's going to give
6 us transmit and receive at each one of those
7 locations, with the addition of also an ASR
8 site, or a single site that's going to be
9 interconnected out by Alligator Alley, which is
10 a critical part for us to actually cover as
11 well. So, that's sixteen total sites of
12 transmit/receive.

13 In addition to that the County procured a
14 backup system as part of that, so we will have
15 also a four site seven channel backup system.
16 In addition to that, you know, we also have a
17 mobile communications trailer that we procured
18 that is also going to have flexibility to have
19 channels installed in there, and being able to
20 be mobile, so we can, you know, approach a
21 tactical situation and assist with
22 communications.

23 The new tower, the new system as well is
24 going to have two master sites, geo-diverse
25 master prime sites, so there's a redundancy

1 built in there. There's redundancy built in
2 that we're doing DC power systems with regards
3 to all of our systems instead of AC power
4 systems, with eight hours of battery backup.
5 In addition to that it will be also backed up
6 by a generator with a minimum of three days
7 fuel to be able to support us during any
8 critical events.

9 So, to say that we've done an exhaustive
10 amount of research and design into this new
11 system, and can guarantee you that the county
12 has purchased the best system that's available
13 out there right now, and has expended no number
14 of funds in procuring that system, you know,
15 right now as mentioned, you know, we're going
16 to be in the \$40 plus million, and, you know,
17 at not one point in in time, at least of me
18 being here, and designing, and going through
19 this process, has anybody said that's too much
20 money, you know, I don't think money is a
21 factor in this decide, in the, in the design.

22 So, I did write down some comments that I
23 guess I want to, you know, make clear as well.
24 I know we talk about different systems and
25 different sites, and different locations, and

1 conventional versus trunking, but as previously
2 mentioned, you know, all the systems are
3 generally designed for their specific area, and
4 each area has different utilization, you know,
5 every agency has, and we noticed that in the
6 interop continuum by the DHS, you know, you
7 have governance, you have SOPs, you have
8 training, you have the technology, and you also
9 have the users. All of that play a role in the
10 success of interoperability, and in the
11 performance of any system.

12 So, it's important to know that when we're
13 comparing the systems, you know, we would like
14 to compare apples to apples, and not talk
15 about, you know, a conventional system that is
16 utilized in the state of New York, because they
17 have different SOPs, they have different
18 training, you know, which I'm not aware of,
19 but, you know, I'm sure they're a lot more
20 different than what we have here in Broward
21 County, so it's important for us to at least
22 make that distinction, that when we're looking
23 at radio systems and whatnot they are unique,
24 not only, maybe not so much on the technology
25 side, but they are unique as far as how they're

1 utilized, and we need to draw that distinction.

2 And as previously mentioned, you know,
3 here are some of the sample communities that
4 have, in Florida counties and some other cities
5 that have trunked radio systems. Again, you
6 know, my emphasis here is we chose a trunked
7 radio system because it is the best for this
8 county.

9 And we've kind of already gone over this
10 slide indirectly with the differences between
11 the old and the new system. I've already
12 spoken on that. And that ends my presentation.

13 CHAIR: All right. And you'll be
14 available for questions after Mr. Jackson if
15 anybody has any for you, right, you're going to
16 stick around for a few minutes?

17 MR. DE ZAYAS: Yeah, I'm open for
18 questions right now too.

19 CHAIR: Okay, all right. Okay. Let's let
20 Mr. Jackson, because he's going to talk about
21 the path forward, and then we'll open up to
22 questions for everybody. So, we'll let Mr.
23 Jackson go ahead. Let him go and then you can,
24 let Mr. Jackson go and when we'll then we'll
25 do questions.

1 MR. JACKSON: Thank you, Mr. Chair. So,
2 path forward is comprised of a number of
3 different items, that I want to highlight the
4 first three bullets there, local government
5 radio system, forty-five hundred fewer local
6 government users will be on the system. The
7 system has been purchased. It's being
8 installed. They're going to be moved off to
9 provide some space, some relief.

10 The second thing that I want to point out
11 is something that's called the regional
12 standard fleet map, which Jose will help us
13 explain in a little bit. And the third thing I
14 want to point out there is user training and
15 awareness. There has to be a collaborative
16 effort to maximize the system that we have
17 today, but again all of these things would also
18 impact any other system, every other
19 municipality, up to and including the new
20 system.

21 To improve the system performance, we need
22 a combination of radio best practices, stop gap
23 measures, and user training. It's been
24 announced at other meetings, and to some of our
25 users, that they can make the biggest

1 difference of anything. Right now, there's no
2 technological stop gap measures, so everything
3 involves human activity. For the users, we
4 told them they can make a difference by
5 following standardized set of management system
6 protocols, and if they're on duty and not
7 responding to a major incident to limit their
8 radio traffic, critical radio traffic only.

9 Under best practices, the two things I
10 want to flag on this slide, which is number 25,
11 are actually the bottom three. You see it
12 again, use regional standard fleet map, conduct
13 ongoing training. When the County talks about
14 training to the users it should be noted that
15 we're talking about identifying the major
16 unknown unexpected type event, and training for
17 that. Our public-safety community does a great
18 job at handling their everyday business.
19 They're fantastic at it. They know what to do,
20 they know how to do it, they know how to make
21 everything work to keep us safe.

22 It is those unexpected events, the unknown
23 events, the things that we don't have any
24 framework for. When the County is talking
25 about user training we're talking about

1 training in that regard, for things that
2 haven't happened, black swan events I guess, if
3 you will. So, just to make a distinction
4 there.

5 Ongoing radio maintenance, because if a
6 radio gets a little bit out of tune for
7 whatever reason it's still, as we were talked
8 to by the technical people, it's still making
9 requests of that system, it's still doing its
10 thing, so if the antennae is bad, or it's out
11 of tune, or if there's maintenance type issues,
12 all of those result in the system being loaded.

13 The stop gap measures that were announced
14 by the County and undertaken included a
15 dispatcher talking to the responding units
16 telling them what's going on, putting the
17 verbal information out there so that the
18 awareness level is rising. There's a critical
19 incident going on, you know, mind your radio
20 traffic. Something as simple as that can
21 really help because it's known that too much
22 traffic can cause the system to go into a
23 protective state.

24 Formal communications training starting
25 summer 2018, we have taken, along with the fire

1 and police users, a very ambitious training
2 regimen is being produced with their input, and
3 with a hard work by a third party vendor we
4 brought on board we are working toward
5 producing a training device that can be rolled
6 out digitally with tracking to make sure that
7 the user awareness at the user level is
8 increased, where the municipalities and their
9 public-safety officers will be able to track
10 and know that they've gotten the word out to
11 everybody who touches a radio about how to use
12 it and what they want them to do.

13 Again, stop gap measures cannot be
14 addressed with currently available technology
15 so our best path forward includes giving the
16 users as much information, raising awareness
17 through boards, through this commission, and
18 other people, to be able to bring some light to
19 the subject, into this issue.

20 Routine follow up exercises, again our
21 public-safety people are very good at that,
22 but, you know, these are things that have been
23 put forth, and we want to continue to put them
24 forth in the hopes that as a community we'll
25 begin to respond, not only here in Broward but

1 even in other places, to make sure that we can
2 keep everyone as safe as possible.

3 The new system is expected to be turned
4 on, completely on next year, fourth quarter
5 2019. We are feverishly evaluating,
6 investigating ways that we can expedite that,
7 that we can move that deadline closer to us.

8 I want to draw your attention to a slide
9 that's in there. There was a question asked
10 about the number of inbound requests. It shows
11 here at Slide 30 on the screen. We'll get a
12 technical, maybe Jose, to walk you through it a
13 little bit, but I included it in case we needed
14 to have this part of the conversation. Jose,
15 can you come for a second please?

16 MR. DE ZAYAS: So, there was discussions
17 here as to how many inbound requests can be
18 handled before we go into throttling, and I
19 want to explain a little bit more about
20 throttling. Throttling could, is any request
21 that comes into the system that starts to take
22 over or overwhelm the control channel. Now, I
23 would like to state that I've been here, again,
24 since 2006, and I have seen the throttling
25 condition happen on several occasions. And

1 when I say several, at least a good handful.

2 And every time those are experienced, and
3 those are investigated, the root cause has
4 always been something different. So, for
5 example, the first time I experienced
6 throttling was maybe, you know, five, six years
7 ago, and we went through an extensive process
8 with Motorola to bring in really like the, I
9 want to call it as kind of like sniffer
10 equipment in the IT world, to be able to start
11 to see where these requests were coming in
12 from, and we ended up finding two or three
13 rogue radios that were basically oscillating
14 and creating an enormous amount of requests
15 onto the system, and during some of our peak
16 times we were experiencing throttling, and we
17 couldn't figure out where it was, but
18 eventually after about a couple weeks, you
19 know, we were able to find those two radios,
20 and we were able to shut them off.

21 But again, this isn't just, you know, a
22 situation, I mean it is a protective mechanism,
23 it is there, we are aware of it, and throttling
24 can be experienced due to numerous several
25 issues and not necessarily just one thing. So,

1 it could go from a radio being out of tune, as
2 what we mentioned before. We've seen on our
3 system some of the out of tune radios causing
4 thousands of requests into the system, and
5 unfortunately, you know, those are really
6 laborious ways to be able to get to that
7 information. There isn't anything right now
8 available that is easy to say, oh, let me print
9 a report and, oh, there it is. It is really
10 data minding, and having to parcel out all of
11 this data, and really try to find the culprit,
12 so it's an extensive very laborious process to
13 be able to do that at times.

14 Right here in this particular graph, you
15 know, if I can go back to the graph, is the
16 permanent mobile updates, and what we call an
17 ISW, you know, requests, and it's going from
18 1:00 p.m. on 2/14 to 6:00 p.m. that day. So,
19 you can see it throttling along pretty much
20 there. You see again an increase in requests
21 coming in, and that's roughly around the time
22 of the school coming in through, and the shift
23 changes, and stuff like that, so we see a spike
24 there.

25 But then, you know, at the time of the

1 incident you see it, it just goes a straight
2 line straight up, and not only that you also
3 see the duration. I know there was a mention,
4 I believe Mr. Carroll here, that there was some
5 information out there that it only lasted a few
6 minutes. I'm here to tell you that that lasted
7 hours. Those inbound requests coming in, or
8 whatnot, really pushed us way over the
9 capacity, the channel, control channel capacity
10 to be able to process calls. And again, we
11 need to be clear, when we're in ISW throttling
12 calls are still being made, okay, you know,
13 this isn't a shut down. This isn't -- there's
14 still calls being processed.

15 There's, you know, it's like a valve
16 opening and closing. As the controller starts
17 to catch up the valve opens, more requests come
18 in, and it gets overwhelmed, it closes again.
19 So, I guess that would probably be the best
20 analogy that I can think of at the moment. So,
21 as we can see here, this is a good graph that
22 shows us the duration of the event was hours.

23 I want to go over to the next slide here,
24 and you guys probably may not be able to see
25 it, but if you have it printed there, right

1 here it shows me the mobility between the day
2 before, the day of the event, and the day
3 after, and the blue there represents
4 affiliations, or mobility requests, you know,
5 radios turning on and off, calls being made.
6 As you can see the day before, you know, the
7 affiliation requests are roughly about forty
8 percent of that activity. And again, this is
9 between 1:00 p.m. and 6:00 p.m., it's not on a
10 full day. I was trying to focus on roughly the
11 time of the event.

