



Innovate to Illuminate:

TEXAS 9-1-1 CENTER'S
TRAILBLAZING RTT JOURNEY

Toni Dunne

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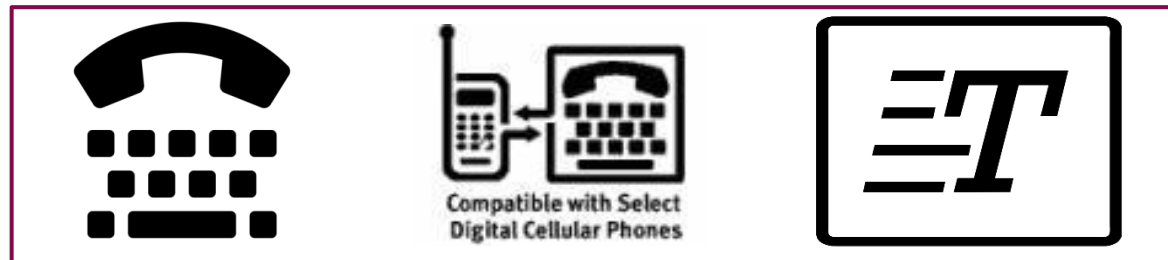


Toni Dunne

NENA RTT WORK GROUP CHAIR

Historical Review

- ▶ **1990 – US Americans with Disabilities Act**
- ▶ **1997 - FCC 94-102 Rules regarding 911 calls & wireless carriers**
- ▶ **1997 – CTIA / ATIS Wireless E911/TTY Forum: TTY access to 9-1-1 over digital wireless systems**
- ▶ **2015 – FCC adopts SMS Text to 9-1-1 rules**
- ▶ **2016 - FCC adopts RTT Rules & establishes Text Registry**
- ▶ **2021 – FCC expands Registry to include RTT**



NENA-INF-042.1-2021

- ▶ **NENA PSAP Logistics Committee** – RTT Work Group established

Co-Chairs: Toni Dunne, ENP, and Sandra Dyre, ENP

- ▶ Developed the [PSAP Guidelines for RTT Readiness Information Document](#)

- ▶ Approved & Released Monday, February 1, 2021

- ▶ www.nena.org/rtt-doc

- ▶ www.nena.org/page/standards

Overview & Text Differences

Topic	TTY	SMS Text-to-911	Native Real-Time Text
Latency	Real-Time over Voice Network	Store and Forward Control Signal/Channel Service	Real Time over Voice Network
Connectivity	Originating Service Provider to SR or LNG	TCC to SR, TCC to ESInet/NGCS or TCC to PSAP	Originating Service Provider to ESInet/NGCS, ESInet/NGCS to the PSAP
Routing	Same as Voice calls	By TCC using cell or Commercial Location Based Services	Same as any NG call
Protocol	TTY/Baudot (TIA-825a) over standard voice call	Delivery mechanisms from TCC Provider: <ul style="list-style-type: none"> •Convert to TTY •Web Interface (HTTPS) •MSRP 	Delivery Mechanism from NG911 SSP via RTT/RTP (RFC 4103)
Character Set	Limited Character Set	Full Character Set	Full Character Set

PSAP Deployment Tasks

Identifies tasks and responsibilities for the introduction of RTT to 9-1-1 for PSAPs deploying NENA i3 compliant systems.

- ❖ Owners of a task (O)
- ❖ Involved (I) with the completion of the task.
Those entities are the CMSP, the NGCS provider, the PSAP or 9-1-1 Authority and the CHE Provider (combined under “PSAP” in the table).

Table 3: Real-Time Text (RTT) PSAP Deployment Tasks

TASK DESCRIPTION	RESPONSIBILITY		
	CMSP	NGCS PROVIDER	PSAP
1 - Initial Service Request			
1.1 - PSAP request for service	I	I	O
1.2 - CMSP acknowledgement of service request	O	I	I
1.3 - CMSP sends questionnaire to PSAP	O		I
1.4 - PSAP completes questionnaire	I		O
2 - Project Kick-Off			
2.1 - Confirm details from questionnaire	O		I
2.2 - Obtain PSAP Admin Contact	O		I
2.3 - Obtain NGCS provider contact	O	I	
2.4 - Obtain PSAP/NGCS provider boundaries	O	I	I
3 - Training			
3.1 - System Admin training			O
3.2 - Public Safety Telecommunicator (PST) training			O
4 - Wireless Service Provider (drive) Testing			
4.1 - Pre-production testing	O	I	I
4.2 - Provide PSAP Readiness / Test Plan	O	I	I
4.3 - Network cutover	O	I	I
4.4 - Schedule and Complete RTT Test Cases	I	I	O
4.5 - PSAP signs off on completed Test Cases			O
5 - Deployment			
5.1 - Carrier sends "Live" notification to PSAP	O	I	I
5.2 - Public Announcement / Public Education			O

