WAYS & MEANS COMMITTEE
Tuesday, May 26, 2026 @ 10:00 a.m.

Matthew Brassard, Chairman
Ike Tyler, Vice-Chairman

Chairman Brassard called this Ways and Means meeting to order at 10:00 a.m. with the following supervisors in attendance: Clayton Barber, Matthew Brassard, Chris Clark, Timothy Follos, Ken Hughes, Mary Lamphear, Tracie McGill, Steve McNally, Clayton Menser, James O'Bryan, Timothy Pierce, Richard Preston, Cathleen Reusser, Matt Stanley, Davina Thurston, Michael Tyler, Joe Pete Wilson (left at 11:12) and Meg Wood.

Department heads present: Mike Mascarenas, Jim Dougan, Hannah Carson and Dan Manning. Judy Garrison had been previously excused.

Deputies present: Bill Tansey, Dina Garvey, Todd Hodgson and Michael LaVallie.

Also present: Andrew Stanley, Nate Jones

BRASSARD: 10:00 AM, we will call the Ways and Means Committee to order. We'll start with a salute to the Flag.
At this time, I will call for a short recess for the Memorial Day observation ceremony.
Moved by Ken, seconded by Ms. Reusser. All in favor. We're in recess.

THIS COMMITTEE RECESSED AT 10:02 AM FOR THE MEMORIAL DAY OBSERVATION CEREMONY.

BRASSARD: Can I get a motion to go back into session? Moved by Mr. Hughes, seconded by Mr. Piece.

WE RECONVENED THIS WAYS AND MEANS COMMITTEE MEETING AT 10:15 AM

BRASSARD: Okay, we are back in session, start with a roll-call.

PUBLIC SAFETY
Monday, May 11, 2026
Chairman – K. Hughes Vice-Chairman – D. Thurston

RESOLUTION AUTHORIZING THE COUNTY CHAIRMAN OR COUNTY MANAGER TO EXECUTE A CONTRACT WITH RS TELCOM, INC. IN AN AMOUNT NOT TO EXCEED $6500.00, FOR MAINTENANCE ON THE COUNTY MICROWAVE SITE AT MONKTON WITH FUNDS TO COME FROM BUDGETED FUNDS.
Barber, Tyler

RESOLUTION AUTHORIZING THE EMERGENCY SERVICES DEPARTMENT TO APPLY FOR THE STATE FISCAL YEAR 2025 AND STATE FISCAL YEAR 2026 OPERATIONS GRANT IN THE AMOUNT OF $405,532.00.
Hughes, Stanley

RESOLUTION AUTHORIZING THE PURCHASING AGENT TO PURCHASE REPLACEMENT RADIO PARTS ON STATE CONTRACT FROM MOTOROLA SOLUTIONS IN THE EMERGENCY SERVICES DEPARTMENT, IN THE AMOUNT OF $30,879.08, WITH FUNDS TO COME FROM BUDGETED FUNDS.
Pierce, Menser

RESOLUTION AUTHORIZING THE PURCHASING AGENT TO GO OUT TO BID AND ACCEPT BID FROM EMERGENCY MANAGEMENT RESOURCES LLC, TO PROVIDE EMS BILLING SERVICES WITH FUNDS TO COME FROM BUDGETED FUNDS.
Barber, Clark

RESOLUTION AUTHORIZING THE COUNTY CHAIRMAN OR COUNTY MANAGER TO EXECUTE A SECOND AMENDMENT TO LEASE AGREEMENT BETWEEN ESSEX COUNTY AS LESSOR AND NEW YORK RSA 2 CELLULAR PARTNERSHIP D/B/A VERIZON WIRELESS FOR THE BELFRY MOUNTAIN TOWER SITE AMENDING THE LEASE AGREEMENT TO MODIFY THE DESCRIPTION OF THE PREMISES AND REPLACE THE CURRENT EXHIBIT A AND EXHIBIT B WITH AN UPDATED EXHIBIT A AND EXHIBIT B.
Pierce, Menser

BRASSARD: Any discussion?

HUGHES: I believe there was conversation about seeing the updated Exhibit A and Exhibit B.

MASCARENAS: Yeah

HUGHES: Is that happening for next week?

MASCARENAS: Mr. Tansey worked on this with the department directly. In terms of an updated Exhibit A and Exhibit B. What were the specifics in the update?

TANSEY: The specifics in the update is they want to move the tower, I think it was 120' - 140', it should read, 140'-145' and then there was a description of the easement. Right now, the easement says they have access to the tower site. The amendment exhibit gives them an easement over our easement, the County easement, which crosses two private parcels from the county road up to the tower site.

HUGHES: Is that something that we'll see? Certainly, I trust Mr. Tansey implicitly, but I am just curious if that is a document that we'll actually have in front us.

TANSEY: I think I did say that I would get the actual exhibits here today and I did not, so I make sure that happens, so you see them before Monday's meeting.

HUGHES: Thank you very much.

BRASSARD: Any further questions? Being none, all in favor - aye? Opposed? Carried.

RESOLUTION AUTHORIZING THE COUNTY CHAIRMAN OR COUNTY MANAGER TO EXECUTE A CONTRACT WITH OMNI CARE FOR PHARMACEUTICAL SERVICES IN THE ESSEX COUNTY CORRECTIONAL FACILITY
Thurston, Tyler

ECONOMIC DEVELOPMENT
Monday, May 11, 2026
Chairman – M. Stanley Vice-Chairman – K. Hughes

NO RESOLUTIONS

HUMAN SERVICES
Monday, May 11, 2026
Chairman – D. Thurston Vice-Chairman - C. Reusser

RESOLUTION AUTHORIZING THE DEPARTMENT OF SOCIAL SERVICES TO ENTER INTO AND EXECUTE WORK-SITE AGREEMENTS WITH MUNICIPALITIES, NON-PROFIT ORGANIZATIONS AND PRIVATE SECTOR EMPLOYERS FOR OPERATING THE SUMMER YOUTH EMPLOYMENT PROGRAM
Reusser, Wood

RESOLUTION PROCLAIMING MAY 2026 AS "MENTAL HEALTH AWARENESS MONTH" IN ESSEX COUNTY
Lamphear, unanimous

RESOLUTIOIN AUTHORIZING A BUDGET AMENDMENT IN THE MENTAL HEALTH DEPARTMENT INCREASING REVENUES AND APPROPRIATIONS IN THE AMOUNT OF $9,500, ADIRONDACK COMMUNITY FOUNDATION
Stanley, Tyler

RESOLUTION AUTHORIZING ADIRONDACK HOMEWARD BOUND TO UTILIZE AN AMOUNT NOT TO EXCEED $20,000.00, OF STATE FUNDING FROM THE OFFICE OF MENTAL HEALTH THROUGH THE JOSEPH P. DWYER PROGRAM, TO PURCHASE CAMPING EQUIPMENT FOR VETERANS
Menser, Pierce

BRASSARD: Discussion?

HUGHES: If I remember, also correctly, the budget that was proposed for this was much less than $20,000.00

MASCARENAS: Correct, so we did make the change to the not to exceed amount that you offered.

HUGHES: Oh yes, okay, thank you.