12 If we see on the following day the
13 affiliations just overtook the number of calls.
14 It was again the reverse. Now seventy percent
15 of the activity throughout that time were
16 affiliation or mobility requests versus thirty
17 percent, roughly about thirty percent of calls
18 being made. So, you know, on that day, on the
19 14th we had roughly about fifty thousand calls
20 being made.

21 And if I can focus your attention on the
22 following day, on the following day we had nine
23 thousand more calls being made, you know,
24 actual calls, and the affiliations again, you
25 know, increased again. And the split is still

1 sixty/forty roughly, sixty percent calls and
2 forty percent affiliations, and, you know, both
3 the day before and the day after we didn't go
4 into throttling, and the day of, clearly, we
5 went into throttling because of that
6 affiliation requests. So, those are the two
7 important factors I just want to point out on
8 this slide. Any questions?

9 MR. JACKSON: Before we get to questions,
10 sorry, I indicated that there was another stop
11 gap measure. I called it a regional fleet map.
12 I'm just going to have Jose explain briefly
13 what that is, and how it helps us to use the
14 system to the best capacity.

15 MR. DE ZAYAS: So, you probably heard
16 Cindy mention fleet mapping before, and again,
17 you know, basically a fleet map is how do we
18 program the radios, what's in what position,
19 what zone, what mode number it is, and so
20 forth. So, when we went into regional dispatch
21 centers, you know, we requested and started,
22 you know, wanting to gather regional fleet
23 mapping. And, you know, that is just to
24 improve the efficiencies throughout all the
25 users.

1 If, you know, certain mutual aid channels
2 are located in the same area of the radio, or
3 in the same position in the radio, that user is
4 going to be able to get to those channels a lot
5 quicker, you know, so regional fleet mapping is
6 critical, again, you know, when we look at the
7 interoperability chart from the DHS you have
8 SOPs, you have governance, you have SOPs again,
9 and training. You know having regional fleet
10 maps and having someone in this environment
11 regionally program their radios, you know, to
12 be alike, you know, you're going to have muscle
13 memory, you're going to have people, you know,
14 remembering, oh, I know where that is. And if
15 we have SOPs that gear them to those mutual aid
16 channels, I'm not saying that they don't exist,
17 but I'm saying if it's consistent throughout
18 all of the agencies, you know, having the
19 efficiencies on the radio, you know, people are
20 going to be able to find what they need a lot
21 quicker, and they're going to know where to go.
22 And that's the importance also of the training
23 aspect of it as well.

24 CHAIR: And I want to make sure everybody
25 is clear about this, but I'm not sure that they

1 are, so is, is that in tying that together, is
2 your point this, that because of this capacity
3 issue and throttling issue it occurs because
4 the radio is turned on, and because people are
5 moving the selector switch and going from
6 channel to channel, correct?

7 MR. DE ZAYAS: Yeah. Yeah --

8 CHAIR: YES?

9 MR. DE ZAYAS: Yes, sir.

10 CHAIR: Okay, so when you don't have
11 training, and you don't have effective fleet
12 maps, and you have people that don't know what
13 channels to go to, and they're sitting there
14 scrambling around because they're going up and
15 down the talk groups, and up and down the
16 various channels is, is that the point you're
17 making is, is that if people know where to go
18 and they only flip it one time you're not going
19 to have the issues that if they're hitting it
20 fifteen times back and forth, is that correct?

21 MR. DE ZAYAS: That's correct.

22 CHAIR: Okay. All right. Anything else
23 before questions? All right, Mr. Schachter, go
24 ahead.

25 MR. SCHACHTER: Chairman, I'm confused

1 because -- it's Jose?

2 MR. DE ZAYAS: Yes.

3 MR. SCHACTHER: He mentioned that in 2005
4 they had throttling, and they found there were
5 certain radios that were the problem. How do
6 you know that that wasn't the issue at the
7 airport and here, number one. And number two,
8 after the airport did you do that same
9 investigation to try to find out what the
10 problem was, and what --

11 MR. DE ZAYAS: Yeah, we did an
12 investigation, and we looked at what was
13 happening. And again, what we determined with
14 the information that we has was, you know, a
15 lot of moving around of radios, people were
16 trying to find where this activity, or event
17 was happening. So, we couldn't find, for
18 example we couldn't find radios with duplicate
19 IDs. We couldn't find radios that were causing
20 high levels of affiliations. And when I say
21 high levels I mean, you know, like in the
22 hundreds. And, you know, we couldn't find any
23 of that, so the root cause became, you know,
24 more of a training, you know, how to get to
25 these resources quicker.

1 MR. SCHACHTER: In your opinion, Jose, do
2 you think that it is, or as a stop gap measure
3 until the new system is put in place it would
4 fix the problem to have those other
5 non-essentials off the system and onto a
6 different system, or something like that, stop
7 gap, in case there's another incident?

8 MR. DE ZAYAS: Well, you know, as was
9 mentioned earlier as well by Motorola
10 obviously, you know, by numbers, if you remove
11 anybody the probabilities of having users on
12 the system, you know, decrease, so obviously,
13 you know, but numbers, yeah, you know, and we
14 are working towards that. And we have been
15 working towards that for a couple years now by
16 implementing a local government radio system
17 and trying to move our local government off of
18 the system. So, that's not something that we
19 haven't worked on, I mean we've been working on
20 that I would say since 2014.

21 MR. SCHACHTER: Since 2014, wow.

22 MR. DE ZAYAS: Yeah. So, and that's in
23 the development, you know, and then we went to
24 RFP, you know, and again that's another history
25 right now, but I'll go through it really quick.

1 Basically, the vendor that was building the
2 system went bankrupt and we had to basically
3 start from scratch again, so that's the delay
4 on that. So, and again, you know, I just gave
5 you three years of history in two seconds.

6 So, you know, again it's important to know
7 that we know that we are doing everything we
8 possibly can. We have seen these issues.
9 We're doing everything we possibly can to
10 expedite these issues, and as a resident of
11 Broward as well, and someone who's been living
12 and breathing this for the last ten years, I
13 take it personal, and I think anybody who's
14 here who knows me professionally would tell you
15 I take it personal. This means a lot to me,
16 and my dedication in making sure that Broward
17 gets the best system possible is on my mind
18 twenty-four/seven and making sure that we get
19 all of these other items, such as the local
20 government radio system up and running as
21 quickly as possible.

22 CHAIR: Okay, so we still have one more
23 presentation to get through today, it's 4:30.
24 It's probably going to take about an hour, so
25 just keep that in mind. I want you to ask all

1 your questions, but just keep that in mind.

2 Secretary Carroll, go ahead.

3 SEC. CARROLL: I just want to say thank
4 you, by the way, because, thank you for bring
5 transparent about the issue of throttling, that
6 you have in fact had issues in the past, as
7 long as six years ago, and you worked with the
8 vendors with that, and I appreciate that. And
9 my point was not about the length of the issue
10 with the throttling, it was that that line went
11 up so quick, and so the initial response by law
12 enforcement when you have that line go up so
13 quick like it does can hinder that response,
14 and so finding ways to make sure that it
15 doesn't go up so quickly, or that you don't hit
16 capacity during that initial response time I
17 think is critical.

18 The fact that you guys have increased
19 capacity by three hundred percent I think is
20 great. You've reduced -- are you going to
21 reduce the number of users by forty-five
22 hundred I think it great. I also think it's --
23 what I like to hear is that you have recognized
24 that training is an issue here too, in that you
25 had folks that were, although not

1 intentionally, it was unintentional, but
2 unintentionally contributing to this issue
3 without even knowing they were contributing to
4 it. I appreciate that.

5 I do appreciate also with the new system,
6 and I understand what it's like to run a system
7 blindly, where you don't have exception
8 reports, and you have to do a lot of the
9 analysis on a manual basis, I appreciate the
10 pain you go through to do that. I am pleased
11 to see that you'll have some type of exception
12 reporting here, because for those radios, or
13 those anomalies that you see it's a lot easier
14 to pick out when you have an ongoing exception
15 report that you can react to quickly.

16 So, I just wanted to thank you for your
17 transparency, I guess, in your presentation. I
18 appreciate it.

19 MR. DE ZAYAS: Thank you, sir.

20 CHAIR: Go ahead.

21 UNDER SHER. HARPING: Mr. De Zayas, you
22 indicated you've been, you've been here for
23 about twelve years, is that correct?

24 MR. DE ZAYAS: Yes.

25 UNDER SHER. HARPRING: And if my

1 recollection serves me correct Mr. Sanchez
2 indicated he'd been involved, and about
3 fourteen years was his frame of reference in
4 Florida. And if I'm incorrect in my
5 recollection please let me know. You've
6 indicated that you have experience, and are
7 aware of multiple throttling issues in the
8 course of your experience in the past twelve
9 years, is that correct?

10 MR. DE ZAYAS: Yes.

11 UNDER SHER. HARPRING: And I'll give Mr.
12 Sanchez an opportunity of course, but my
13 recollection is he's indicated that other than
14 the incident at the Fort Lauderdale Airport and
15 at Marjory Stoneman Douglas he's not aware of
16 any throttling issues. That would appear to be
17 an apparent conflict in the testimony, or in
18 your collective experience, would that be fair
19 to say?

20 MR. DE ZAYAS: Well, I think you need to
21 understand that even though he was with
22 Motorola at a different capacity doing other
23 things, not necessarily on the radio systems,
24 so that's probably a piece of information that
25 was never provided to him, because it has

1 happened in the past, and we've dealt with it
2 in the past, so it's not something that, you
3 know, would be relatively available for him.

4 UNDER SHER. HARPRING: And I'm not trying
5 to impugn him, or his testimony, I just want to
6 clarify that you're indicating that your
7 experience is that there's been multiple
8 instances of throttling at whatever level,
9 substantive, transient, whatever it happened to
10 be, correct?

11 MR. DE ZAYAS: If I understand your
12 question, you know, yes, I was aware that there
13 was throttling before, yeah.

14 UNDER SHER. HARPRING: Okay. Aside from
15 the airport --

16 MR. DE ZAYAS: Aside from the incident in
17 the airport, yeah, correct.

18 CHAIR: Mr. Sanchez, anything you want to
19 add to that?

20 MR. SANCHEZ: Yeah. Like Jose stated I've
21 been at Motorola fourteen years. I started out
22 as a software engineer, then I was in product
23 management, then in business development, then
24 in product marketing, and I've been in this job
25 for a year and a half. I started working with

1 the County here when I was in a business
2 development role in about 2012, and I've done
3 my very, very best to integrate myself, and be
4 as helpful as possible, and serve the community
5 as much as possible in these different roles.

6 And my testimony earlier was specific to
7 what I was aware of. I have no way of keeping
8 track or knowing every time one of these issues
9 has happened except for those that, you know,
10 have either come to me in this role that I'm in
11 over the last twelve or so months, or before
12 that when I haven't been serving in this role
13 either been on the newspaper, or been large
14 enough to where they were really highly
15 documented and talked about. So, Jose's
16 statement is completely accurate.