Steps to receive RTT in the United States

PSAPs

- **Must test TTY functionality for RTT converted calls.**
- **Talk to your CHE vendors about their plans for RTT integration.**

Native RTT

- **Must have RTT solution in place (NG & CHE) - then you can...**
- **Send request letter to wireless providers to send native RTT.**

Carrier

- **Carriers have six months to comply with the request to deliver native RTT to the PSAP.**



Christy Williams

NCT9-1-1 DIRECTOR

NCT9-1-1 – The RTT Journey

- 40+ PSAPs/ECCs (9-1-1 Centers)
- Self-Maintained
- Pilot(s) in Lab Environment
- Worked with T-Mobile and Solacom through extensive testing
- Implemented RTT to RTT in Hood County SO in August, 2022

Why is RTT Deployment Important?

- ▶ This is NOT MY problem!
- ▶ RTT is here!
- ▶ **This is MY PROBLEM!**
 - ▶ RTT to TTY Conversion has limitations and potentially liability
 - ▶ Not able to identify RTT calls, silent calls, garble, ADA, lack of caller education
- ▶ Requires Coordination, Planning and Budgeting (contracts)
- ▶ Pushing the Vendors/Market to Offer RTT to RTT
 - ▶ CHE and Network providers
 - ▶ Work out issues on the fly during testing with partners



IMPORTANT

Carriers Deliver RTT Calls via TDD TODAY!

- **T-Mobile** RTT calls will be received as a normal wireless 9-1-1 call.
- **Verizon Wireless** RTT calls will be received as a normal wireless 9-1-1 call AND they will send 3 Baudot characters upon call answer which will trigger any TDD auto-detection you have in place.
- **AT&T Wireless** RTT calls will be received as a nomadic VoIP call, meaning the address provided will be an address input by the caller which may or may not be where the caller or the emergency is located. No rebid, lat/long, confidence and uncertainty factors may be irrelevant/meaningless.

RTT calls will not have a unique Class of Service (COS) and may also be received as VoIP (Voice over IP), VMBL (VoIP Mobile), VNOM (VoIP Nomadic) or Wireless (WRLS).

Benefits of RTT to RTT in 9-1-1

- RTT has both a voice and data path so 9-1-1 TC's can hear background noise.
- RTT eliminates the need to purchase specialized devices, such as TDD/TTY machines.
- Both parties can simultaneously send and receive text.
- RTT utilizes the full international character set, unlike TDD/TTY, which does not allow symbols, emojis and other language characters.
- Eliminates limitations of TTY conversion.

First Steps of Implementation of RTT – *Even Before the Technology!*

▶ **Testing in the PSAPs**

- ▶ Recognition of RTT call
- ▶ Data only – no background noise
- ▶ Garble
- ▶ Transferring calls
- ▶ Expectation of the public/caller

▶ **Educating or Training the PSAPs**

- ▶ History of RTT
- ▶ Current state and limitations of RTT to TTY
- ▶ Benefits of RTT to RTT for 9-1-1
- ▶ Hands on RTT demonstrations were provided to the PSAP during training and testing



Before Requesting RTT

- Must have NG911
- Must work with Call Handling Equipment Provider
- Must work with Network or NGCS Provider



RFP/Contract Requirements

- 6 Months to Comply
- Voice and Data Path
- Character by Character Messaging
 - As Opposed to Store and Forward (SMS)
- Identifying an RTT Call
 - Indication for TCs to easily see an RTT call
- Automated Initial Message
 - Call similar to Text to 9-1-1 or TTY
- Canned Message Availability
 - Quick option to typing
- Logging of Deleted Messages
 - May be needed for court

AGREEMENT
CONTRACT



Requesting RTT in the United States

- ▶ **Preparing Request Letters for Wireless Providers**
 - ▶ Can send to all carriers or one at a time
 - ▶ 9-1-1 entities can start with a request for a single PSAP or County as a pilot to conduct testing and reduce risk.
 - ▶ Wireless provider has 6 months to meet your request (you might have roadblocks on your end that extends that clock)
 - ▶ You and wireless provider should be partners in making this new technology work

Lessons Learned

- ▶ RTT Implementation is a Slow Process (started in 2017)
 - ▶ So many items on the readiness checklist
 - ▶ Testing and documentation with each step forward
- ▶ RTT Implementation can be Expensive
 - ▶ Put requirements into all new contracts for CHE and NGCS
 - ▶ Budget for RTT
 - ▶ Encourage your vendors to start preparing for RTT-to-RTT implementation
- ▶ Need Point of Interconnection (POI)
 - ▶ Time and money





Tony Parrott

COMTECH/SOLACOM

Call Handling Equipment

- RTT Network Interface
- Security Considerations
- RTT within the PSAP call-flow
- RTT User Interface
 - Simultaneous Voice and Data (characters)
- MIS Considerations
- Call History
- Refining Initial Design
- Differences Between Android and Apple Devices

RTT Administration – Send Immediately

Release 20.1

RTT IMMEDIATE SENDING

Real-Time Text interface has been enhanced from original design to provide PSAPs the option to send the characters delayed or immediately to the caller.