MASCARENAS: But you are correct, camping equipment is less than that. Now, understand that these funds are obligated to be used for these purposes and these purposes only for veterans. If anything goes unspent, it will simply go back over into the Dwyer account and cannot be utilized for General Fund maintenance. So, a few extra bucks allocated, right now, is fine. It can't really be used for anything else other than that anyway and we did change the language, as you suggested.

HUGHES: And I very much appreciate that reminder, thank you.

BRASSARD: Any further questions or comments? Being none, all in favor - aye? Opposed? Carried

RESOLUTION AUTHORIZING THE APPPOINTMENT OF DR. MARY HALLORAN TO THE ESSEX COUNTY COMMUNITY SERVICES BOARD FOR A TERM EFFECTIVE APRIL 8, 2026 TO DECEMBER 31, 2029
Clark, Reusser

RESOLUTION AMENDING RESOLUTION NO. 38 OF MARCH 2, 2026, AUTHORIZING BUDGET AMENDMENTS FOR VARIOUS DEPARTMENTS FROM THE HEALTH DEPARTMENT TO INCREASE REVENUES AND APPROPRIATIONS IN THE AMOUNT OF $377,917.26, CARRYOVER 2025 UNEXPENDED GRANT FUNDS
Tyler, Thurston

RESOLUTION AUTHORIZING THE HEALTH DEPARTMENT TO APPLY FOR THE NEW YORK STATE GOVERNOR'S TRAFFIC SAFETY COMMITTEE HIGHWAY SAFETY GRANT IN THE AMOUNT OF $3500.00
O'Bryan, Barber

RESOLUTION AUTHORIZING THE HEALTH DEPARTMENT TO APPLY FOR THE NEW YORK STATE GOVERNOR'S TRAFFIC SAFETY CHILD PASSENGER SAFETY GRANT PROGRAM IN THE AMOUNT OF $5,720.00
Stanley, Wood

RESOLUTION AUTHORIZING A BUDGET AMENDMENT IN THE OFFICE FOR THE AGING DEPARTMENT INCREASING REVENUES AND APPROPRIATIONS IN THE AMOUNT OF $141,798.96, CARRYOVER UNEXPENDED 2025 UNMET NEEDS FUNDING
McGill, Barber

DEPARTMENT OF PUBLIC WORKS

Monday, May 18, 2026
Chairman – C. Barber Vice–Chairman – C. Clark

RESOLUTION OF APPRECIATION TO THE ESSEX COUNTY BUILDINGS AND GROUNDS STAFF
Clark, unanimous

RESOLUTION AUTHORIZING THE COUNTY CHAIRMAN OR COUNTY MANAGER TO EXECUTE A CONTRACT AMENDMENT WITH SRA ENGINEERS IN AN AMOUNT NOT TO EXCEED $7,660.00, TO PROVIDE PROFESSIONAL ENGINEERING SERVICES INCLUDING GEOMORPHIC EVALUATION FOR THE FISK ROAD OVER MCKENZIE BROOK CULVERT REPLACMENT PROJECT LOCATED IN THE TOWN OF MORIAH, WITH FUNDS TO COME FROM US FISH & WILDLIFE FUNDS
Tyler, Menser

RESOLUTION AUTHORIZING THE COUNTY CHAIRMAN OR COUNTY MANAGER TO EXECUTE A CONTRACT AMENDMENT WITH SRA ENGINEERS IN AN AMOUNT NOT TO EXCEED $7,580.00, TO PROVIDE PROFESSIONAL ENGINEERING SERVICES INCLUDING GEOMORPHIC EVALUATION FOR THE ADRIANS ACRES OVER SLIDE BROOK CULVERT REPLACMENT PROJECT LOCATED IN THE TOWN OF KEENE, WITH FUNDS TO COME FROM US FISH & WILDLIFE FUNDS
Wilson, Thurston

RESOLUTION AUTHORIZING THE COUNTY CHAIRMAN OR COUNTY MANAGER TO EXECUTE A CONTRACT AMENDMENT WITH ALL STATES CONSTRUCTION, INC., IN AN AMOUNT NOT TO EXCEED $167,703.75, FOR THE FORGE LAND OVER THE BOQUET RIVER BRIDGE SUPERSTRUCTURE REMOVAL PROJECT, LOCATED IN THE TOWN OF ELIZABETHTOWN WITH FUNDS TO COME FROM BUDGETED FUNDS
Reusser, Pierce

RESOLUTION AUTHORIZING THE DEPARTMENT OF PUBLIC WORKS TO APPLY FOR A FEDERALLY FUNDED BUILD GRANT TO CONDUCT STUDIES ON THE ENSIGN POND ROAD FLOODING ISSUES
Clark, Hughes

BRASSARD: Discussion?

MCNALLY: Yes, Ensign Pond Road is a corridor that is used by many, many people from Moriah out. Yesterday, I happened to be travelling that road and got into about a 1' of water. This is not something that these people do, this is a public safety issue. There was cars driving through it and I drove through it myself. What is the liability is one of our people drown in that? Knowing that there's a problem there. The alternative is not to close that road. We can't close that road; people use that road. We need to do something in an emergency basis, and I am not sure what that is. It's close to a state of emergency and we need to do something with this road. If you haven't traveled across there. Yesterday, I followed 4 cars through that mud puddle, it was 100' long and this has to be addressed very, very soon, before we end up losing somebody. It's a safety concern.

BRASSARD: Absolutely, I echo that statement. I was talking to Mr. Stanley through DPW earlier, I mean we're going to on the Tracy Road, towards the end of summer, which is the other way out of Moriah, I guess you could say the Northway. That's expected to be closed for a couple of weeks. So, everything is going to be going out the Ensign Pond Road, late this summer. So, we definitely got to figure something out.

MENSER: Several years ago, the Rock Cuts Road going into Moriah/Port Henry area, they had to actually raise the entire level of the road. They spent months doing the work, but it has paid off because that used to be a very dangerous place because of flooding and that's no longer an issue. I think this is extremely important to be addressed correctly.

MASCARENAS: To speak to a little bit of the history on that road without getting long winded, that road has been raised before. The issues that we continue to deal with on that road are the surrounding lands, the sediment, the beaver dams, all those fun things that we get to deal with. The bigger issue, I think we have ideas, we know how to fix it. What we're really trying to make evident is that the property around it needs to be maintained or we're going to be revisiting this in another 25 years, somebody's going to be raising that road again. Because not dealing with the problem is putting a band-aid on the solution. So, I think what we're really trying to do is come up with a well thought out plan that will fix the problem indefinitely and making those landowners that are largely New York State lands that surround this property aware of the issue. We met them onsite; we met them last fall. So, they have been put on notice in terms of their impact that their property is having on our property, but no solutions have been come up with. So, yes, we can fix it. Yes, we have ideas on how to fix it. It's just that we think the people that are indirectly destroying should also have some skin in the game.

BRASSARD: Any further questions or concerns? If not, all in favor - aye? Opposed? Carried.