17 UNDER SHER. HARPRING: And again, I'm not
18 trying to impugn you, your character, or your
19 testimony. I just want to resolve the conflict
20 in the testimony through some clarification.
21 Thank you.

22 CHAIR: All right, Commissioner Petty,
23 you're next.

24 MR. PETTY: I think it might be important
25 to point out too throttling is designed into

1 the system. It's a safety mechanism, so in
2 certain cases throttling is a desirable thing
3 to have happen, it preserves the ability for
4 others to communicate while control messages
5 are being sent back and forth between radios
6 and the system. Is that, that correct?

7 MR. DE ZAYAS: Yes, that's correct.

8 MR. PETTY: Okay. My question is for Mr.
9 Jackson actually. You said something that
10 caught my attention. You called -- you called
11 this a black swan event, and I wanted to make
12 sure I understand what you meant by that,
13 because I want to understand whether or not you
14 believe it's your responsibility to be prepared
15 for these unusual and unlikely events, or if
16 you're dismissing these events like Stoneman
17 Douglas, like the airport shooting, where
18 you're simply not planning for this kind of an
19 event to happen, you're not planning capacity
20 systems, procedures, policies, whatever.

21 So, I want to understand, make sure I
22 understood your use of the term black swan.

23 MR. JACKSON: Thank you, sir. Thank you
24 for asking for the clarification. I live in
25 Broward County. I've had the unfortunate

1 opportunity to not only work in a 911 system as
2 a chief and a firefighter paramedic, but I've
3 also had to use it to call for myself, and for
4 my son. It has always been important to me,
5 both as a person who worked there, and
6 definitely as a citizen of Broward County, that
7 every possible means of preparation, training,
8 expenditure, whatever, be made, and continue to
9 be made to protect the citizens and the
10 visitors of the County. In no way did my
11 comment indicate anything less than a total
12 complete commitment to doing the best, and
13 being the best as a County agency, as an
14 administrative group, and a public-safety user
15 as we possibly can.

16 Instead my comment was meant to direct
17 attention to the fact that in training those
18 events are not the ones that are planned for.
19 The things that we don't expect are the things
20 that tax our plans, and before today, before
21 this year these types of events were not as
22 prevalent as they r. I mean we're entering a
23 time where unfortunately tragedy is around
24 every corner, and we have to be prepared for
25 that. It's very much the opposite of what I

1 apparently communicated to you, is that we
2 cannot stop in the preparation, we cannot think
3 that whatever we do or set in place is going to
4 be sufficient. It can't be. There's going to
5 be things that happen that we can't prepare
6 for, we cannot plan for, and this board, and
7 other boards, we have to adopt the mindset that
8 something is going to happen beyond our ability
9 to see today, and we need to have our minds
10 open, and our eyes open, so that when we're
11 putting plans in place, and we're buying
12 things, that we don't get dependent on
13 technology thinking it's going to solve these
14 things, it's no.

15 The people will solve it, but only if
16 we're looking forward and preparing ourselves
17 for it. So, I hope that's clearer. It's very
18 much the opposite of how I communicated to you,
19 and I'm very sorry, and very thankful that you
20 gave me the chance to qualify that.

21 MR. PETTY: No, I appreciate your answer.
22 And I think, you know, unfortunately maybe
23 these are, these events are the new normal, and
24 we have to be prepared for, and be thinking
25 about our response to these events. Obviously,

1 I hope we'll come up with a set of
2 recommendations to try to prevent these things
3 from happening, but in the unfortunate
4 circumstance that they do we need to know that
5 our government officials are planning for these
6 kinds of events, and are prepared, and are
7 thinking about contingencies should technology
8 fail us, or should capacity of technology fail
9 us, or, you know, should the circumstances not
10 go according to training, or according to our,
11 our best laid plans.

12 We need to have fall back, fall back
13 plans, and other means of addressing these
14 kinds of unfortunate circumstances. We live --
15 I mean we're hearing the thunder out here, we
16 live in a, you know, Hurricane zone, so it's
17 not, you know, there are man-made, obviously,
18 disasters, and there are natural disasters, and
19 I think we have to be ready for both, and
20 those, those can, you know, throw the best laid
21 plans out the window very quickly.

22 MR. JACKSON: They often do, sir. You're
23 a hundred percent right, and we are a thousand
24 percent in agreement with you in the County.

25 MR. PETTY: Thank you.

1 CHAIR: Commissioner Dodd.

2 MR. DODD: I had a question in regards to
3 the throttling event that took place with the
4 radios that the officers were using dealing
5 with a unit to unit, or a car to car, or a
6 direct fashion. I just want to make sure, was
7 that available, or even during throttling does
8 direct communication not work?

9 MR. JACKSON: Yes, so when you mentioned
10 direct I think of conventional, right, I think
11 of a simplex, as Cindy mentioned earlier in a
12 previous slide, simplex, which is one frequency
13 is being used to both transmit and receive, so
14 there are opportunities for that. And again,
15 that flows into the fleet mapping portion of
16 the discussion, is having the regional fleet
17 map. So, with regards to what happened on the
18 14th, you know, we do need to look at those
19 regional fleet maps. As far as I'm aware,
20 okay, there are resources in those radios that
21 can do direct car to car type of, or what we
22 call a direct or simplex type of communication.

23 MR. DODD: So, those were not available at
24 the time on February 14th?

25 MR. DE ZAYAS: Like I mentioned on the

1 14th to my knowledge there is availability of
2 those resources within a radio.

3 CHAIR: Yeah, they're available, but
4 nobody knew how to get to them. I mean that's,
5 that's the bottom line, is, is that the people
6 weren't familiar with the radios enough to be
7 able to get to certain things, and Cindy will
8 talk about this a little bit more tomorrow with
9 the mutual aid channel in a little bit, and
10 we'll have a question about that. Is, is that,
11 and I'll ask her the question, and ask her to
12 explain it is, is because I've had an
13 opportunity to talk to her about this
14 previously, is that with some of the mutual aid
15 channels, there is no throttling issue with
16 some of the mutual aid channels.

17 So, let's let her come back to that
18 tomorrow, but the short version of that, or the
19 bottom line of that is, is that it does appear
20 that there were alternative radio channels
21 available that nobody knew how to get to, and
22 then the, I think Chief Backer will talk about
23 this from Coral Springs from a tactical
24 standpoint, in the middle of an incident like
25 this, and you have a tactical response, when

1 you take this radio out and you have to step
2 through all of the steps, and all of the
3 buttons, there's no way you can sit there and
4 be doing this, this, and this, and moving that
5 all around, and getting there while you're in a
6 tactical response or you're driving.

7 So, there's -- that is -- that is a
8 legitimate issue, about being able to navigate
9 these radios these days when you have, some of
10 them have, some of these radios, I think mine
11 has probably about fifteen different talk
12 groups with probably fifteen channels in each
13 one, and there's no way you're going to
14 navigate through that. So, it's a function of
15 these radios, and if you all feel differently
16 than what I just said --

17 MR. DE ZAYAS: No. And that's the reason
18 why we're trying to come up with a regional
19 fleet map, and have those efficiencies built in
20 with the first three zones. You know,
21 primarily, you know, most of the radios, you
22 know, you can flip a toggle switch and go
23 between zone one, two, and three, which is a
24 lot easier. You know, and again different
25 agencies do it differently, so we're trying to

1 get the best practices that others are using to
2 try to come up with what would work here in
3 Broward.

4 CHAIR: Yeah, on the -- on the Motorola
5 radios you have A, B and C, or 1, 2 and 3.
6 Beyond A, B and C and 1, 2 and 3 --

7 MR. DE ZAYAS: You got to the pull the
8 radio.

9 CHAIR: -- is that you got to go to, you
10 got to pull the radio out, you got to go to the
11 screen, and you actually have to navigate the
12 buttons, and it's not realistic in a tactical,
13 especially in a tactical situation.

14 MR. DE ZAYAS: Yes, especially in --

15 CHAIR: Senator Book.

16 SEN. BOOK: Thank you, Mr. Chair. And I'm
17 wondering if when we look at the timeline that
18 you all are working so hard to create in terms
19 of the, the events on February 14th, can you
20 overlay somehow the graph on 30, because I'm
21 interested to understand from a long-term
22 perspective just the drastic drop of usage,
23 like on the certain times, and then a huge
24 spike. Why -- why what -- I don't know that
25 they can speak to that, but perhaps when we put

1 the timeline together, what happened in that
2 time from, I guess that's, what time is that,
3 like 16, like that 4:00, 4:30 ish, all the way
4 up, then back down very drastically, I'm just
5 wondering where were we in all of this.

6 MR. DE ZAYAS: I can attempt to explain
7 that. And again, you know, when we're looking
8 at the drop there basically what we're looking
9 at is basically quiet, all right, so everybody
10 kind of like stopped, everybody was at where
11 they needed to be at, everybody found what they
12 needed to. Eventually the controller starts to
13 catch up, those requests come down, and then
14 all of the sudden they spiked up again. Well,
15 the spike could have been for many different
16 reasons, you know, they just finished catching
17 the perpetrator and now they're transporting
18 him, and now there's a big hype again on the
19 system, kind of like, okay, where, where are
20 they going, where are they taking him.

21 So, those -- those are some of the actions
22 that you can see there. And again, you know,
23 trying to drill, and again the technology that
24 we're dealing with now is not like today's
25 technology that I can hit two key strokes and

1 print out a report, you know, we have to data
2 mind all of this, and again parse everything
3 out, and then try to align everything, you
4 know, everything has a time stamp, but we'll
5 try to align everything in being able to come
6 up with these charts.

7 CHAIR: And we'll try. And you also had
8 at that point too is that you had a lot of SWAT
9 elements that were responding, and they were
10 clearing the school, and it was called deep
11 clearing the school, and the classrooms, so you
12 had a lot of tactical elements that were even
13 after Cruz was in custody, that we're clearing
14 every single classroom, and deep clearing, and
15 multiple clears in there. So, as you had a lot
16 more personnel responding even after the
17 immediacy of the incident was over and he was
18 gone, and in custody, you still had a lot of
19 activity at the school, which means more
20 people, which means more radios, which means
21 this.

22 All right, so we -- go ahead, one more.
23 One more, and we're going to move on.

24 MR. SCHACHTER: Can I just clarify? I
25 remember there was some numbers thrown around

1 that it was normally two hundred, and then
2 seven hundred is when it throttled. What is
3 the new system? Is there, you said it's thirty
4 percent more --

5 MR. DE ZAYAS: Yeah, I think the number
6 was our current system can handle about, you
7 know, two hundred, you know, inbound requests
8 per minute, and the new system is going to be
9 seven hundred and fifty.

10 MR. SCHACHTER: But in a previous
11 testimony I think Danny said that it throttled
12 at seven hundred last time.

13 CHAIR: When it got to --

14 MR. DE ZAYAS: Yeah, when it got to seven
15 hundred.

16 MR. SCHACHTER: Right.

17 MR. DE ZAYAS: You know, the existing
18 system right now can handle about two hundred
19 or so inbound requests per minute, and what we
20 see here is kind of like roughly it's going
21 right about that, and then all of the sudden it
22 just spiked all the way up, and that's when we,
23 the sustainment, and again it's not a spike,
24 the spike we could handle, you know, and it's
25 usually a couple seconds, three, four, five,

1 six seconds, but when it's sustained for that
2 level of time that's when we start, because
3 again, you know, the controller is trying to
4 catch up, and then it starts to kind of like,
5 okay, this was in here too long, releases it,
6 and again I go back to the valve.