The screenshot shows the 'Administration' console with the 'Edit Role' dialog open for the 'PSAP1 Admin' role. The 'Privileges' list includes 'RTT Send Immediately', which is checked. A red arrow points to this checkbox. Another red arrow points to the 'Administration' menu item at the top of the console.

Name	Description
PSAP2 Admin	PSAP2 Admin
PSAP2 Supervis...	PSAP2 Supervisor
PSAP2 Telecom...	PSAP2 Telecommunicator
PSAP1 Admin	PSAP1 Admin
PSAP1 Telecom...	PSAP1 Telecommunicator
PSAP1 Trainee	PSAP1 Trainee
PSAP1 Supervis...	PSAP1 Supervisor
PSAP2 Trainee	PSAP2 Trainee

Primary Call Control

Answer call
 Privacy
 Mute
 Join
 Callback
 Textback
 Caller History
 Call history
 TIC history
 IRR
 Hold
 Excl Hold
 Release
 Make Busy
 HELP
 PSAP Make Busy
 Maps
 What3Words
 Translate
 Edge

NG9-1-1 Info

ANI: 2418092241

Call type: E9-1-1

Caller status: Ringing

Routing status: Normal

Ticker Message Bar

Alerts

Call Notes
 Note
 Management
 Messages
 Ticker
 Notifications
 TDD

New SMS

Sessions List

PSAP Floor EMS MAP SOLACOM FIRE MAP 2415552201 2415552201

Caller
HARRY BURGESS (241) 809-2241
WPH2

Location
KISSIMEE FL 32824
28.329061 -81.541555 500

TOWER 357
Additional Location Information
ESN: 5307 ANI/PANI: 241-555-2201
POLICE 247-345-9521 FIRE 247-256-9451
EMS 247-256-9451

Notes

RapidsOS:

What3Words:

Lat/Long:

Real-Time Call Status

9-1-1 ALL 1
 9-1-1 HOLD 0
 9-1-1 ABNDN 0
 ADMIN ALL 0
 ADMIN HOLD 0
 CALL TAKER 1

Smart Pad

FLSH	1	2 ABC	3 DEF
QXfer	4 GHI	5 JKL	6 MNO
CONF	7 PQRS	8 TUV	9 WXYZ
Call	*	0	#
SEND			EXIT

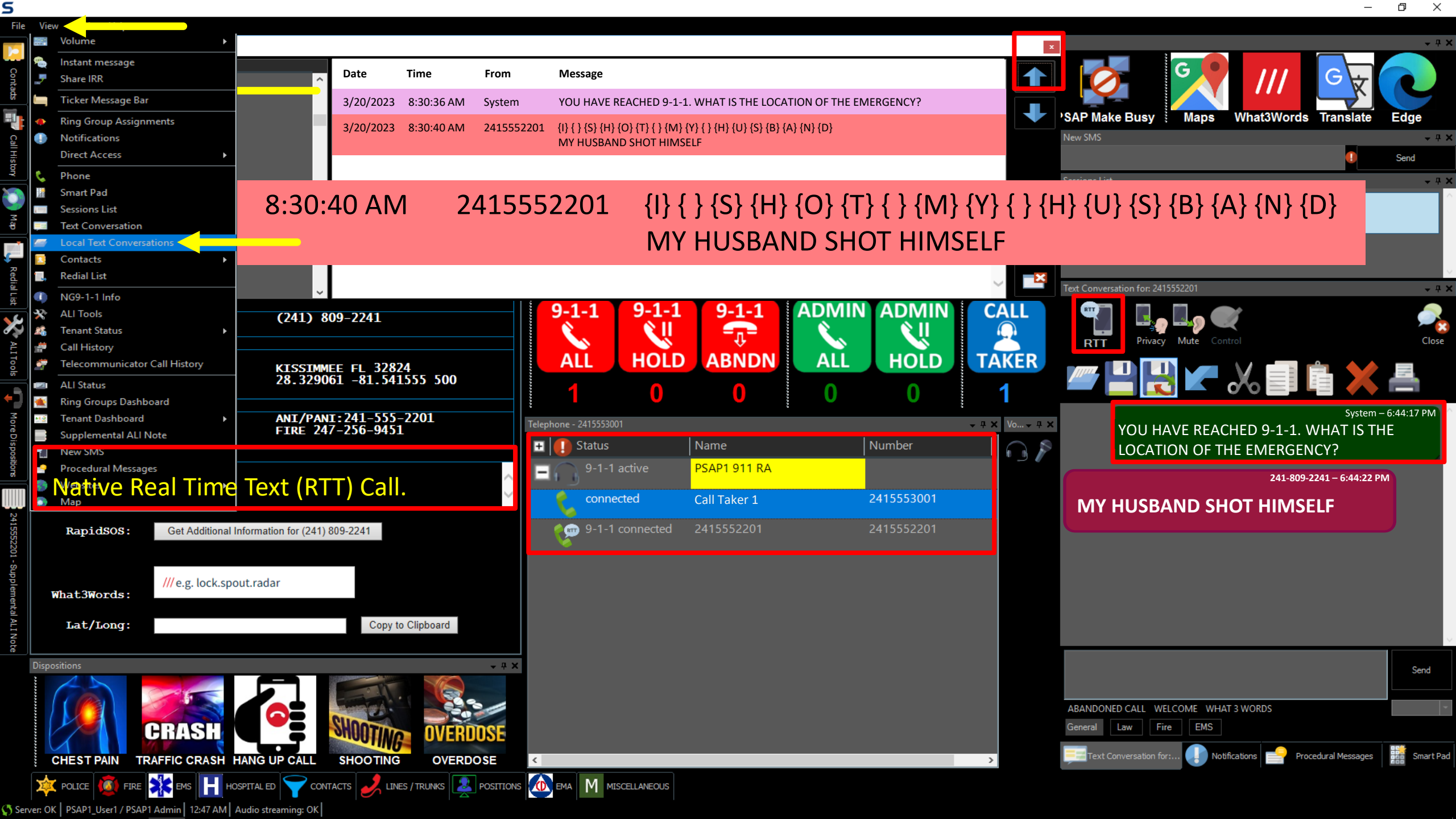
Telephone - 2415553001

Status	Name	Number
9-1-1 ringing	PSAP1 911 RA	
ringing	Call Taker 1	2415553001
9-1-1 ringing	2415552201	2415552201

Dispositions

CHEST PAIN
 TRAFFIC CRASH
 HANG UP CALL
 SHOOTING
 OVERDOSE

POLICE
 FIRE
 EMS
 HOSPITAL ED
 CONTACTS
 LINES / TRUNKS
 POSITIONS
 EMA
 MISCELLANEOUS



Date	Time	From	Message
3/20/2023	8:30:36 AM	System	YOU HAVE REACHED 9-1-1. WHAT IS THE LOCATION OF THE EMERGENCY?
3/20/2023	8:30:40 AM	2415552201	{I} { } {S} {H} {O} {T} { } {M} {Y} { } {H} {U} {S} {B} {A} {N} {D} MY HUSBAND SHOT HIMSELF

8:30:40 AM 2415552201 {I} { } {S} {H} {O} {T} { } {M} {Y} { } {H} {U} {S} {B} {A} {N} {D} MY HUSBAND SHOT HIMSELF

9-1-1 ALL 1
9-1-1 HOLD 0
9-1-1 ABNDN 0
ADMIN ALL 0
ADMIN HOLD 0
CALL TAKER 1

Status	Name	Number
9-1-1 active	PSAP1 911 RA	
connected	Call Taker 1	2415553001
9-1-1 connected	2415552201	2415552201

Native Real Time Text (RTT) Call.

System - 6:44:17 PM
YOU HAVE REACHED 9-1-1. WHAT IS THE LOCATION OF THE EMERGENCY?

241-809-2241 - 6:44:22 PM
MY HUSBAND SHOT HIMSELF

Dispositions

CHEST PAIN TRAFFIC CRASH HANG UP CALL SHOOTING OVERDOSE

File View Tools Help

Primary Call Control

Answer call Privacy Mute Join Callback Textback Caller History Call history TIC history IRR Hold Excl Hold Release Make Busy HELP PSAP Make Busy Maps What3Words Translate Edge

Call History (highlighted with a red box and yellow arrow)

9-1-1

Ticker Message Bar

Alerts

Call Notes Note Management Messages Ticker Notifications TDD

PSAP Floor EMS MAP SOLACOM FIRE MAP 2415552201

Caller HARRY BURGESS (241) 809-2241 WPH2
 Location KISSIMMEE FL 32824 28.329061 -81.541555 500
 TOWER 357
 Additional Location Information
 ESN: 5307 ANI/PANI: 241-555-2201
 POLICE 247-345-9521 FIRE 247-256-9451
 EMS 247-256-9451
 Notes

RapidSOS: Get Additional Information for (241) 809-2241
 What3Words: // e.g. lock.spout.radar
 Lat/Long: Copy to Clipboard