PERSONNEL

Monday, April 18, 2026

Chairman – M. Wood Vice-Chairman – C. Reusser

RESOLUTION IN SUPPORT OF CONTINUING THE NEW YORK HIRING FOR EMERGENCY LIMITED PLACEMENT STATEWIDE (NY HELPS) PROGRAM IN ESSEX COUNTY
Wood, Hughes

RESOLUTION AUTHORIZING THE APPOINTMENT OF ANNE PAULSON AS A TRUSTEE OF THE CLINTON, ESSEX, FRANKLIN LIBRARY SYSTEM FOR THE TERM OF 01/01/26 - 12/31/30
Wilson, Pierce

FINANCE/TAX REDUCTION/MANDATE RELIEF

Monday, May 18, 2026

Chairman – I. Tyler Vice-Chairman – J.P. Wilson

RESOLUTION AUTHORIZING A BUDGET TRANSFER IN THE TREASURER'S DEPARTMENT IN THE AMOUNT OF $74,494.47 FUND BALANCE (TAHAWUS OVER SANFORD LAKE PROJECT) TO THE COUNTY ROAD FUND
Clark, Tyler

RESOLUTION AUTHORIZING A BUDGET TRANSFER IN THE TREASURER'S DEPARTMENT IN THE AMOUNT OF $34,097.05 FUND BALANCE (INTERBROOK OVER

JOHNS BROOK) AND $57,637.06 (UNALLOCATED BRIDGE) TOTAL $91,734.11, TO DEBT SERVICE FUND
Wilson, Tyler

MISCELLANEOUS

RESOLUTION RECONGNIZING LONG TERM EMPLOYEES FOR THE MONTH OF JUNE
Brassard, unanimous

BRASSARD: Anything else?

MCNALLY: Yes, on your desk, I had Judy print out a resolution. This is from Bil McGahay, he is our Representative on the OTB Board. It's Senate Bill S9545, sponsored by Senator Fahy and Assembly Bill A10231, sponsored by Senator McDonald. What basically this is, is the winning tickets from OTB that aren't cashed, the State seems to keep that money, and we believe it should be brought back to the county coffers. So, this is the resolution in support of that. I would move that.

BRASSARD: Motion by Mr. McNally. Do I have a second? Mr. Pierce

RESOLUTION IN SUPPORT OF SENATE BILL S9545 (FAHY) / ASSEMBLY BILL A10231 (MCDONALD) AND RELATED LEGISLATION AMENDING THE RACING, PARI-MUTUEL WAGERING AND BREEDING LAW TO DIRECT UNCLAIMED WINNINGS AND PART-MUTUEL TAX REVENUE TO PARTICIPATING CAPITAL OFF-TRACK BETTING CORPORATION COUNTIES
McNally, Pierce

BRASSARD: Any discussion?

WOOD: I am just wondering, do you have any sense of how money isn't collected?

MCNALLY: No, I don't. I believe it's substantial. I mean, I don't think it's $100,000 because OTB doesn't do that in our County, but whatever it is I believe we deserve it before the State.

BRASSARD: Any other questions or concerns? All in favor - aye. Opposed? Carried
Anything else? Okay, at this time I am going to have Todd and Nate come up and do a presentation on the Radio System.

MCNALLY: Just remember that Adirondack Association of Towns and Villages is having our spring conference in Lake Placid, Sunday and Monday. Great speakers from the Rail Trail, Association of Towns, the legal department is going to be there to discuss different things, and we also have Jennifer Menary, who is the compliance officer for NYSERDA who is going to speak on battery storage. She is the source for battery storage, if you want to fight that battle. So, get sign up and it's going to be a good time, thank you.

FAVRO: Good morning, everyone. Thanks for letting us take some of your time this morning. I know everyone is busy here.
As we all know over a relatively short period of time, we've had some significant staff turnover in the Emergency Services Department and when that happens you lose your institutional knowledge on things like your radio system. As a result of this the Department became

increasingly dependent on vendors to manage our system on our behalf and in some cases the management wasn't always aligned with the best interest of the County or our taxpayers. In recognizing this concern, we reached out to Jim Dougan and DPW to see if he had anybody in his engineering department that would be willing or able to step in and help us do a deep dive into the radio system. Over the past year we have worked very collaboratively with Nate and Todd and Mike LaVallie to do a deep dive into the system. We've learned a lot, we still have a lot of learn, but we feel that we're to the point now that it's important, we start to bring everybody up to speed on the condition of the system, what you have for a $21 million asset and looking forward to maintaining it a little bit better than it had been. So, with that being said, I am going to turn it over to Nate and Todd and Mike and they can give you a rundown on what we've been up to for the past year.

HODGSON: There's a few reasons why you should pay close attention today. One is usually when we start talking about things it involves money. Two is there is a lot of information that is contained in some of these slides as background in history and the third is that there is a quiz, just so you know (laughter).
I am not asking for $21 million, by the way, but this is roughly what the Board spent, leading up to 2015 on the radio system. So, this is a pretty significant asset of Essex County that Essex County Emergency Services and now DPW are involved with, but it doesn't represent the entire value of the radio system. Some of those components are legacy components, tower sites and other pieces of infrastructure, roads, generators, that comprise this system. So, it's a lot of money that Essex County has in assets.
Radio waves, what speed do they travel? At the speed of light, that is how fast they travel. We'll get into why that matters, because it's sub-second intervals that make the difference of whether or not a vote scan goes from one tower to the next. How far do radio waves travel? It depends, it depends on frequency, it depends on other factors of the system. Which is better, high band or low band? That depends on your typography, it depends on the amount of data that you need to send or different aspects of radio engineering. Is your cell phone a radio? It is, your cell phone is actually a very sophisticated radio and we're going to get into a little bit of the details of it because I think it's applicable to our radio system and some things that we need to learn from them. Is cell phone coverage getting better? It depends, but I would say that it's getting worse and again, we'll get into the details of why that is.
Radio basics; I don't know that we need to go into all of these, but I'll highlight a couple of them. Let's talk a little bit about low band, in fact very low band, as in VLF. That is down in the basement as far as frequencies are concerned, 10htz, 30htz, those frequencies have a very specific use. They're used by the US Military for submarine navigation. This is the frequency that can penetrate through the ground into the water to allow a sub to operate. So, radio frequencies, not one is better than the other, kind of like it depends. It depends on what you're using it for. As you can see there's FM modulation, frequency modulation, we have our public safety grade radio spectrums, in fact there's one that's missing there that we use. That would be considered our low band, that's in the 45.

JONES: So, it's going to be our low band public safety system that we own is between 40 megahertz and 50 megahertz with the paging system being on 46.

HODGSON: And then we have cell phones which have quite a range. Some of them start off in like the 700-800 range. They're now into 4G, 5G which there's some good and some bad with that. 900 megahertz, those that have water systems, that have water meters, your system travels on a spread spectrum mesh network most of the time.
Special use conditions; very local, a lot of information, a lot of data, but not travelling very far.
And then you have channelized Wi-Fi, like what's in this building.