7 MR. SCHACHTER: And so -- and so what are
8 we thinking the new throttling level will be on
9 the new --

10 MR. DE ZAYAS: Anything over seven hundred
11 -- you know, we can process seven hundred and
12 fifty, and again it is allowable for spikes.
13 So, anything sustained at over seven hundred
14 and fifty per minute for --

15 MR. SCHACHTER: Are you saying if we have
16 the same incident with the same number it's
17 going to throttle, basically is that what
18 you're saying?

19 MR. DE ZAYAS: What I'm saying is that we
20 are taking measures already to decrease our
21 users, increase user awareness, increase
22 training, increase or have regional fleet maps,
23 increase user efficiencies, which will, all of
24 those are preventative measures to make sure
25 that we don't get into throttling.

1 CHAIR: All right, gentleman, thank you
2 very much. We appreciate your time. The next
3 presenter is Angela Mize again from Broward
4 County Sheriff's Office. And I appreciate
5 everybody's indulgence on this, a lot of good
6 questions, and the dialogue that needs to be
7 had and we've got a full day tomorrow, so if we
8 don't stay and get through this tonight we're
9 not going to make it through everything
10 tomorrow, so we'll just let Angela go tonight,
11 and hopefully we'll get through this fairly,
12 fairly quickly, so we stay on schedule for
13 tomorrow. Angela, thank you.

14 PRESENTATION: BROWARD COUNTY SHERIFF'S OFFICE CAD
15 AND DISPATCH SYSTEM

16 MS. MIZE: Thank you very much. So, good
17 afternoon. We're going to be going through the
18 dispatch perspective as it pertains to radio
19 usage, so talking about the dispatchers'
20 experiences. We're going to tie in the field
21 unit experiences, the limitations, and the
22 abilities of the system. We're going to talk
23 about the independent radio systems, and how
24 they can come into play. Then we're also going
25 to talk about interoperability, and we're going

1 to talk about disaster contingency planning.

2 So, a lot of the terms that you're going
3 to hear me discuss luckily for me have already
4 been discussed, so they're not going to be too
5 foreign at this point in the game, but I am
6 going to try to break it down to make it very
7 clear, and to maybe give some analogies that
8 make it a little more logical to what you're
9 able to understand on this point.

10 What I want you to focus on as we go
11 through this is the limitations to what the
12 dispatch console, I will refer to as the gold
13 elite, that is what the terminology is for the
14 dispatch console, it's called a gold elite, we
15 utilize the Motorola radio system, against the
16 portable radios. There is vast differences
17 between what we can do from the dispatch
18 perspective to what the field user is capable
19 of doing as well. We also need to focus on
20 interoperability, because that does come into
21 play.

22 Overview, we're going to talk about
23 dispatch work flows, and how CAD would make
24 unit recommendations based upon run cards.
25 We'll talk about the field units and the gold

1 elites, patching and multi selecting, the
2 differences between the two. What the fleet
3 map is, that term has been tossed around
4 multiple times already so I'm going to give you
5 a little image of what the fleet map is and try
6 to put it in a way that may make sense as far
7 as what that means. And then radio resource
8 allocation.

9 Dispatch work flow, very simplistic. A
10 call gets entered by the 911 operator. It goes
11 into the CAD system, which I explained earlier
12 this morning. CAD will zone the call based
13 upon the location of the currents, push it to
14 the correct dispatcher. The dispatcher assigns
15 it.

16 I must take a moment at this time to
17 correct an error that was stated earlier by the
18 Coral Springs presentation. We did have a
19 sidebar with them after the meeting concluded.
20 Our call processing mirrors Coral Springs' call
21 processing. They had indicated that we may be
22 a bit slower, that they put highest priority
23 calls out therefore they're faster. That is no
24 accurate our call processing mirrors what they
25 do. Unfortunately, they're not familiar with

1 some of our policies so they just were not able
2 to really clarify that. So, with apologies, I
3 just wanted to make sure that was clear.

4 When a dispatcher gets a call, the call is
5 going to drop into her pending queue, or his
6 pending queue, which is basically the CAD
7 system's available, a waiting unit's
8 assignment, call assignment. It's going to
9 recommend DLE or fire rescue units based upon a
10 run card. A run card is nothing more than a
11 preprogrammed recommendation for unit number
12 and type. That is what the run card pulls for.

13 So, for an example in a law enforcement
14 environment in a robbery that had just occurred
15 with a weapon the law enforcement run card may
16 call for four units, one supervisor, one K-9,
17 and perhaps aviation. And when the dispatcher
18 receives that call he or she is going to
19 execute the assignment because CAD is going to
20 tell the dispatcher precisely what to send.
21 And in addition, it's going to tell the
22 dispatcher from what escalation to send it.

23 So, for an example, particularly on the
24 fire rescue side, where they never allow calls
25 to remain idle, if I don't have sufficient

1 apparatus from the station that's responsible
2 it will then start going down in escalation
3 order to say, well, if not this station then
4 pull from this station. Law enforcement
5 behaves similarly, however law enforcement
6 typically doesn't go outside their
7 jurisdictional boundary, meaning the City of
8 Davie is going to have a run card that supports
9 the City of Davie. Highly unusual to see them
10 pulling resources from the City of Hollywood,
11 although the opportunity would exist, and it is
12 there.

13 The CAD will also identify for the
14 dispatcher any units that are not recommended,
15 so in addition to what you need it's going to
16 tell you what the CAD system cannot supply, and
17 it will give the dispatcher an opportunity to
18 go to the sergeant, or in the case of fire
19 rescue go to the battalion, and determine
20 whether or not mutual aid may need to be
21 secured, or if they want the call to continue
22 as the recommendation holds. It also gives the
23 dispatcher an opportunity to see if there's no
24 unit availability, and at that point that
25 becomes a field supervisor decision entirely to

1 let the call remain pending assignment.

2 Run cards in the regional system can also
3 provide for automatic paging of the CAD system
4 to field users. We have specialized units that
5 are out there, for an example our burglary
6 apprehension team. If particular calls have
7 particular characteristics behind it those
8 teams could be automatically alerted, so we do
9 use the CAD system for additional notification
10 purposes as is programmed in the run card.

11 So, I gave you an image earlier today
12 about what the CAD looks like from the regional
13 perspective, but this is what the unit
14 assignment would look like from the CAD system.
15 So, you have a couple of arrows highlighting
16 some areas of interest, the first being the
17 unit recommendation. This is what the CAD is
18 preprogrammed to send in this particular signal
19 classification at this particular location. In
20 the regional system, to make it very clear, so
21 to go against any of those misperceptions that
22 everything must be done the same way, CAD
23 programming for run cards can be
24 individualized. What that means is that what
25 Fort Lauderdale opts to send does not in any

1 way have to be what Hollywood opts to send.

2 It is completely individualized at the
3 City level, so it allows the City to make their
4 independent determination as to what they want
5 to send, how many, and what type. So, the
6 second one shows you what the missing
7 recommendations are, and then to the far right
8 you'll see the escalation order, and what the
9 CAD is looking for, in order of station
10 assignment, for example.

11 Dispatch cadence is relatively common
12 amongst law and fire rescue services, so
13 regardless of whether the dispatcher is law or
14 fire rescue you'll hear the same cadence. Call
15 assignment if always going to begin with the
16 units that are to be assigned, the location of
17 occurrence, the nature of the emergency, or the
18 signal, the classification, the comments or
19 notes that are entered into that CAD header.
20 To the earlier point, critical safety flags are
21 going to be introduced, so if that location has
22 been flagged for any reason it's going to be
23 introduced at this point. The case number and
24 the time of call assignment is all part of the
25 standard dispatch cadence.

1 The radio. The simplest way to explain
2 some of the terms you heard. Zones, a zone you
3 can look at as when you get into your car and
4 you turn on your car radio you have an AM
5 option and FM option, satellite option perhaps.
6 Think of a zone as you would an AM option or an
7 FM option. If I'm in my zone I'm on my FM
8 dial. The talk groups that I'm able to access
9 are going to be now specific to my FM dial.
10 The same thing with a zone. If I'm in zone one
11 I will have a maximum of sixteen options along
12 zone one in order to select my assignment.

13 Why is this important? Why is this a big
14 deal? Well, officers, firefighters, keep
15 radios down here, very much out of view, right,
16 just on the side. If I'm in zone one, and zone
17 one is my primary zone, and this is where my
18 main dispatcher is operating, I have sixteen
19 preprogrammed talk groups to select. That is
20 my fleet map. If I want to switch channels
21 amongst my zone in my zone all I have to do is
22 switch the dial. I do not have to un-holster
23 this radio. I don't even have to look at it.
24 I know one click takes me into the 2, or Bravo
25 position. Two clicks takes me into the C, or

1 Charlie position. And obviously since they
2 operate in this environment they're very, very
3 familiar with how many clicks down.

4 And in some cases, on the BSO fleet map
5 we've tried to simplify it even more to say,
6 all right, the three most common you're going
7 to find is in the ABC position, and if you
8 really get into a jam just go the very bottom
9 and you're going to reach a calling channel, so
10 when in doubt just go until you can't go
11 anymore, and you will find somebody.

12 The field users. Talk groups and radio
13 channel we tend to use synonymously, so you'll
14 hear us interchange that term. For our
15 purposes it means the same thing. Talk groups
16 will vary across fleet map programming. Cities
17 can have different fleet maps. So, the
18 Sheriff's Office, for example, has a very
19 robust fleet map, and our fleet map can hold up
20 to over thirty zones, times sixteen talk groups
21 in the zone, it gives you an indication of how
22 many talk groups are there. There are hundreds
23 of talk groups there.

24 However, the City of Davie may have a
25 different fleet map. Even though they're part

1 of the regional system their fleet map may be
2 different. This very much comes into play when
3 it comes to critical events and
4 interoperability, particularly when we're
5 asking field to find a talk group. So, for an
6 example if we're switching users to a mutual
7 aid talk group we know in the BSO fleet map --
8 and BSO fleet map is shared throughout the
9 county, so it's not just exclusive to BSO, but
10 there are independents out there.

11 We know that the mutual aid talk group can
12 be found on zone fourteen, so if a unit wants a
13 mutual aid country wide talk group we'll tell
14 them 14OPS2. They have to un-holster the
15 radio, turn it over, and start manipulating the
16 key pad to get to fourteen, then they know it's
17 one dial click away, which is two. But here
18 becomes the issue. Davie needs to get to
19 14OPS2, where is it? It may not be in zone
20 fourteen. It may in their zone three. It's
21 going to be named 14OPS2 interestingly enough,
22 but that may not be where they locate it. This
23 is where fleet mapping becomes critical,
24 absolutely critical.