Dispositions

CHEST PAIN TRAFFIC CRASH HANG UP CALL SHOOTING OVERDOSE

Real-Time Call Status

9-1-1 ALL 0
 9-1-1 HOLD 0
 9-1-1 ABNDN 0
 ADMIN ALL 0
 ADMIN HOLD 0
 CALL TAKER 1

Telephone - 2415553001

Status	Name	Number
No active calls		

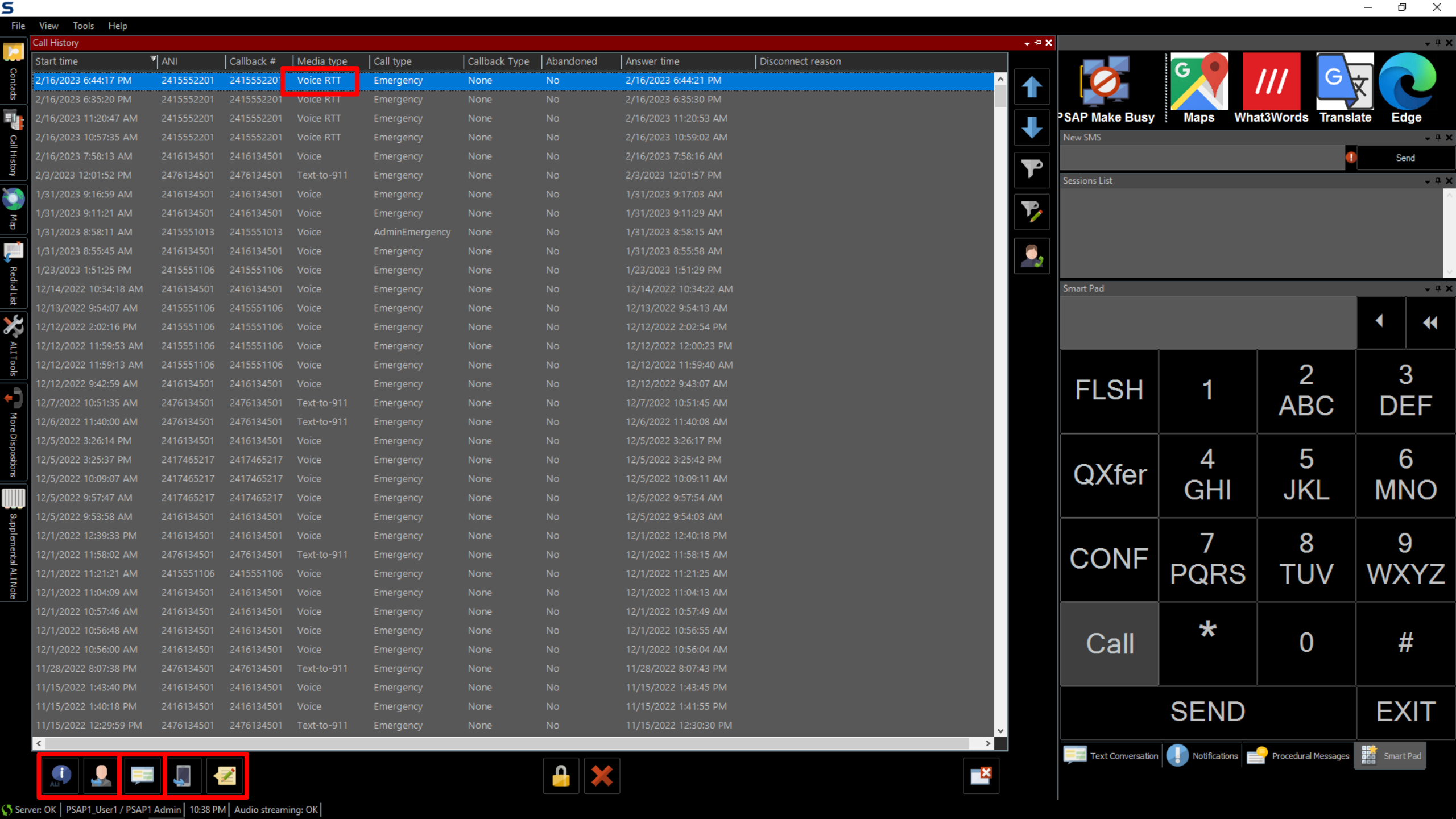
Sessions List
 Smart Pad

FLSH	1	2 ABC	3 DEF
QXfer	4 GHI	5 JKL	6 MNO
CONF	7 PQRS	8 TUV	9 WXYZ
Call	*	0	#
SEND			EXIT

Text Conversation Notifications Procedural Messages Smart Pad

POLICE FIRE EMS H HOSPITAL ED CONTACTS LINES / TRUNKS POSITIONS EMA M MISCELLANEOUS

Server: OK | PSAP1_User1 / PSAP1 Admin | 12:48 AM | Audio streaming: OK



Start time	ANI	Callback #	Media type	Call type	Callback Type	Abandoned	Answer time	Disconnect reason
2/16/2023 6:44:17 PM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 6:44:21 PM	
2/16/2023 6:35:20 PM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 6:35:30 PM	
2/16/2023 11:20:47 AM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 11:20:53 AM	
2/16/2023 10:57:35 AM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 10:59:02 AM	
2/16/2023 7:58:13 AM	2416134501	2416134501	Voice	Emergency	None	No	2/16/2023 7:58:16 AM	
2/3/2023 12:01:52 PM	2476134501	2476134501	Text-to-911	Emergency	None	No	2/3/2023 12:01:57 PM	
1/31/2023 9:16:59 AM	2416134501	2416134501	Voice	Emergency	None	No	1/31/2023 9:17:03 AM	
1/31/2023 9:11:21 AM	2416134501	2416134501	Voice	Emergency	None	No	1/31/2023 9:11:29 AM	
1/31/2023 8:58:11 AM	2415551013	2415551013	Voice	AdminEmergency	None	No	1/31/2023 8:58:15 AM	
1/31/2023 8:55:45 AM	2416134501	2416134501	Voice	Emergency	None	No	1/31/2023 8:55:58 AM	
1/23/2023 1:51:25 PM	2415551106	2415551106	Voice	Emergency	None	No	1/23/2023 1:51:29 PM	
12/14/2022 10:34:18 AM	2416134501	2416134501	Voice	Emergency	None	No	12/14/2022 10:34:22 AM	
12/13/2022 9:54:07 AM	2415551106	2415551106	Voice	Emergency	None	No	12/13/2022 9:54:13 AM	
12/12/2022 2:02:16 PM	2415551106	2415551106	Voice	Emergency	None	No	12/12/2022 2:02:54 PM	