So, this is frequency coordination; there's a lot of little blocks there about all the little various aspects of radio licensing and coordination. This is just in the United States, because we're very close to the Canadian, one of the challenges we have is also meshing our licensing with the Canadian FCC.
A little bit about cell phones; because of the close parallels we have frequency pairs with the cell phone. A cell phone has a transmit and receive frequency. Those are two different frequencies that are associated with your cell phone. They have tower sites; your cell phone does not work cell phone to cell phone. My cell phone doesn't call Nate directly. That cell coverage is carried by tower sites that are connected by a backhaul There is a core network computer that makes a decision on where that call routed through the cell system, and they have a voted system. In other words, is where a tower site that's picked up that's got a better single that's kind of outside your typical area picks up your call on a different layer of that system. That voting is made on a millisecond basis because of the speed that these singles travel.
Okay, 5G, 4G, 3G; this is just a quick overview. I guess what I really want you to know is that some of the moves have been for good reasons. The number of calls, the number of people that have cell phones, the more data that we are requiring of these systems, but it comes at a cost and that cost is for coverage. The higher the frequency, the more difficult it is to have that frequency penetrate into our very rugged terrain. That is a significant problem for us. Now, that problem goes away when we have special events and put up special towers that help that communication and we find how good cell phone coverage could be during the University Games, I think is what it was, but then when they take it away, we're back to where we were.
So, this is a little bit of how terrain affects cell coverage and then the same thing applies to our radio system, reflection, refraction, absorption, you know dense areas of tree cover absorbs some of those frequencies, deep valleys like Keene, Schroon Lake, Newcomb, our challenge is for the radio system. Also, summits, if you're on top of a mountain and you're making a call, more towers can see than if you're down in the valley and only one tower sees you. That can cause vote scan issues for a cell carrier.
Regulatory Agencies; the Adirondack Park has a huge influence on cell phone coverage because it limits the areas where we can have cell towers and it limits the areas where we at Essex County can have cell towers as well as the State land limitations to heights. The Canadian FCC, like we discussed also.
This is a map, this is the latest survey that was done, I think it was last year, I think. Those are the four carriers in the area and those are the designated areas where cell phone coverage is a problem, ironically, those are the areas that we have a problem with the County radio system, btu to an extent.
So, why are we talking about cell phone coverage? Because we have the same components in our radio system. We have a backhaul, we have a core, we have tower sites, we have frequencies that are allocated to us and we have voting, a voted system. We have a core computer that makes those split second decisions for where those radios are going to be picked up and where those transmissions go. We have high and low band in our radio system, and we do struggle from time to time having reliable coverage. We are working diligently and it's been great working with Josh and Mike on this. We're overcoming some of those challenges, but we know we have a long way to go as well.
The next slide is you.

JONES: Good morning, everyone, just for introduction, my name is Nate Jones, and I work under Jim and Todd, DPW and have been assisting on the radio investigation project.
So, just trying to go over historically what we have. So, historically, before you built system that we have now that works really well, we had 3 sites. We had the farthest southern site being Gore, the farthest northern site being Palmer Hill in AuSable Forks, and centrally located site being Belfry Mountain. And as you can see here, we have four channels. It wasn't super complex; it was

pretty simple. The biggest thing that we learned in doing some of the historical study is how actually, before we had a massive county radio system it was kind of broken up into different little sections. You have Ticonderoga, Chilson, Crown Point that kind of had their own thing going with their own dispatch center. You have Willsboro, Schroon Lake and North Hudson that were high band paged and you have a couple of people that were on low band paged. So, it was a very interesting hybrid system back before they built this new radio system. But the biggest thing was with this historical system that all the lines were what they called phones lines, so you get the phone call on your old landline and that is what was connecting the sites together was a phone line, literally a Two Pair phone line. So, that had some reliability issues.

So, we were trying to figure out what was the justification for the new radio project. Why did they come to the Board back in 2008 and ask for a new radio system? It really steamed from a lack of available low band equipment. The vendor at the time started to realize that there's a lack of available equipment coming for the low band system. Back in the day, the system was fully tube based, meaning that the whole, the actual radio itself at a tube in it, a little radio tube that the voltage would move up in temperature and transmit. That was one of the biggest things is there was a lack of low band equipment. A lot of people were moving away from that band, due to the vendors not building it anymore. Our vendor, Wells Communications, was saying that parts weren't available, we're not going to be able to find tubes for this. So, how do we keep the system working. So, again lack of capacity. So, again you have one main talk channel, which is called trunk to trunk, 4622, well if Mike and me are using that on the scene and there's a call in Willsboro we're going to hear each other because of the way the low band functions in the County. So, it caused issues where there wasn't enough capacity when the call volume got high enough. And then there was this thing called 911, which is where they found out that a lot of these people that came to help out after the fact did not have the ability to communicate with each other. They were kind of in their own island and couldn't do anything about it. So, they created this thing called the Regional Consortiums, so every section of the State has a consortium. There is the Adirondack Consortium, the Central New York Consortium, the Western New York Consortium, these are put together to try and help figure out how does Saratoga County talk to Warren County, how does Warren talk to Essex, and so on and so forth, because again, before this was built everyone was kind of their own little silo.

So, again, what we procured through Motorola in 2008 and built in 2013 was a P25, which means digital radio and it was a multi case system, which means that every site transmits its own custom frequencies out to the user of the system. It was built by Motorola, and it was built in the DHF spectrum which is 150-174 megahertz. So, again we went from a low band system, 40-50 DHF. So, usually when you go from low band to DHF you have to double your sites because obviously low band has better propagation, so if you go up to DHF you got to double your sites to gain the same coverage footprint that you had. So, we ended up getting six sites, six transmitter sites. We bought a microwave system, which we call the backhaul, this is now it connects Belfry to Gore, Gore to Angier, so on and so forth and then we also built a, what they call a prime site or a core, where all the brains of this is housed at the dispatch center. The design of this system was to provide 95% coverage. So, if I am driving in Essex County, I should be able to talk in 95% of the time from anywhere in the County back to dispatch and dispatch to the user and this is procured through an OGS contract back in 2008 and through grants, thanks to Mike Mascarenas and the County Board at that time.

So, kind of tried to figure out who was involved with this project because we don't really know how this got built, so we're trying to find the history. So, we're in Essex County, we're above Warren County, which means we're above the FCC line A, so based on the baseline for us was to try and find the frequencies to do this. So, that required a lot of backdoor and talk with Motorola and we ended up actually buying for $500,000.00, frequencies from Motorola because we did not procure easily through the FCC with Canada. Canada has a thing where you can send them an email