25 Fleet maps will hold zone specific and

1 shared, so what that means is if I'm in zone
2 one, and zone one is my home zone, the first
3 five clicks of my dial can be specific, and
4 only found to zone one. These are used for
5 tacticals that are agency or jurisdictionally
6 specific. So, for an example Tamarac operates
7 on zone eight. That is their main. That is
8 where the live. If Tamarac is working a bank
9 robbery and they need to take the event to a
10 tactical situation they're going to go to
11 8BRAVO, one click away, so they don't have to
12 un-holster, they just turn the dial. 8BRAVO
13 though it unique and independent from Miramar's
14 dispatch 10BRAVO. BRAVO to BRAVO, but they are
15 zone specific. It is not the same thing.

16 That is done intentionally, and that is
17 done because of field operational needs. But
18 each fleet map also holds countywide
19 interoperability channels, shared. So, for an
20 example back to Tamarac on zone eight. If they
21 wanted to access teletype, which is a shared
22 ancillary service, or if they want to access a
23 countywide talk group we can send them to the
24 bottom of their dial and they can find 140PS2.
25 And if Miramar needs to find the same thing

1 they can go to their bottom of their dial and
2 find 140PS2. So, again the key to fleet
3 mapping, and to field unit ability to access
4 the radio in a critical incident, really comes
5 down to how often do they have to do this
6 versus how can they just do this.

7 This is a lot easier, and for their
8 purposes a lot safer, because it's not taking
9 their attention away from what's going on
10 around them. A key difference is that portable
11 radios can hold hundreds of fleet map, of talk
12 groups. It depends upon the city, it depends
13 upon the radio. There can be dozens of zones.
14 It depends upon the radio capacity, and there's
15 a couple of different capacity radios out there
16 in use right now, but there's a difference
17 between them and us. Field users communicate,
18 like I stated, on a primary. There are
19 alternate talk groups, like I said, that are
20 preprogrammed typically for ancillary or
21 tactical. Each zone holds sixteen independent
22 talk groups.

23 And here's a sample of a fleet map. This
24 is an actual sample of the current BSO fleet
25 map for two different zones in the multiple

1 zones that we hold, so as you can see zone two
2 is specific to Fort Lauderdale/Hollywood
3 International Airport, the City of Dania, and
4 Port Everglades. Those are the three local
5 areas that operate off of that one talk group.

6 Channels A through channel E ECHO, where
7 you see BCAB CAD, they are zone specific, so if
8 you look right next to zone three, and you'll
9 see there ABCD, there's some different names
10 there, particularly on the ECHO position,
11 because you have BCAB CAD versus BSO ECHO.
12 These are zone specific, so if somebody is
13 operating on 2CHARLIE and somebody is operating
14 on 3CHARLIE they are not communicating. They
15 are not on the same talk group. However, when
16 you go down the dial, and you go anything past
17 the G position, or GULF position, they're
18 shared.

19 So, if a deputy or officer who is
20 operating on 2JULIET, which is identified and
21 daily mutual aid OPS14, and a deputy who is
22 working on zone three goes to the same talk
23 group, they are communicating. They do not
24 have to un-holster the radio, they just switch
25 the dial. These are some of the key goals of

1 fleet mapping.

2 This is what the dispatcher sees. So, the
3 field unit is playing with portable radio, the
4 dispatcher -- sorry for the picture, it's not
5 as clear as it could be, but this is what the
6 dispatcher sees. The gold elite console. In
7 the regional system we have got multiple gold
8 elite presentations, and the reason is this.
9 We have different geography in each of the
10 three PSAPs, so the north building is going to
11 have gold elite presentation that's specific to
12 the north areas, Coconut Creek and Margate, and
13 Tamarac, and Deerfield, so their gold elite is
14 going to be unique to that, where a central law
15 enforcement's gold elite is going to obviously
16 focus on the talk groups that are affiliated
17 with that jurisdictional area.

18 There's also law versus fire gold elite
19 presentations, so the law dispatchers are going
20 to see a completely different series of options
21 against the fire, but keep in mind the shared
22 talk groups are there, they are presented. The
23 key take away here is there's only a hundred,
24 one hundred resources that are locked down and
25 available to the dispatcher's gold elite, so

1 whereas the portable radio can have hundreds
2 the dispatcher is locked to one hundred in
3 presentation. Now, this is with the current
4 radio system. My understanding is with the P25
5 system this is going to change considerably,
6 and it's going to give us much more
7 flexibility. But right now, if I sit at a
8 dispatch console and I'm accessing a gold elite
9 the presentation on what I see is going to be
10 specific and locked to the assignment that I am
11 working.

12 So, to highlight some of the key features
13 of the gold elite, the talk groups are going to
14 be the boxes that are identified there, so
15 again you'll see a bunch of boxes in there.
16 Anything that has the lightning bolt is a talk
17 group, so those are the various talk groups
18 that are just on the main page. There are
19 multiple folders along the top toolbar of that
20 presentation, so each folder is going to have a
21 predetermined group of talk groups. So, we
22 will basically group together the mutual aid,
23 and we can group together fire options for main
24 channels in there. So, we have that all kind
25 of grouped together in a way that makes logical

1 sense to the dispatcher.

2 Toning, and the key, patching and multi-
3 selecting. And note where that is on the gold
4 elite presentation, because the comments had
5 been made that patching can be done through
6 mouse clicks, which is actually very accurate
7 as long as the talk group is there and
8 available. That is key.

9 As I stated in the regional system the
10 gold elites are unique to the PSAP and are
11 discipline specific. Toning and
12 interoperability are available, but
13 interoperability is only available if the
14 resource that we need to use is in presentation
15 from the dispatch console. Any emergency that
16 a deputy or officer emits is going to be
17 displayed on the gold elite. So, anybody who
18 hits the emergency button, which is this little
19 orangey button at the very top, we will know
20 who they are, and we will know what talk group
21 it emitted from. So, that's a safety feature
22 for the field.

23 And again, the main difference between the
24 two, portable radios can have over a hundred
25 more resources than what the gold elite has in

1 presentation. The dispatchers cannot monitor
2 or access resources that are not in
3 presentation. Portable radios are more
4 susceptible to environmental influence like in
5 building penetration and weather conditions,
6 and as has been stated before the maintenance
7 of the radio itself can impact the ability of
8 that radio to communicate effectively, and
9 there could be audible differences between what
10 we hear and what the field can hear.

11 The independence. Coral Springs and
12 Plantation obviously operate an independent
13 PSAP, but they also have an independent radio
14 system. The regional gold elite is limited in
15 presentation if any to the independents'
16 resources. For the City of Plantation, we have
17 no presentation of any resource, and it is due
18 to a compatibility issue between our system and
19 theirs, as what I have been told by the radio
20 management.

21 For Coral Springs we only have
22 presentation to ancillary talk groups. We do
23 not have presentation of their main working
24 talk groups. So, as I stated earlier law
25 enforcement and fire rescue operate on a main,

1 they're usually on the main channel. This is
2 the operational channel. The ancillary talk
3 groups could be something they go to for
4 tactical purposes, or car to car, talkarounds,
5 teletype. For Coral Springs at this point we
6 do not have access to the mains. Now, there is
7 efforts being made to push us to get those
8 abilities presented but understand at this
9 point in time we do not have the ability to
10 access them.

11 So, when we need interoperability with the
12 independents it can only be done of two ways,
13 the independents have to go to a shared talk
14 group assignment, which would require them to
15 un- holster, or they need to execute the patch
16 on their side, if they have our presentation,
17 which my understanding is they do, so they need
18 to do the patch on their end. Fast moving
19 critical incidents make this much more
20 challenging, clearly, to get this done.

21 Interestingly, there's regional
22 municipalities that have independent radio
23 system, Hollywood and Fort Lauderdale still
24 have independent radio systems, but it really
25 doesn't have much bearing in the regional

1 system as a whole. We have access to all of
2 their resources. We can patch and interact
3 with them, as per we can with everyone else, so
4 there really is not much difference in that.
5 But this does come into play in disaster
6 contingency, and it does give us some
7 flexibility in the event of a Broward County
8 radio issue.

9 Patching. The best way to understand or
10 describe patching is think of a conference
11 call. That is patching. I dial a phone
12 number, I reach a conference bridge, and one
13 more person can dial that same phone number and
14 connect with me, five more, ten more, we're all
15 communicating. That is patch. A patch is done
16 by the dispatcher through the gold elite radio.
17 So, back to the original photo that I had
18 showed, it's mouse clicks. So, essentially, I
19 will tell the system I want a patch, and I will
20 select the talk groups I want to patch
21 together, which takes me back to the
22 significance of as long as we have presentation
23 we can do that, as long as a talk group is
24 available we can do that.

25 So, what that means is if a patch is

1 existing with a talk group already I can't now
2 engage the patch additionally, I'm limited to
3 that because it's already tied up somewhere
4 else. But the patching is done at the dispatch
5 level, and the patching will allow for
6 immediate interoperability. Patching is
7 seamless to the field user. They don't have to
8 take their radio out, they don't even have to
9 switch the dial. All they know is that they
10 are now in communicate with what was a
11 previously separate zone talk group, they are
12 now in communication with them, completely
13 seamless to them.

14 Multi-selecting is different. The
15 procedure for multi-selecting is exactly the
16 same, it must be in presentation by the
17 dispatcher, it's executed at the gold elite
18 level, but think of multi-selecting as you
19 would a PA broadcast, it's one person that is
20 blasting a communication message, and it's
21 hitting any talk group selected in that
22 multi-select. So, again I can do it with two,
23 I can do it with ten, it doesn't matter, the
24 choices are up to me on how many I want to
25 bring in. But the difference between patching

1 and multi-selecting is patching allows a
2 conference to occur, people can communicate.
3 They can hear the dispatcher, the dispatcher
4 can hear them, and importantly, they can hear
5 each other.

6 In multi-selecting it is not the same.
7 Multi-selecting, they cannot hear each other,
8 they can just hear the dispatcher. It is a
9 broadcast. So, think of it as a PA
10 announcement, or like a radio DJ, it's just a
11 broadcast. Multi-selecting is also seamless to
12 the field user, as is patching.

13 There are shared countywide talk groups as
14 well. No patching is required for a shared
15 countywide talk group, however utilization of
16 these again depends upon accessibility from the
17 field user end, because in a shared talk group
18 assignment there is no patching, and there is
19 no manipulation from the dispatcher, the field
20 user is going to have to take the radio and
21 either zone around by removing it from the
22 holster, or they're going to have to turn the
23 dial in order to access the correct talk group.

24 But shared countywide mutual aid talk
25 groups are very useful because it brings in the

1 independence as well. In addition, it can
2 bring in some of our tri-county partners. Dade
3 County and Palm Beach County have engaged in
4 some programming of that to allow that
5 tri-county communication, so there is benefits
6 beyond the boundaries of this county as well.

7 The pros and cons. The pros to patching,
8 the number one pro is it's seamless to the end
9 user, they don't have to do anything at all, it
10 happens for them behind the scenes. So, one
11 moment they're talking just to their zone
12 partners, their channel partners, and the next
13 moment they have others that are now
14 communicating with them. It is very easy to
15 execute. The cons are the limitations. If it
16 is not in presentation I cannot patch. I am
17 also limited when it comes to the independence.
18 As I stated we have no availability to
19 Plantation talk groups, and limited
20 availability to Coral Springs, so it really
21 does not serve a big purpose when we talk about
22 the independence. Another con is that too many
23 resources into the patch can degrade the
24 system, and the quality of the audio, so I do
25 have to run the risk that if I'm throwing too

1 much in I can have some audio problems.