12/12/2022 11:59:53 AM	2415551106	2415551106	Voice	Emergency	None	No	12/12/2022 12:00:23 PM	
12/12/2022 11:59:13 AM	2415551106	2415551106	Voice	Emergency	None	No	12/12/2022 11:59:40 AM	
12/12/2022 9:42:59 AM	2416134501	2416134501	Voice	Emergency	None	No	12/12/2022 9:43:07 AM	
12/7/2022 10:51:35 AM	2476134501	2476134501	Text-to-911	Emergency	None	No	12/7/2022 10:51:45 AM	
12/6/2022 11:40:00 AM	2476134501	2476134501	Text-to-911	Emergency	None	No	12/6/2022 11:40:08 AM	
12/5/2022 3:26:14 PM	2416134501	2416134501	Voice	Emergency	None	No	12/5/2022 3:26:17 PM	
12/5/2022 3:25:37 PM	2417465217	2417465217	Voice	Emergency	None	No	12/5/2022 3:25:42 PM	
12/5/2022 10:09:07 AM	2417465217	2417465217	Voice	Emergency	None	No	12/5/2022 10:09:11 AM	
12/5/2022 9:57:47 AM	2417465217	2417465217	Voice	Emergency	None	No	12/5/2022 9:57:54 AM	
12/5/2022 9:53:58 AM	2416134501	2416134501	Voice	Emergency	None	No	12/5/2022 9:54:03 AM	
12/1/2022 12:39:33 PM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 12:40:18 PM	
12/1/2022 11:58:02 AM	2476134501	2476134501	Text-to-911	Emergency	None	No	12/1/2022 11:58:15 AM	
12/1/2022 11:21:21 AM	2415551106	2415551106	Voice	Emergency	None	No	12/1/2022 11:21:25 AM	
12/1/2022 11:04:09 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 11:04:13 AM	
12/1/2022 10:57:46 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 10:57:49 AM	
12/1/2022 10:56:48 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 10:56:55 AM	
12/1/2022 10:56:00 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 10:56:04 AM	
11/28/2022 8:07:38 PM	2476134501	2476134501	Text-to-911	Emergency	None	No	11/28/2022 8:07:43 PM	
11/15/2022 1:43:40 PM	2416134501	2416134501	Voice	Emergency	None	No	11/15/2022 1:43:45 PM	
11/15/2022 1:40:18 PM	2416134501	2416134501	Voice	Emergency	None	No	11/15/2022 1:41:55 PM	
11/15/2022 12:29:59 PM	2476134501	2476134501	Text-to-911	Emergency	None	No	11/15/2022 12:30:30 PM	