three times and they will reject the email three times because they like to play hardball with the frequencies up there.
We had to build a backhaul so that involved shared site access because we don't own all the sites we're sitting on. There was grant applications, there was APA permits, there was project managers, clerk of the works, engineers and radio techs, so there was a lot of people involved in this radio system to build it.
So, this is a list of sites that the system is built up off. So, as you guys all know, Belfry Mountain is in Mineville. This is a site that we, as Essex County, procured a lot of fight to get to it, but technically it's our site, we own it. There are 4 channels, for fire, EMS, Sheriff and Highway and there's your low band paging and interoperability base stations, which are going to be how we can communicate to other counties when needed. We has Gore Mountain, so that's going to be the ski mountain down in North Creek, right now in the Minerva neck of the woods and that's going to be owned by DEC. Mount Defiance, same thing that's Ticonderoga, that's a big site down in Ticonderoga, really helps out down there and that's owned by Fort Ti. Angier Hill, over in Westport, right behind the Westport Fire House, is going to be owned by Vertical Bridge and again, as you can see here, all these sites all have the 4 channels of the P25 radio system.
This is just a list of sites continued. So, in 2022 we added the Monkton Site, that is owned by Wendland LLC, who is technically a HAM Radio operator who owns that site. So, that site is located in Vermont about maybe 20 minutes at the most from the New Hampshire border, it's pretty far from here. You guys know Blue Mountain with the fire tower. Palmer Hill is a historic site that we've always been on. Terry Mountain, we ended up buying it because we needed it for the microwave and that's owned by us and again, we'll show you some pictures of these sites in the next couple slides.
So, this is the big one here, so, this is what Dan Palmer put together for the Board when he brought this back in 2008-2009 timeframe. The total of this radio system was only supposed to be $10 million. That was the budget cost of $10 million, and they were going to bond for it. Well, this ended up being a $21 million project by the time it was said and done between contracts, site agreements and all that, but the biggest thing to take away is they estimated that the maintenance of this system was going to be about $168,000 annually. Well, today the actual cost to maintain this and this is just with contract is $602,000. So, the $60,000 that we put towards JBJ for low band maintenance, $20,000 towards I Am Responding through a Hazmat Grant, we have a $378,000 contract with Motorola which covers the radio system, the Motorola components of the radio system and then we have a $144,000 microwave maintenance cost that's shared between the State Police, NYSEG and us.
So, Belfry, this is a picture of the site. As you can see on the towers, you've got your antennas, your microwave and this is what's actually on the site and the actual details right off the APA documentation that we submitted to the APA.
This is Gore Mountain; this is the fire tower on Gore. It doesn't really look like a fire tower because it has so many antennas. This is a site that you have DEC, New York State Police, Warren County, and Essex County all sharing that one tower with microwave and antennas. There's a lot going on in that one little fire tower. Mt. Defiance, this is what the building looks like in Ticonderoga. The biggest thing here is you can see the low band, which is going to be the cross looking antenna, and you see how the cell antennas are right behind it, so you have a little bit of interference there with the cell provider with your low band equipment. So, you can see that these sites are very heavily built upon because they're hard to get sites in the Adirondacks, so everybody piles on and builds on them. Angier Hill; this is the one over in Westport. The top of that tower, you can see those 4 little disc shaped antennas and that's going to be your FM radio station for Classic Rock and Country. But below that is our antenna and microwave. Little Whiteface; this was built in conjunction with ORDA and New York State, we built the building as a team and that's the picture of the antenna at the top of the roof and as you can see, that white rectangle, square is where the

microwave is hanging out. So, when you actually ski on Little Whiteface, the microwave is shooting over the top of your head, it's kind of cool.
This is Pisgah Mountain; so, Pisgah is in Saranac Lake and again this is a shared site between NY State Police and Essex County. We own the building, the own the tower and the site is actually owned by Harris Maycoff, which is interesting.
So, Monkton; we don't have much information on Monkton, there's not a lot of documentation. We bought it in 2022, we built it, but we don't have any justification on why it was built and kind of the details behind it. So, that's still being investigated because it's kind of like a newer site in Essex County.
So, this is Blue Mountain, it is the NYSEG 220' tower. NYSEG owns the tower and the shelter. The only reason we're on Blue Mountain is because we have a shared agreement with NYSEG and State Police to be there. So, we'll get to that in the next couple of slides about that shared agreement.
Palmer Hill; this is our lovely telephone pole on Palmer Hill. So, this is a site that we've always had since 1998 with a lease through AuSable Telephone which became Frontier and this is a shared site between Essex County and Clinton County.
Wells Hill; this is right here in Lewis, right up the street from the Public Safety Building in the NYCO Mine and this the main hub of the microwave. This is one of the more important sites to make sure that it stays working.
And then finally we have Terry Mountain; which is your site in Peru, and this is again, a primarily a microwave site for Essex County. But Essex County is the lessor for a bunch of people like Vermont Public Radio, NCPR, T-Mobile, AT&T. So, this site is important for us for microwave but it's even more important for the people that lease from us and this is also a prime Clinton County 911 site, as well. So, again, these sites are all shared amongst multiple users.
So, we're going to kind of touch on the microwave backhaul because we showed some of the pictures of microwaves on the sites and how we got these sites. Well, the reason we're on these sites is all due to this microwave. So, the NYS Police was running on phone lines, Essex County was running on phone lines, NYSEG was trying to RF Blanking, which is where you take a radio and an antenna and point it at the site and that other radio picks up the other site's signal. So, everyone was kind of in the same boat where they wanted a really reliable way to communicate between the sites. So, Essex County in conjunction with the Motorola contact and NYS Police was going to build a backhaul that was designed to connect Franklin County to Hamilton, Clinton to Essex all to get back to Albany, to get to the main headquarters in Albany because they wanted to be able to interoperate between the groups. But the biggest problem with the microwave was the terrain, right? You can't just build a microwave in Essex County, it's super rugged. So, they actually ended up having to go around the High Peaks Region with the microwave to get it to connect into Essex County and back down to Albany.
So, again, this is just a fact that we created a shared agreement to build this massive microwave system we came up with a shared agreement through our radio attorney, Jonthan Murray, who was at the time the Clerk of the Works for the project. So, again the deal between this agreement was to figure out okay, who's on what site, how you get on that site, the payment process, who owned what. This was kind of the backbone of the entire radio system in terms of how we got there and who paid for what to build on that site. So, like on say Gore for instance, there's a brand new shelter there. Well, that new shelter was partially installed and paid for through the shared agreement. So, that's the biggest thing in this microwave system is that shared agreement is what is holding us to these sites, that's why you're not seeing bigger lease payments out to the State of New York, because we're there under a cooperative agreement.
So, we're going to get a little technical here about the microwave. Really the biggest thing to take away from this is that our Belfry Mountain site and the Wells Hill site are the two most critical sites in the microwave. If you think about it, if you lose Wells Hill and we lose Belfry, that microwave can't go anywhere and it can't take the Public Safety's Building data and get it anywhere but there

because there's no way for it to move. So, that's why at Belfry and Wells Hill they have what they call a fiber backhaul. So, there's a fiber failover in case we lose the microwave on those sites.
And then the other big thing with this one is that this was really based on 180 megs of bandwidth. So, the pipe that we were given was 180 megs wide. So, that got divvied up between Essex County, NYS Police and NYSEG and again there was an access report. And then the biggest thing here is that actually it was on Essex County to maintain this and there's a side agreement because due to the usual issues with RPFs and having vendors actually bid on them, the State Police sent over a side agreement that kind of talked about how they would like to take over ownership of the microwave in terms of maintenance and they would pay the maintenance costs to offset their bill that they didn't pay for in the initial bill. So, it gets kind of convoluted when you get into some of the side agreements.
So, here is the radio site topology; if you look here, you can see how we actually go around the High Peaks for this entire system. So, basically the ways this works is dispatch will talk on the radio and that little packet of voice will travel around the ring from Public Safety Building to Saddle Hill to Wells Hill to Belfry and then from Belfry it can either clockwise or counterclockwise around that ring, depending on where that traffic needs to go, but again, if you lose Wells or Belfry, there's no way for that to happen to go from the Public Safety Building out to the user in the field.
Any questions so far?

TYLER: Thank you for all this, but my question is, especially in this day and age, the security at these places, is in your mind, is it appropriate?

JONES: In terms of the microwave or in terms of the whole site as a whole?

TYLER: Whole site.