2 The pro to shared countywide talk groups
3 is everybody has access to these channels.
4 These are countywide issued, they're there so
5 everyone can get to them, the independents, as
6 well as the regional partners. The con is I
7 have to un- holster the radio in more cases
8 than not to access it.

9 So, what is the work flow for a critical
10 incident? As a standard recognized practice,
11 the agency having jurisdiction of the event is
12 the host agency, it is their show. So, if
13 Tamarac is working a burglary and they need
14 resources to aid them from the City of Sunrise
15 it is Tamarac's event. Sunrise will be brought
16 in to aid as per Tamarac's request. How we do
17 that is going to be based upon whether we are
18 giving them a mutual aid, and patching the
19 mutual aid into the Tamarac working, or if
20 we're sending everybody to a shared talk group.
21 But Tamarac is the host agency.

22 Moving units to tacticals is really
23 dependent upon the discipline. Fire does
24 things a bit differently than law enforcement,
25 but it is very much established process and

1 protocol, and we follow those recommendations
2 that the field does use for these purposes.
3 So, how we bring in help, like I just stated
4 the host agency has ownership, it is their
5 event. The assignment is going to always be
6 worked on the host channels main, more often
7 than not, so the host channel units do not
8 leave their zone. They do not maneuver or
9 manipulate around their portable radio. We
10 want to keep them there, and what we want to do
11 is bring others in to join them. And how they
12 join them is through patching, typically of
13 shared mutual aid talk groups, is normally how
14 we would bring them in.

15 Why do we not want field units to zone
16 around, the most simplest answer is safety. If
17 a field unit is told that you are in the middle
18 of a hot zone working a critical incident the
19 last thing we want them to do is un-holster the
20 radio and try to zone around. With hundreds of
21 talk groups that could be potentially available
22 to them the processes of them zoning very much
23 runs the risk of us losing them on a talk group
24 that no one is monitoring. So, practice as has
25 come in this county has been, and has been for

1 quite some time, the host agency is running the
2 event, everybody else comes in, and is brought
3 in through radio interoperability measures, but
4 the host agency is not going to be asked to
5 zone around and manipulate in order to gain
6 access. We want to keep them where they are,
7 so we have control of their movements, and
8 their activities. And like I stated already if
9 the inbound units do not have access to the
10 talk groups involved patching is established.

11 We do have processes in place for high
12 impact critical events, and the only reference
13 on this slide is the fact that should the event
14 be so high impact, or highly critical, we will
15 branch off talk groups into multiples. So,
16 what that means is if you have a critical
17 incident working on a main channel you may
18 ultimately have to branch that off into a
19 triage talk group, or a staging talk group, or
20 a perimeter SWAT, or something of that nature,
21 so we do allow for that, and we do support all
22 of those talk group efforts that are required.

23 Disaster contingency. We are fully
24 prepared to handle radio failures, depending
25 upon the nature of the failure when they occur.

1 We have disaster contingency plans in place. A
2 complete failure of the Broward County radio
3 system will typically result in us moving to
4 state channels or trying to access the radio
5 systems of other either regional or even
6 non-regional partners, depending on upon the
7 programming in the radio and the jurisdictional
8 area in which the deputy or officer is
9 situation.

10 So, for an example, Fort Lauderdale has an
11 independent radio system. The footprint of
12 their radio system can still pick up the
13 majority of the City of Pompano Beach, so in
14 the event of a Broward County radio failure
15 Fort Lauderdale is not going to feel many
16 affects, their radio system is still up. What
17 we can do is push the Pompano Beach deputies
18 onto Fort Lauderdale's system, and now they
19 have got a working system to operate off of.

20 We have the county broken down into
21 geographical considerations with pre-planning
22 establish to say if you lose radio you guys
23 based upon your location in the county is going
24 to move to this location. We will move the
25 southern end to the Hollywood talk location,

1 and then we utilize the state channels. And as
2 Cindy has mentioned these are the eight TACs,
3 TAC91, 2, 3 and 4 in Broward County, and the
4 mapping gives you the footprint by which the
5 coverage area can support the field units.

6 First reaction to any kind of radio
7 issues, every position in the regional system
8 has a backup console. A backup console is
9 nothing more than this that allows a headset.
10 The functionality of a console removes, no
11 ability to patch, no ability to multi-select,
12 no ability to tone alert, but it gives you
13 radio coverage that the dispatcher could use,
14 because remember what the dispatcher doesn't
15 want to do is have to key up a mic and then
16 type in a CAD system.

17 If the backup consoles are not functional
18 then we do go to portable radios, and as an
19 absolute last measure if need be we will resort
20 to telephone notifications, and start calling
21 our personnel, and our personnel have been
22 trained that in the event of any kind of radio
23 they should return to their station, their fire
24 station, or their district office, and we have
25 procedures in place to start making phone calls

1 to them. So, again the contingency plan is
2 very simplistic, obviously gold elite, to
3 backup, to telephone.

4 CHAIR: Okay, so on the Parkland, for
5 Parkland for the deputies, do I understand this
6 correctly, is that the primary channel for them
7 on the BSO radio system is 8ALPHA, is that
8 correct?

9 MS. MIZE: Parkland is 8ALPHA, correct.

10 CHAIR: Okay, so that's their primary
11 channel. So, everybody, everybody that was
12 responding in Parkland to MSD was on 8ALPHA.

13 MS. MIZE: Correct.

14 CHAIR: And 8ALPHA is the channel that was
15 throttling, correct?

16 MS. MIZE: The system throttled.

17 CHAIR: They system throttled, right.
18 Right.

19 MS. MIZE: Everybody did, including
20 8ALPHA.

21 CHAIR: Right, okay. So, if you had
22 successfully patched Coral Springs onto 8ALPHA
23 that would have made the throttling problem
24 even worse, wouldn't it?

25 MS. MIZE: Potentially, yes. But again,

1 remember we couldn't access them, so the
2 patching --

3 CHAIR: I know, I'm just saying hypothetical
4 -- but if it had worked, and the patch had
5 worked, it would have exacerbated the
6 throttling problem.

7 MS. MIZE: Potentially it could have
8 exacerbated the quality, yes.

9 CHAIR: Right. So, you have access to no
10 channels, no communications. BSO in the
11 consolidated communication center, regional
12 communicate center, has no access to any of the
13 Plantation Police Department's radio channels.

14 MS. MIZE: Correct, including fire.

15 CHAIR: And so, the only channels you have
16 access to, the Broward County Sheriff's Office
17 regional communications center has access to
18 for Coral Springs are not their primary
19 dispatch channels, the main channels, only
20 secondary channels, correct?

21 MS. MIZE: That is correct.

22 CHAIR: And so, is that a policy decision,
23 or is that a technology issue?

24 MS. MIZE: For Coral Springs I would have
25 to defer to Jose from the radio system. I am

1 not aware of really what drove that decision.
2 I don't know if it was more policy as by, and
3 potentially policy by perhaps the City of Coral
4 Springs' decision as opposed to functionality.
5 The fact that we do have ancillary would
6 suggest the functionality is there, but I do
7 not know what policy decisions were made as to
8 why the primaries were not given.

9 I can tell you since MSD there has been an
10 agreement signed off by the City of Coral
11 Springs to allow us access to the primaries, so
12 I would think it would be more of a policy
13 decision at the time, as a guess.

14 CHAIR: And so -- and so has Broward
15 Sheriff's Office authorized Coral Springs to
16 have your primary channels, including 8ALPHA?

17 MS. MIZE: They have everything, and we
18 were not even aware that they had. When they
19 had programmed their radio system, from what I
20 understand they had programmed all of our
21 primaries. So, they've always had them since
22 they cut over to their P25 system a year, two
23 years ago.

24 CHAIR: All right, we'll ask Chief Backer
25 about that tomorrow, and why you didn't have

1 access to it. If you would go to Slide 6, in
2 Slide 6, and talking about the mutual aid
3 channels and accessibility. So, Slide 6 you
4 had the example of on a portable radio, or in
5 car radio, for that matter, but in Slide -- I'm
6 sorry, Page 6. I'm sorry, it's the fleet map
7 sample. I'm sorry. The one -- what I'm
8 looking at is this one.

9 MS. MIZE: Yes.

10 CHAIR: Okay, so on there, and the slide
11 numbers aren't on here, but it's on Page 6 of
12 the handout. So, anyway, on there is that you
13 have that the channels A-G in zone two are
14 unique, and then from G down they are
15 consistent.

16 MS. MIZE: A through ECHO.

17 CHAIR: A through ECHO.

18 MS. MIZE: A through ECHO, yeah. ALPHA
19 through ECHO are zone specific. Anything lower
20 than that is shared.

21 CHAIR: Right. So, if you have a Broward
22 County deputy that works in Weston, and you
23 have a Broward County deputy that works at the
24 Fort Lauderdale Airport, and they were teamed
25 up together on an try team going into Stoneman

1 Douglas, and the one deputy said to the other
2 deputy go to OPS13, and they know in their mind
3 one is on zone two, one's on zone three, but
4 they both know that OPS13 is in the I position,
5 so on their radios they can go to I13 and
6 they're both, because it's the switching down
7 without taking out of the holster the way you
8 described, right.

9 MS. MIZE: Yes, correct.

10 CHAIR: So, they can both go to I13, and
11 they can talk, and they're on a mutual aid
12 channel on an OPS channel, and those two
13 deputies. But if it is the Broward Sheriff's
14 deputy paired with a Coral Springs Police
15 officer, and the Broward deputy says to the
16 Coral Springs officer go to OPS13 is, is that
17 Coral Springs, they wouldn't know, they're not
18 talking the same language.

19 MS. MIZE: They will probably understand
20 the terminology of the nomenclature --

21 CHAIR: Right, no, but I'm talking --

22 MS. MIZE: -- but where to find it is the
23 issue.

24 CHAIR: That's what I'm talking about.

25 MS. MIZE: Correct.

1 CHAIR: When I'm saying talking the same
2 language, it's not there where it's just one
3 switch for both of them and they're getting
4 there, because there's not that synced system,
5 correct?

6 MS. MIZE: Absolutely. And that's the
7 fleet mapping. Absolutely.

8 CHAIR: Right, okay. All right,
9 questions, any other questions for Angela?
10 Sheriff.

11 SHER. ASHLEY: They're just on a different
12 fleet plan. They would just be on a different
13 fleet plan.

14 MS. MIZE: They're on a different fleet
15 map, correct, so the positioning of that talk
16 group could be anywhere in the zones in that
17 radio.

18 SHER. AHSLEY: And you may have said this,
19 who determines initially what resource to send
20 to an incident, is that the dispatch operator?

21 MS. MIZE: As far as initial dispatch
22 assignment?

23 SHER. AHSLEY: Yes. And any, any backup,
24 where you're pulling them from a different,
25 different zone.

1 MS. MIZE: It's at the direct -- no, it's
2 at the direction of the field commander, it's a
3 commander, battalion chief, absolutely. We --
4 we defer to field command for those decisions.