PSAP Make Busy Maps What3Words Translate Edge

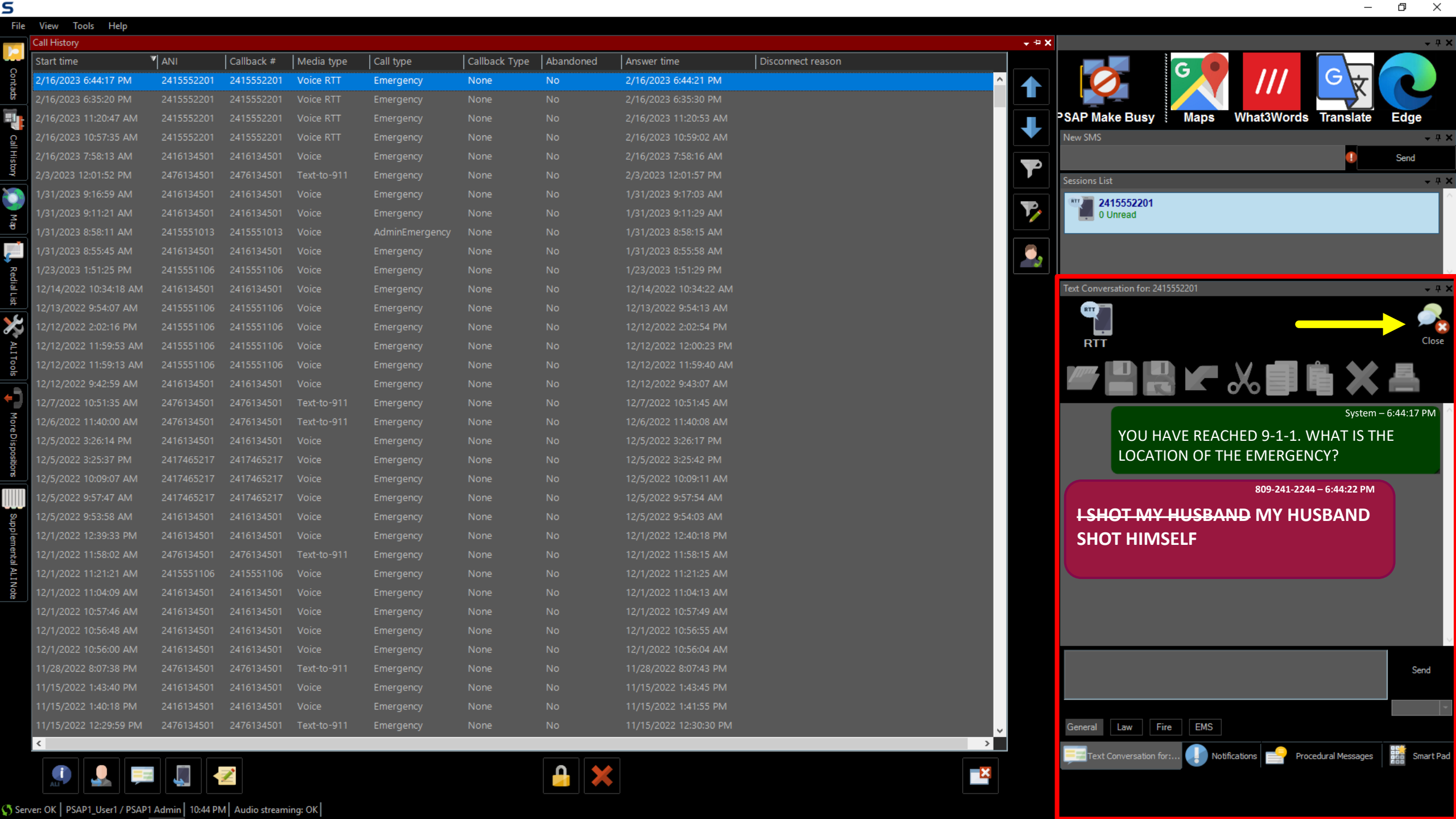
New SMS Send

Sessions List

Smart Pad

FLSH	1	2 ABC	3 DEF
QXfer	4 GHI	5 JKL	6 MNO
CONF	7 PQRS	8 TUV	9 WXYZ
Call	*	0	#
SEND			EXIT

Text Conversation Notifications Procedural Messages Smart Pad



Call History

Start time	ANI	Callback #	Media type	Call type	Callback Type	Abandoned	Answer time	Disconnect reason
2/16/2023 6:44:17 PM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 6:44:21 PM	
2/16/2023 6:35:20 PM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 6:35:30 PM	
2/16/2023 11:20:47 AM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 11:20:53 AM	
2/16/2023 10:57:35 AM	2415552201	2415552201	Voice RTT	Emergency	None	No	2/16/2023 10:59:02 AM	
2/16/2023 7:58:13 AM	2416134501	2416134501	Voice	Emergency	None	No	2/16/2023 7:58:16 AM	
2/3/2023 12:01:52 PM	2476134501	2476134501	Text-to-911	Emergency	None	No	2/3/2023 12:01:57 PM	
1/31/2023 9:16:59 AM	2416134501	2416134501	Voice	Emergency	None	No	1/31/2023 9:17:03 AM	
1/31/2023 9:11:21 AM	2416134501	2416134501	Voice	Emergency	None	No	1/31/2023 9:11:29 AM	
1/31/2023 8:58:11 AM	2415551013	2415551013	Voice	AdminEmergency	None	No	1/31/2023 8:58:15 AM	
1/31/2023 8:55:45 AM	2416134501	2416134501	Voice	Emergency	None	No	1/31/2023 8:55:58 AM	
1/23/2023 1:51:25 PM	2415551106	2415551106	Voice	Emergency	None	No	1/23/2023 1:51:29 PM	
12/14/2022 10:34:18 AM	2416134501	2416134501	Voice	Emergency	None	No	12/14/2022 10:34:22 AM	
12/13/2022 9:54:07 AM	2415551106	2415551106	Voice	Emergency	None	No	12/13/2022 9:54:13 AM	
12/12/2022 2:02:16 PM	2415551106	2415551106	Voice	Emergency	None	No	12/12/2022 2:02:54 PM	
12/12/2022 11:59:53 AM	2415551106	2415551106	Voice	Emergency	None	No	12/12/2022 12:00:23 PM	
12/12/2022 11:59:13 AM	2415551106	2415551106	Voice	Emergency	None	No	12/12/2022 11:59:40 AM	
12/12/2022 9:42:59 AM	2416134501	2416134501	Voice	Emergency	None	No	12/12/2022 9:43:07 AM	
12/7/2022 10:51:35 AM	2476134501	2476134501	Text-to-911	Emergency	None	No	12/7/2022 10:51:45 AM	
12/6/2022 11:40:00 AM	2476134501	2476134501	Text-to-911	Emergency	None	No	12/6/2022 11:40:08 AM	
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12/5/2022 9:57:47 AM	2417465217	2417465217	Voice	Emergency	None	No	12/5/2022 9:57:54 AM	
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12/1/2022 11:04:09 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 11:04:13 AM	
12/1/2022 10:57:46 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 10:57:49 AM	
12/1/2022 10:56:48 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 10:56:55 AM	