JONES: I would say site as a whole, a lot of the sites, everyone knows the password or combination of the lock, shares locks across users and everyone knows how to get to the site. So, between NYS Police, Essex County, and the other users on the site it comes down to the fact that they're not as secure as they should be because of sharing locks and combos amongst the different technicians. Any other questions?
Okay, we will move on to the radio system as a whole. So, this is going to get really technical really fast about the radio system. So, again just to remind you, we have a multitask system. What that means is that when the radio system transmits to the user in the field their radio's receiving a different frequency depending on where they are in the County off each site. And again, what's cool with this system is when the user talks about to the dispatcher, it actually takes all that, all their traffic between all those shared sites and votes on it, and says, okay, I like the, it has the best audio and I am going to pass that dispatch, I am also going to pass that back out to the system to the other users in the field. So, what's cool with this system is it you're technically simulcasting into the dispatching center but multicasting back out, so it's almost like a hybrid system. So, the benefit to this is the fact that I can be anywhere in the County and I have coverage and I am not tied into the issue of simulcast, which is usually lower power and terrain challenges. The multicast works around that problem, but the person who backs to the dispatcher has the benefit of all sites hearing on the same channel and it votes the best audio back to the dispatcher. The dispatcher always gets the best audio in their headsets.
So, this is the complex typology of this radio system; so, if you look inside the green box there, that's the brains of the operation. That is all your networking equipment that controls how these sites talk about to the main site which is the dispatch center. So, as you can see here, on every site you're going to see that there is what is called site gateway, which is the main router of that site, it's how network traffic is passed between the site and the dispatch center. You're going to have a switch where all your IT components are plugged into, and you're going to have your

actual base stations. So, you can see how complex this is and if you look over to your right hand side of your screen, everything on that Ray Brook site was built and installed with the NYS Police. So, this system was built specifically, size-wise to handle the NYS Police traffic. If it wasn't for them, we wouldn't need this complex of a system, that's really what we learned in this investigation so far.

So, this is the radio site typology, again, showing it that you've got your site gateway, your switch and you've got our 4 channels of your P25 system, which is again is your Public Safety Digital Radio System and those 4 channels are going to be our Sheriff dispatch; which is for the Sheriff's Department to talk about the dispatch and to each other. You have fire dispatch; which will be for all the volunteer fire departments to be able to talk to each other and back to dispatch. EMS dispatch for EMS and highway for highway. And what's kind of interesting is recently we have been trying out the highway channel and turned it into a temporary paging channel that helped offset some of the paging issues that we encountered with the low band system while we're in the maintenance of low band.

So, historically this is the map that Motorola gave to us when we bought the system and this map breaks down each site's coverage. So, if you look at the yellow, the yellow on this map is going to be Gore Mountain, the purple is going to be Little Whiteface, the red is going to be Mount Defiance, and then you can see Belfry and Angier Hill kind of overlap with each other in terms of their coverage. Belfry is that light green and Angier is that darker green and you can kind of see because of that terrain of the county how hard some of these areas are to cover. Especially in Keene and Keene Valley, Blue Ridge Road and parts of Newcomb just because of the terrain.

So, again, a system overview. The system is IP based, it's not old school radio, it's not something you can work on easily. It's IP based; you have to basically be a network engineer or IT person to work on this. We have what they called parallel M2 cores, and all the M2 means is that it's Motorola's second generation network equipment. It's the Cadillac, as Motorola puts it.

And again, the system was designed as a regional system. We have NYS Police that used it, up until a certain, but also this was designed to handle the traffic of Washington, Warren, Saratoga, Hamilton, Franklin, Essex and Clinton Counties. So, this system was really designed to handle a lot of traffic that it's currently not doing.

The biggest problem with this system right now is this networking operation. This core, if it was to go down, we would lose everything. This is nothing you can do if you lose that core. So, we've had times, and we've done testing with Motorola and the with the micro-vendor and have actually taken the radio system offline for repairs, where nothing with work until it comes back up in operation, other than you talking radio to radio.

And then the biggest thing to take away from this is realistically this system is actually designed really well by Motorola. It's a get system, it's just very complex for Essex County.

So, we're going to dive into the paging system, but are there any questions on the radio system side of it before we move onto paging?

O'BRYAN: We originally built that radio system for use, not only for ourselves, but also for the State Police, correct?

HODGSON: The State Police, Warren County.

JONES: Yup, so the State Police, Washington and Warren Counties, Saratoga and Hamiton, Franklin, St. Lawrence.

O'BRYAN: And today, we have who on the system?

JONES; Right now, it is just going to be Essex County.

O'BRYAN: Okay

JONES: The State Police are no longer on it. We're still investing how much they're tied to Essex County in terms of IP network stuff. Because again, if we can clean up some of the complexity by cleaning up some of the stuff that was installed for them that would be awesome. And that's mostly an issue because there's a food fight there in terms of how that was installed.

HUGHES: Who owes the M2 cores?

JONES: Essex County. I think some of you guys went up and Mike LaVallie showed up the data room up and the Public Safety Building one day, I believe Mike, you took them through it.

LAVALLIE: Yes

JONES: So, you guys have seen that data room, those four racks in that data room are what controls this entire radio system, from our low band to our high band to the microwave, everything is controlled out of that.
So, we'll step into the paging system, which was actually an initial request from Emergency Service for help with the paging system, because Motorola came in and said, you need a new paging system. It was going to cost $5 million; it was going to be a 1/3rd of the coverage, all these things piled on to Essex County in terms of a bigger project. So, we got asked to look into the paging system, initially.
So, we're going to kind of go through this, so, initially our paging system was, again, three sites, but in 2008 the County had the opportunity to look at different paging options. We had the option to keep the low band, what they call high band or VHF high band paging, using the simulcast; which means that one frequency is going to be transmitted across all sites at the exact same time, which is very complex and then they talked about contact paging, the little beepers you had back in the '90s that received a little text message, basically or phone number for you to call. So, those were the options that we were looking at.
So, again, Dan Palmer did a get job back in 2009 in his presentation to the Board and actually had a really good argument on why to keep the low band and really the biggest issue with going high band was that the fact that our terrain is not conducive in going high band in terms of simulcasting. If you take that one frequency, and try to pass it around the County, the terrain is actually going to affect how that signal gets out consistency, and the fact is that is going to be very expensive. So, they decided based their own internal investigation with Wells Communications to keep the low band paging and actually amplify it by adding more low band tower sites.
So, what they called this was enhanced paging. So, they took the three sites and turned it into nine sites. So, we added, we went from Gore, Palmer and Belfry and added Defiance, Pisgah, Wells Hill, Angier, Little Whiteface, and Blue. So, what we did is we took the low band coverage and actually amplified it and made it better coverage. The design is supposed to be sequential, meaning that once the tones went out to say Blue, it would go around to the nine sites, and the tones would come out to all nine sites sequentially one at a time. But, again, they still found that there were terrain issues, even with the low band there was still terrain issues. So, they ended up adding in what they call, rebroadcast devices or repages, what would take that signal from the tower site, hear it, store it and then play back locally in the township that helped with coverage.
Then the other big thing is this paging system is 100% controlled by the M2 core, that brain controls our paging system, so again there's no safety net in terms of that network if it goes down, you won't have paging.
So, again here at this one, the big thing to take away from this slide is the fact that our low band paging system is actually our low band radio system. So, currently if you were in the dispatch

system where Mike did the tour, you'll see on the console that they actually had the ability to still use the old dispatch channel 4632 and still have the ability to talk and transmit trunk to trunk, paging, all those things are still there. So, realistically, when they enhanced the paging, they actually enhanced the entire low band system as a whole and the biggest thing that we learned as engineers is that actually the dispatchers rely on low band a lot more than we figured. So, say a call comes in from Clinton County that there's a call in AuSable Forks, an EMS call, well Clinton County will actually call Essex County on low band, pass over the information of that call to Essex County to page out AuSable Forks and vice versa if Essex County was to receive a call that is in Clinton County's jurisdiction, they pass it over the low band to Clinton County to page out to their agencies. So, really today the low band is still used.