5 SHER. ASHLEY: Thank you.

6 CHAIR: Senator Book.

7 SEN. BOOK: Thank you, Mr. Chair. If --
8 and you probably said this but I'm not as quick
9 as you guys. When you were talking about
10 engaging a patch, and earlier, I think it was
11 on Slide 19, you talked about how law
12 enforcement, like the, you, you guys would
13 drive any of what that is. However, in this
14 situation Coral Springs would have had to
15 initiate a patch, and they are not like the
16 driver's of law enforcement.

17 MS. MIZE: And that's what made it very
18 unique and very complicated, because Parkland
19 is BSO district responsible, they are the host
20 agency, but you had an independent city come in
21 that was assuming host agency functionality in
22 disparate CADs to where we were unable to
23 execute a patch due to a lack of resource to
24 gain interoperability. So, this made it far
25 more complicated.

1 SEN. BOOK: And you said that you only can
2 engage a patch if you have the dashboard, the
3 talk group to do so. Did they not -- they did
4 not. That's a question, sorry, it was not
5 meant to be a statement.

6 MS. MIZE: So, Coral Springs from what I
7 have found since the incident does have access.
8 We do not, so we could not execute the patch to
9 their main operational work talk group, because
10 we just didn't have the resource in order to
11 execute the patch. I have found out that Coral
12 Springs did have the accessibility to our
13 working main, which was dispatch 8ALPHA, so
14 again that's a question for them as far as what
15 they did with that.

16 But we just had no ability, so our initial
17 reaction then was try to get to mutual aid talk
18 groups, let's use some of these state, or these
19 countywide mutuals. But again, patching needed
20 to be done to achieve that as well, and there
21 would have been complications behind that, much
22 like what the Sheriff commented to, so.

23 SHER. AHSLEY: Sheriff. Could you --
24 could you have -- could regional have called
25 Coral Springs and said, hey, patch us through

1 --

2 MS. MIZE: We did.

3 SHER. ASHLEY: -- immediately, or --

4 MS. MIZE: If memory serves within
5 fifteen, twenty minutes we did, in that time
6 frame. But don't quote me on that, it's
7 ballpark.

8 CHAIR: Chief Lystad, you're next.

9 CHIEF LYSTAD: Thank you, Mr. Chair. For
10 the radio systems you, Broward County programs
11 all the radios, correct?

12 MS. MIZE: Broward County, yes. For the
13 regional communication system, yes, absolutely.
14 The portables could be done at the city levels,
15 so not to confuse the two.

16 CHIEF LYSTAD: Okay, so the portable
17 radios could be, Coral Springs or Plantation
18 programs their own.

19 MS. MIZE: Yes.

20 CHIEF LYSTAD: Or does the county program?

21 MS. MIZE: No, on the portable radios it
22 typically does go to the city unless there's
23 some agreement with the county, say a
24 third-party vendor, or some other mechanism to
25 do it. But the portables are typically done at

1 the city level. Again, that may be a better
2 question for Jose. But the gold elites are
3 through Broward County. Communications
4 technology handles that.

5 CHIEF LYSTAD: And who -- is there any
6 oversight over the fleet map?

7 MS. MIZE: There has not been on the DLE
8 side. Fire rescue is well ahead of the game.
9 Fire rescue operations is exceptionally
10 different than law enforcement. They depend
11 upon interoperability, mutual aid, and auto aid
12 as part of their normal business practice.
13 Their fleet map is very standardized. Law
14 enforcement really operates in a very different
15 manner, it's just the nature of their culture,
16 it's very different.

17 So, since regionalization occurred we've
18 been suggesting the standardization of a single
19 fleet map, and again not even in a critical
20 incident, just in incidents in general when
21 you've got resources that are coming in, or in
22 the event of a radio system failure and we're
23 telling field units I need you to go to the
24 state channel, I need you to go to 8TAC91, I
25 need you to go to 8TAC92, these are going to

1 allow you to maintain operability and
2 communication, and some of the concern has
3 been, well, where is it, how do I find it. I
4 don't know how to tell you to find it if your
5 fleet map is different than my own.

6 So, that is some of the hiccups that have
7 been identified. I can tell you that there is
8 right now a very concerted effort with the law
9 enforcement community to standardize a fleet
10 map, and to take a lot of pages out of fire
11 rescue's concepts because they do work, and as
12 Jose had commented, utilizing the toggle switch
13 on the top of the radio which takes your one
14 zone to three zones without having to
15 un-holster the radio.

16 So, there is definitely now a push, and we
17 are involved with Jose and his team, as well as
18 the law enforcement partners, to work on a
19 standardized fleet map to make this much more
20 seamless in the future.

21 CHIEF LYSTAD: So, then it's a fair
22 assumption if you had a standardize fleet map,
23 and on the main zone you could have one mutual
24 aid channel that everyone would know, be
25 talking on the same language, all switch down

1 to the last channel, 14 is it, in the radio,
2 and everybody would be talking on the same
3 radio without having to manipulate a radio.

4 MS. MIZE: Yes. Potentially, yes, without
5 having to un-holster. That is the objective.

6 CHIEF LYSTAD: Without having to holster.

7 MS. MIZE: Yes.

8 CHAIR: So, Mr. De Zayas, would you come
9 up for a minute? Can you answer the question?
10 Do you know whether the reason why Plantation
11 shares no radio channels with BSO and the
12 regional communication center, and why Coral
13 Springs from, at least from February 14th
14 previously, did not share its primary radio
15 channels with BSO and the regional
16 communication center, whether that was a policy
17 decision or a technological reason?

18 MR. DE ZAYAS: I don't know the reason
19 why.

20 CHAIR: Who -- who knows that?

21 MR. DE ZAYAS: I would have to defer to
22 those cities. But I can tell you, you know,
23 for example, Plantation recently moved to a P25
24 phase two system which, which causes our
25 systems right now, the gold elite consoles

1 cannot interface with their resources, so we
2 did put a console, you know, out there, and
3 programmed it to have Plantation's talk groups
4 on there. So, they are available, you know,
5 but again it's a conventional type of resource
6 that is added onto the gold elite. So, they
7 did allow, or we do have that, and I believe
8 for some time now, that we've had that
9 available.

10 CHAIR: Well, if -- common sense like
11 tells us that if BSO had, in the case of Coral
12 Springs, if BSO had secondary channels then
13 it's not a technological barrier as to why they
14 didn't have the primary channels.

15 MR. DE ZAYAS: You're speaking of the BSO
16 consoles?

17 CHAIR: Yes. So --

18 MR. DE ZAYAS: So, I'll explain that. You
19 know, for example, you know, the theory is, for
20 example, if Coral Springs is coming into the
21 county the theory is that Coral Springs would
22 move to a mutual aid, a countywide mutual aid
23 in order to interop, again, their P25. The
24 other theory is if BSO was going into Coral
25 Springs that BSO would move to a Coral Springs

1 interop, and BSO's radios do have Coral Springs
2 programmed into it, the main. It wasn't on the
3 console, and again, you know, the limitations
4 that we have on the consoles is we have a
5 hundred resources, and in cases like, you know,
6 our central dispatch, regional dispatch, you
7 know, we've reached that limit, so we had to
8 like make decisions, okay, do you want this and
9 that, or one or the other. We chose with going
10 with the Coral Springs joint op, which is they
11 have three resources, the call, joint op one
12 and joint op two.

13 CHAIR: Commissioner Dodd, you're next.

14 MR. DODD: Yes. Ms. Mize, I had a
15 question for you. On February 14th were you
16 working at the communications center?

17 MS. MIZE: I was at the public-safety
18 building, so I was on duty, but not at the
19 north building, no.

20 MR. DODD: Okay. I guess my question is
21 this. What did that look like, and sound like,
22 at dispatch station when those throttling
23 started to occur? I mean this wasn't an event
24 that had happened before, what, what was the
25 response during that time, do you know, or just

1 total --

2 MS. MIZE: Just unable, unable to hear
3 inbound traffic, from -- from how I understand
4 the experience to have been was just unable to
5 hear inbound traffic, and having, you know,
6 units obviously, you know, you see a lot, when
7 you start having multiple units key up
8 sometimes the push to talk, which is a little
9 display that tells you what units are trying to
10 reach you, sometimes you'll see that moving so
11 you know people are trying to access the
12 system, you just can't hear anything.

13 So, beyond that I don't know anything
14 other than how the experience was from what
15 they were hearing.

16 MR. DODD: So, they could see units trying
17 to key up.

18 MS. MIZE: Oftentimes you can see units
19 trying to key up, yes, you just can't hear
20 anything. Or if anything you'll hear the
21 squelching, or some noise, but you just cannot
22 make any audible sense out of what you're
23 hearing at that point.

24 MR. DODD: Was someone able to determine
25 this is throttling? I mean was, was that

1 something, or was it just a question that our
2 system has failed, what, what was the --

3 MS. MIZE: You know, with regard to how
4 they interpreted that, I mean obviously they
5 know they can't hear inbound, they can see
6 it, they're aware that there are inbound trying
7 to happen. More than likely they didn't
8 classify it as throttling. That's a term that
9 really has come into favor since all of this as
10 far as terming what that is. To them it
11 probably would have been this is busy, the
12 radio is busy, you know, we're possibly getting
13 what we refer to as bonking noises, we're
14 hearing it, they're not able to communicate.

15 I seriously do not believe they would have
16 put that label to it. They just would have
17 sensed that the radio is really busy. And
18 again, it wasn't failing in the sense that it
19 would have kicked us to disaster contingency.
20 The console would not have done anything more
21 than what we had on the gold elite, so it
22 really would be nothing that we would say, all
23 right, what backup process do we have in place
24 right now.

25 MR. DODD: But yet they were able to

1 establish a command post on site, correct, but
2 there was --

3 MS. MIZE: From my understanding.

4 MR. DODD: But the communication during
5 that process was nonexistent from unit to unit.

6 MS. MIZE: Well, again, it was coming in
7 and out. So, there were times when they were
8 communicating, there were times when it was
9 not. So, it was not that it was out for any
10 duration to where, you know, we're just going
11 to put aside the radio, it's not functioning.

12 MR. DODD: Right. I got you. Okay, thank
13 you.

14 CHAIR: Anybody else? Okay, thank you, we
15 appreciate that. Sheriff Judd, go ahead.

16 SHER. JUDD: The last -- the last question
17 I have, and it may be for the Motorola rep.

18 CHAIR: Okay. Mr. Sanchez.

19 SHER. JUDD: In the even Coral Springs and
20 Plantation says, hey, as an afterthought we
21 ought to all join the regional, does the
22 capacity of this new system exist for that
23 blend?

24 MR. SANCHEZ: For which scenario, for a
25 scenario where all the cities --

1 SHER. JUDD: If every, everybody comes
2 onto the regional system.

3 MR. SANCHEZ: Yeah. I'll just give you an
4 example if that's okay. The Harris County,
5 Texas regional system holds today over seventy
6 thousand radios. That's a P25 system. That's
7 the system that was used during the Santa Fe
8 incident. The State of Louisiana P25 system
9 M3, the same one that Broward is purchasing,
10 holds today over ninety-five thousand radios
11 with hundreds of sites throughout the entire
12 state. And what we're implementing here for
13 the State of Florida, hopefully, you know, over
14 the next couple of years we'll be close to a
15 hundred fifty sites with close to thirty
16 thousand users.