So, this is a coverage map of low band. So, basically anywhere that's green is usable coverage but you see all that red, that the High Peaks Wilderness, that's Newcomb, Minerva, that's that Vanderwhacker Mountain Forest area, that's a very hard area to cover with low band. So, even through the coastlines look good and up into Saranac Lake, Lake Placid, Wilmington, Jay, those deep valleys and heavily mountainous areas still have difficulty in paging because you're wearing a little radio on our hip and you may not receive the signal.

So, again, we'll go through the steps of how they page, this is kind of interesting. We really got into this. So, 911 will pick up the phone, you have a call for say, an EMS call in Moriah, well, the dispatcher is going to take all the person's information, they're going to put it into what is called the CAD system, so again, we have a CAD system that is shared between 3 counties, that call for service, once entered is what they use to dispatch. Now the rule of thumb in the PSAP standards, from the time to call comes in, to the time it gets dispatched is a minute and 30 seconds. That is the maximum time allowed in their PSAP standards for Essex County. So, what they'll do is they'll take what's in the pre-alert, so you have your dispatch console, and they'll push a button that will send a short tone burst out to alert the user that they're getting a call. All that is done from the dispatch console to the networking equipment out to the sites, and then again, the dispatcher is going to go through and select, okay, paging screen and again the paging system is all done by the core. The tones they use, the paging agency is all done through that network equipment. And again, they're going to select the towers, so we didn't think this was a fully single tower select, we kind of thought we hear sequential, it was going to go out to all sites, along with the voice and it doesn't. It only sends voice out to selected tower. And again, it does select the department button, the tones goes out, the dispatcher talks and the agency receives their call, their pager goes off and they respond to the call. But, when you look at this slide, you can see how complex just sending out a basic page is to the agency. There's a lot of equipment involved, a lot of networking involved and the dispatcher on the other end is trained to be able to use that equipment, but when it fails or has issues it is very hard to troubleshoot, there's so much involved in that. Any questions?

STANLEY: So, the dispatcher needs to choose where they were sending it out?

JONES: Yes

STANLEY: The system isn't smart enough to say, hey, we're paging out this department, go to this tower?

JONES: No, it's old school, single tower select. So, for Jay for instance, the dispatcher has the option to page you up on Palmer Hill or Little Whiteface and it all depends on the day. Some days, Little Whiteface may work better, some days Palmer Hill might. It's really day by day, depending on the coverage. So, we're trying to be current with this, and me and Mike have sat down and built what we call, backup paging screens. So, we figured out that, okay say, 95% of the time Little

Whiteface works for Jay, and the other 80% Palmer works and we're going to build Palmer as a backup paging resource.

STANLEY: It just seems to me that with how complex and smart the system is, you shouldn't have to rely on a person to know what tower to go to, because obviously that human error that throws a call in Jay, they could click the wrong tower and be paged to Ticonderoga and nobody even knows the call, and nobody would really understand or know that it was missed.

HODGSON: Let me make a comment on that, that is one of the reasons why both Mike and Nate have been exploring some other options. Because of the fact that we do have some problems like that, that are prone to human error. As it says at the bottom of this slide, not the entire County as once. We don't have the ability to page the County at one time and that is a problem and some of the objectives that I know that Josh and Mike have of getting the message out quicker, having more agency involvement, and more notifications. Our system on the low band side does not have that capability.

JONES: So, the way this works is in the back end, you actually program in their tone set. That tone set is programmed to a group and that group is what shows up on the console, a little button that they push. That button is tied to that specific tower meaning like programming-wise it's tied, but the dispatcher, if they select the wrong tower to talk at there will be no audit to that user. So, we do have that issue. So, what we've come up with is a short-term solution, technically long term testing is what they call P25 paging. So, because P25 is backwards compatible with analog, which is what the paging is, we are able to actually take the users tones from low band and mitigate them to high band and send them out to the existing radio system of that.

STANLEY: Is this what happens when they are times tones go out and there's no voice afterwards?

JONES: Yup, that will happen. So, what they've come up with is we've come up with a way to page over high band through the multitask radio system at the same time we're doing low band. So, what I have done on that backend, we have grouped the low band tones and the high band tones into a group button and that group button ties the low band audio to the high band audio. But, again, the problem with the low band is they still have to select the right tower, so even if the audio is going out with the high band system correctly, not everyone has high band pagers that we're still testing, but the low band could not always get the audio. There's been times when the low band has had issues before. So, like yesterday morning, me and Mike got called by dispatch, because there was an issue with Gore Mountain. Well, the Gore Mountain paging site wasn't working, so we had to go through the process of troubleshooting what that was and it ended up being the power supply which is a simple fix, but the only benefit to this system is the fact that we are able to go behind and cover Gore with a different tower site manually. But, again, it requires a dispatcher to have some knowledge of what covers what and that's not always going to be their job because they call be busy taking calls. So, it ends up, this dispatcher almost has to be a low level radio person, knows the basics of radio, which is a lot for them to handle, because if they're handling a call for a structure fire or a domestic and a cardiac patient at the same time, and there are only three of them, well they can't sit there and think about which tower is going to do it for them. Any other questions?
So, I am going to pass this back to Todd to finish it off with the good and the bad of this radio system.

HODGSON: And there have been a lot of things that have been done, we'll get into those a little bit later that both Mike and Nate, Josh, myself have been working on. But, just to recap, $21

million. We have a good radio system, there were a lot of good things that were done back then, because of the fact that we have sites that are very, very strategic for our radio system. We have, essentially, two radio systems, which is not common. A lot of other counties don't have two separate radio systems as far as the low and the high band and I would say because not all counties are like Essex County. We are the most rugged terrain in the NYS.

O'BRYAN: Isn't that why this was built in this fashion?

HODGSON: Yes, if you look at the tower sites, some of them are way outside of Essex County and that's part of the reason is to get around the High Peaks.
The other thing is we do have a shared radio agreement. That has helped Essex County in at least one sense, occupy the sites that we have.
Here is some of the bad; we actually got involved because of paging. In decisions with Mike and Josh, because the vendor at the time that was taking care of this said that we had to spend $5 million on a new paging system, like right now, because they couldn't maintain what we had. We've since found out that that's not necessarily the case, so you guys haven't spent $5 million.
Essex County was informed that the core will be unsupported in 2028, that's not that far away and you've seen a little bit of the intricacies of the core to understand that this is the core to our radio system.
We have had a lack of maintenance in some cases. Both Mike, Josh, myself and Nate have been heavily involved in tracking down some the maintenance issues. Some of the issues that we have had are bad antennas, bad coax, configuration files that were incorrect. So, there's been a lot of chasing things down as far as problems are concerned and the system, although in one sense isn't that old, you know how electronics are, things go out of date very quickly.
We have a very high maintenance contract. It's $600,000+ annually. That's a big chuck of change for carrying in the budget for the maintenance of the system.
We are a little bit vendor locked with the equipment that we have. We can't just pull in any switches into our computer system that runs the radio system. So, we're very heavily dependent on one vendor at this time. It is very complex. We are limited in our frequencies.
Our shared agreement is out of date for where we stand. A lot of time has passed, the way that those agreements were, are different that how we stand today and some of our leased areas have expired. So, we're at a junction here where some decisions will need to be made.
And just at the bottom of the slide, the need. We are going to need some funds for the maintenance of the system. We need a plan before 2028, now we're told that that might be a little bit later, how those things go, but understand that this radio system is currently operating on Windows 10. That's no longer supported, so these are real, real issues that we are facing, and we need a plan and then we are needing a capital improvement plan for the things that do need to be replaced and how this system will be paid for as we look in the future. You know, this effects what we do every day and how we look at the radio system.
Thank you for attention for a long period of details of the radio system and again, thank you.

STANLEY: I would just like to say as an engineering nerd this was incredibly awesome to listen to, and you guys have done a massive amount of work to understand what was left to you. So, first of all, I think Essex County is extremely lucky to have you guys working on this project and if we didn't have you, we would probably be talking about millions of dollars just to get the knowledge that we currently have. So, thank you and I think this project is much more complex than I think even the original makers of this system would have ever thought and coming from when this was created and started to be thought about in 2008 until now, like technology has just quadrupled in speed or more actually, that is probably being very conservated, but understanding and knowing where we can go, what we can do, what do we need, what do we not need, I am sure that when you start looking at this process it was, what can the vendor get out of, for money,

for what they were trying to get. It sounds like the system is massively overbuilt for what it's utilized. So, kudos for you guys, can't wait to hear recommendations moving forward. I was waiting for the ugly, I saw the good, the bad and I didn't see the ugly.

HODGSON: We left that part out and really thanks for Mike, Josh. It's been a really good working relationship with DPW working together with Emergency Services on that. You know, collectively, as a whole we can accomplish so much more because of that collaboration. So, again we really appreciate that and Nate, also, you know, thank you for hiring him. It's tough sitting next to him every day, listening to radio, but you learn a lot (laughter).

REUSSER: I can't help but think that maybe the State should have some skin in this game with the aspirations of bringing the Olympics back here in 2040 and so on and so forth and the reliability of services in this terrain would be of interest to them. Is there anything there that we have an awareness of?

MASCARENAS: Yeah, so what you saw is chapter one and chapter two and finale are to follow. You know doing an asset management plan is currently where we're at and we're getting that documentation together, life expectancy, those types of things. Then that will be followed by a plan of finance. That plan of finance will come from me and using their help and their expertise, we've done this together and awful lot. The plan of finance will also, hopefully, have a list of potential funding partners attached to it that we'll be able to take advantage of. So, much like you and your own communities when you're doing wastewater/water projects, those types of things know that this is really the starting point. I can tell you for certain in 2008, the County didn't have the capacity we do today to do what these gentlemen did. We absolutely did not. We're very fortunate to have that level of expertise and boots on the ground to where we're not overly reliant on a vendor who's making our decisions from afar and I am not saying that all vendors are bad. I am not saying that. What I am saying is, I've worked with a lot of them through the years and their jobs are to get repeat business and that repeat business is what keeps them motivated and going. The M2 core that you saw there, that was a major dollar figure a lot of years ago. So, I am expecting that will be quite high, we'll start looking at some of those replacements. Mr. Stanley, you did hit on it, and I know your brain is going a million miles an hour, we do need capital planning around this. This Board has started to head in the right direction in terms of having funds set aside for specific purposes. This is our largest asset, really and arguably the most critical in the terms of the reliance of not only the 4 million visitors that come to Essex County annually, but the 36,000 that live here and depend on an ambulance showing up or a fire department showing up when they're at a time of need. It's critical that we have those dollars planned.
Our predecessors did a really nice job making sure that we had coverage and a reliable system, they really did. We weren't so sure when we started this, but the more we've learned, the more investigations that we've done, they did an excellent job. Where we fell short was planning for future finance and how are we going to maintain through operations and maintenance costs a system that is this large. We are the hub for that Adirondack consortium. Without us those other counties are not going to be able to talk to one another. There's a lot more detail that I am sure that Nate would love to get with anybody when they have a minute and want to talk about radio, but kudos to them, really, because just in this small investigation they saved us probably $100,000-$150,000 and not having to get a 3rd party consultant. There are lots of options, from maintaining with the current vendors to total rebuilds, all those things are going to be options. There's also the do nothing option, that's always an option. That's usually not a good one, but it's an option. So, again, chapter two will be coming, it will take some time to get there, but by end of summer I would like to have a capital account established so that we can continue some of these break, and fix items that need to happen now. You're seeing those come in front of you. I don't want to be in that position. There's a certain amount of that we can't control. An antenna gets hit

by lightning, we got to go and fix it, it just has to happen, but we want to be more proactive in terms of getting out in front of potential items before disaster hits.

STANLEY: Now, of course technically has changed. Cell service is on of those issues, as this is being built out and looked at is there a way a cell can be made better? So, last weekend in AuSable Forks in our hamlet, someone dialed 911 from a cell phone in a parking lot, couldn't get any signal and unfortunately that incident ended up in the loss of life. As we build this out is there the ability to utilize cell or enhance cell so that when a 911 call is actually pressed it takes priority over everything else that is in the network?

HODGSON: We have given some of that some thought. In fact, with Mike Mascarenas, he posed the question, what about the 911 call that can never be made, to your point and there it is unfortunately. It's a serious concern up here and so we have looked at ways, when we make improvements to make improvements to cell coverage also. We have some of the same infrastructure, as we were talking about. We have a backhaul. We have a voted system. There are things that we may do to comingle those things. Part of it is providing service to our constituents, but also the more partners that you have in a system, too, if it's a good partnership, you know the multiple benefits that it brings and again, very, very good point.

MASCARENAS: Yeah, and I also think you bringing up matters. We often don't hear about the cell call on 911 that's never made because no one tells the story and I think telling those stories more frequently when they happen, I-87 coverage ended up happening because there was a death, two individuals froze to death while going off the Northway, both with fully charged cell phones in their pockets and that got people's attention. So, when those things are happening, we need to let our people know at the State and Federal Government that we need better coverage in our area. You get a new cell phone, and it works worse than your old one because your upgrade is less powerful or the frequencies are different than what you previously had and it's definitely not an upgrade. So, I think just telling the story can help a great deal, too.

BRASSARD: Any other questions?

HUGHES: I just want to point out, thank you very much, I echo what my colleagues have said here today. I think from a Public Safety Committee standpoint it is important to keep the Committee and Board updated about the low hanging fruit. Some of that stuff is pretty easy for you guys to tackle and some of it's much larger, much heavier, and multi-year, but some of the small stuff that you guys can work together as departments to tackle and get done, I think it's important for us to see that and know that and really high that. This is a big deal and you guys are all poised to be in the right spot to move forward. So, keep us in the loop and I look forward to the plans, I look forward to the financials, seeing how that's all going to come out. We're all in the right position to move forward and this is perfect, so keep up the great work, thank you.

BRASSARD: Anything else before we adjourn? Okay, thank you.

AS THERE WAS NO FURTHER BUSINESS TO COME BEFORE THIS WAYS AND MEANS COMMITTEE MEETING, IT WAS ADJOURNED AT 11:40 AM.

Respectively Submitted,

Dina L. Garvey, Deputy Clerk
Board of Supervisors