17 So, I think the answer would be yes, from
18 a technology perspective the capacity would be
19 there to support that if that were to even
20 happen. Does that answer your question?

21 MR. DE ZAYAS: Excuse me, if I may answer
22 that specific to Broward County, and what we
23 did in RFP and the design, yes, we did include
24 Coral Springs onto the capacity calculations
25 into the Broward County system.

1 SHER. JUDD: How about Planation, isn't --

2 MR. DE ZAYAS: Yes, we included
3 Plantation. We included Fort Lauderdale. We
4 included Hollywood as well. So, yes, all of
5 those were taken into consideration when we
6 designed the system, to be able to have all of
7 these users on the system.

8 SHER. JUDD: Okay, thank you.

9 CHAIR: Okay, thank you. Appreciate it.
10 So, tomorrow morning, we have public comment
11 yet, but tomorrow morning we'll hear from Coral
12 Springs, and then Cindy will be back to answer
13 any questions you have from a subject matter
14 expert perspective. So, public comment, again
15 we'll ask all the people asking to make
16 comments here during the public comment section
17 to limit your remarks to three minutes please.
18 And the first one that we'll recognize is Tony
19 Montalto.

20 PUBLIC COMMENTS

21 MR. MONTALTO: Good afternoon. Today
22 we've heard from a lot of hard-working folks
23 trying to keep us safe, and we appreciate their
24 efforts. Despite those efforts many failures
25 occurred on February 14th of this year. We're

1 hopeful that this commission's findings will
2 make things better. I want to preference the
3 next part of my statement by saying I'm not a
4 police officer, and I'm only commenting on what
5 was discussed here today. And I apologize in
6 advance if I don't use the terms properly or
7 understand their interaction.

8 I do have some concerns about the hot
9 files, or caution files that the sheriffs on
10 the panel brought up. My concern is that in
11 the case of the MSD shooting suspect if a
12 previous history of dispatch was provided to
13 the responding officers, and they see multiple
14 visits to his residence with on follow up
15 action, this flag info for the responding
16 officers could create an expectation bias, that
17 they don't need to do anything other than show
18 up and talk to them.

19 It is my hope that there's training that
20 occurs in your jurisdictions, and all
21 jurisdictions, to prevent this kind of
22 expectation bias from leading to complacency.
23 It is important to remember that sometimes only
24 a small different in what is observed can
25 prevent disaster. Thank you.

1 CHAIR: Thank you, Mr. Montalto. The next
2 is, it looks like Stephen Schachter.

3 MR. SCHACHTER: So, again, I've lived in
4 Broward County for about forty years, and I've
5 watched the county grow. I've watched the
6 airport grow. I've watched the police forces
7 grow. And after 9/11 you would think that as
8 our county grew, as the United States
9 government threw tons of money into police and
10 security for communications you would think by
11 this time we would have replaced a
12 communications system that might be twenty,
13 twenty-five years old. Am I the only one who
14 wonders why?

15 But getting back to communication, is it
16 appropriate to ask what the SWAT teams and the
17 first responders were doing that day vis-a-vie'
18 communications. Is there anybody in this room,
19 you know, who would have that information, any
20 of our presenters would have an answer to that
21 question? If someone could get that
22 information I'd appreciate it, because one
23 wonders if they could have gotten there, you
24 know, a little sooner, maybe some of the
25 seventeen might still be with us. Thank you.

1 CHAIR: Okay, thank you, Mr. Schachter.

2 Next is Jeff Ostroff.

3 MR. OSTROFF: Hi, good afternoon. Just a
4 little disclosure, I know three of the shooting
5 victims. Two are dead, one survived. He has
6 permanent shrapnel in both of his arms,
7 inoperable, so he'll be like that for the rest
8 of his life. The reason I came up today to
9 talk is a few years back I was an electrical
10 engineer over at Motorola here in Plantation,
11 worked a lot of radios, and I even have a
12 patent on preventing calls from dropping too,
13 so I was, I just wanted to come up and give you
14 a warning here about some of the numbers I
15 hear, you know, when they say like you have two
16 fifty capacity.

17 I wanted to warn you, the same warning I
18 used to give all of my fellow engineers at
19 Motorola, and that is a design limit is
20 something that you want to run away from, it's
21 not something you go rushing toward. Oh, we
22 got two fifty, yea. That doesn't mean you go
23 rushing toward it, you should be running away
24 from that.

25 So, when I design a circuit, and I have a

1 capacitor with a 20-volts rating on it I don't
2 operate my circuit at 20-volts, I operate it at
3 10-volts to give it plenty of margin, okay?
4 And so, when you see the numbers that they,
5 they give you, keep in mind that that is a,
6 what I call a system theoretical max. The
7 numbers that I think make better sense are what
8 is your system throughput, the actual usable
9 system throughput.

10 So, anyway, I have an idea for this
11 control channel. So, the control channel was I
12 think they said ninety-six hundred, it's a
13 fixed width amount, right? My idea is, because
14 it ties along to sort of to the patent that I
15 have, can you make it dynamic, can you steal a
16 few bits from a channel next to it, make that,
17 that control channel wider like this when it
18 needs to, and a few seconds later dynamically
19 it contracts back to where it was, to the
20 normal position. That way your system grows
21 along with the traffic. And you could probably
22 find a few unused channels that it can steal
23 bits from. The software is pretty smart. It
24 should be pretty easy for them to do that.

25 So, and then I didn't hear too much about

1 the testing, how -- I think they mentioned it
2 was simulated or something, and yeah,
3 simulation is great, and we do simulation a lot
4 too when I was an engineer, but there's a big
5 difference between what you do on the computer
6 and what actually happens outside there. So,
7 every time we changed our software on the
8 phones we'd have to send drive teams out to map
9 everything, see how it, how does that phone
10 perform when it's out there in the, in the
11 field there. And -- and so I'd seriously doubt
12 somebody took three or four hundred
13 transmitters, took this thing outside and did a
14 system, you know, a stress test on the system.
15 So, that's something we ought to look at too.

16 And I also didn't hear anybody speak about
17 repeaters. Are there any repeaters in the
18 schools too, because as some of you folks I
19 know are police officers here, when you're,
20 you've got half a dozen cops that are sitting
21 in a stairwell pinned down by a guy with a
22 submachine gun, and they can't get a signal out
23 to ask for help, that's a problem too. You
24 know schools are big thick buildings, they have
25 metal roofs, they have staircases, and stuff

1 like that. That's what we call an RF cage.
2 That means that the, the power, and the energy
3 from the radio cannot escape, and so by having
4 repeaters inside the building, I think that
5 would save a lot of lives.

6 And it was actually kind of embarrassing,
7 because when I came in here this morning and
8 walked across this plaza I looked on top of the
9 building, and we have a repeater up there,
10 there's a tower, there's two triple diversity
11 cell phone towers on top of the building, and
12 you guys probably can't see it, but I believe
13 that's a repeater right there, that little
14 disc, big disc hanging up right there on the
15 ceiling. So, why is it that the people that
16 designed this building decided to make all of
17 this here for the convenience of nineteen
18 thousand hockey fans, but we don't have
19 repeaters inside the schools to protect our
20 kids?

21 CHAIR: All right, thank you.

22 MR. OSTROFF: Thank you.

23 CHAIR: Michael Sirbola. Three minutes,
24 Mr. Sirbola, to the second.

25 MR. SIRBOLA: I'll do my best, thank you.

1 We here in the community are here to end
2 shootings, you also. You are good people.
3 Good people listen. You are both a cause and a
4 symptom of these shootings. You are the
5 opposite of a cure. You are not even a
6 palliative. You are the cause and the symptom
7 of our current distress here in Broward, and
8 nationwide. Put a child to death on purpose,
9 really, our bloodlust will only lead to more
10 bloodlust.

11 Behavioral, academic, and professional
12 errors are opportunities to learn and to teach,
13 That applies to us as well as to children, not
14 opportunities to judge and punish. Are you
15 here to find someone to punish and judge in the
16 district, or are you here to figure out how to
17 end shootings genuinely and truly? Please fix
18 the real problem. The real problem, that even
19 when we, our schools, our sheriff, police,
20 hospitals, prisons, hospices, nursing homes,
21 and VA systems, even when we know the problem
22 and when we know its solution we don't employ
23 it.

24 Fix our -- you're, actually -- inability
25 to fix real issues even when we have the

1 solutions. Our inability to make schools safe
2 in a deep, lasting, and fundamental way is
3 ongoing. We -- to do that, to make them safe
4 we need to make them the last place anyone
5 would ever dream of going to do mayhem. Your
6 promise, evaluation that you've provided,
7 pointed out a lack of communication between
8 police, schools, and by the way DCF as well
9 should have been mentioned.

10 And I want to add, to say that I myself
11 brought that to the attention of the district a
12 number of times. There was an Obama-era
13 program to do just that, on one had any
14 interest in it. I spoke to this years ago.
15 They, you are all good people, and yet nothing
16 is done even when we have solutions. This is
17 due to a sickness we have, and it has a name,
18 and it's behaviorally transmitted, and it
19 affects those that work with the most damaged
20 of us, and it affects us in the course of doing
21 our jobs.

22 Let's not like to ourselves. Sure, we're
23 increasing counseling, and we're increasing
24 police, but we're not doing it to help
25 children, we're increasing it to identify

1 potentially what we view, because we're
2 damaged, as bad children. There's no such
3 thing as a bad child. How dare we even
4 insinuate, as you did in your evaluation of the
5 PROMISE program, that sometimes the point is
6 reached where the children just have to be
7 incarcerated. Really, in what world does any
8 child ever deserve incarceration? That's our
9 sickness speaking when those words are uttered.

10 We target potential problems not out of a
11 sudden urge to provide help, not out of
12 empathy, but out of a reactive fear, okay? Our
13 superintendent is now brining in the Center for
14 Mind, Body, Medicine Dr. Jim Gordon. He's
15 worked with Kosovo, he's worked with Gaza --

16 CHAIR: All right, Mr. Sirbola, thanks for
17 your comments. Your three minutes is up (sic).

18 MR. SIRBOLA: Thank you very much for your
19 time. I appreciate all of your efforts, truly.

20 CHAIR: Thank you. All right, anybody
21 have anything before we recess for the day?
22 All right, we'll see everybody at 8:30 tomorrow
23 morning. Thank you.

24 (Thereupon, the above meeting concluded.)
25

C E R T I F I C A T E

(STATE OF FLORIDA)

(COUNTY OF BROWARD)

I, NIDELIS GONZALEZ, Reporter, certify
that I was authorized to and did report the
foregoing proceedings and that the transcript is a
true and correct transcription of my notes of the
proceedings.



NIDELIS GONZALEZ, Reporter
Commission Number: FF188630
Expires: 01/11/2019

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(STATE OF FLORIDA)

(COUNTY OF BROWARD)

I, NIDELIS GONZALEZ, Reporter, certify
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proceedings.



NIDELIS GONZALEZ, Reporter

Commission Number: FF188630

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