12/1/2022 10:56:00 AM	2416134501	2416134501	Voice	Emergency	None	No	12/1/2022 10:56:04 AM	
11/28/2022 8:07:38 PM	2476134501	2476134501	Text-to-911	Emergency	None	No	11/28/2022 8:07:43 PM	
11/15/2022 1:43:40 PM	2416134501	2416134501	Voice	Emergency	None	No	11/15/2022 1:43:45 PM	
11/15/2022 1:40:18 PM	2416134501	2416134501	Voice	Emergency	None	No	11/15/2022 1:41:55 PM	
11/15/2022 12:29:59 PM	2476134501	2476134501	Text-to-911	Emergency	None	No	11/15/2022 12:30:30 PM	

PSAP Make Busy

Maps

What3Words

Translate

Edge

New SMS

Send

Sessions List

RTT 2415552201
0 Unread

Text Conversation for: 2415552201

RTT

Close

System - 6:44:17 PM

YOU HAVE REACHED 9-1-1. WHAT IS THE LOCATION OF THE EMERGENCY?

809-241-2244 - 6:44:22 PM

I SHOT MY HUSBAND MY HUSBAND SHOT HIMSELF

Send

General Law Fire EMS

Text Conversation for: ...

Notifications

Procedural Messages

Smart Pad

Primary Call Control

Answer call
 Privacy
 Mute
 Join
 Callback
 Textback
 Caller History
 Call history
 TIC history
 IRR
 Hold
 Excl Hold
 Release
 Make Busy
 HELP
 PSAP Make Busy
 Maps
 What3Words
 Translate
 Edge

NG9-1-1 Info

9-1-1

Ticker Message Bar

Alerts

Call Notes
 Note
 Management
 Messages
 Ticker
 Notifications
 TDD

New SMS

Sessions List

PSAP Floor EMS MAP SOLACOM FIRE MAP 2415552201

Caller
 HARRY BURGESS (241) 809-2241
 WPH2
Location
 KISSIMMEE FL 32824
 28.329061 -81.541555 500
 TOWER 357
Additional Location Information
 ESN: 5307 ANI/PANI: 241-555-2201
 POLICE 247-345-9521 FIRE 247-256-9451
 EMS 247-256-9451
Notes

RapidsOS:

What3Words:

Lat/Long:

Real-Time Call Status

9-1-1 ALL 0	9-1-1 HOLD 0	9-1-1 ABNDN 0	ADMIN ALL 0	ADMIN HOLD 0	CALL TAKER 1
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Smart Pad

FLSH	1	2 ABC	3 DEF
QXfer	4 GHI	5 JKL	6 MNO
CONF	7 PQRS	8 TUV	9 WXYZ
Call	*	0	#
SEND			EXIT

Telephone - 2415553001

Status	Name	Number
No active calls		

Dispositions

CHEST PAIN
 TRAFFIC CRASH
 HANG UP CALL
 SHOOTING
 OVERDOSE

POLICE
 FIRE
 EMS
 HOSPITAL ED
 CONTACTS
 LINES / TRUNKS
 POSITIONS
 EMA
 MISCELLANEOUS



Michael Hooker

T-MOBILE

T-Mobile

- **RTT to TTY with gateways**

- 2G Slow
- Voice or Text (Half Duplex)
- TTY No Habla Español
- Must take turns typing (TTY Etiquette)
- I've never even seen a TTY call what is that?
- Limited character set
- Garble, Garble, Garble



- **NG911 RTT to RTT without gateways**

- 5G Fast
- Simultaneous Voice and Text (Full Duplex)
- RTT Habla Español
- Conversational text
- Easy even for first time users
- Full character set and more
- High Fidelity

Bottom line

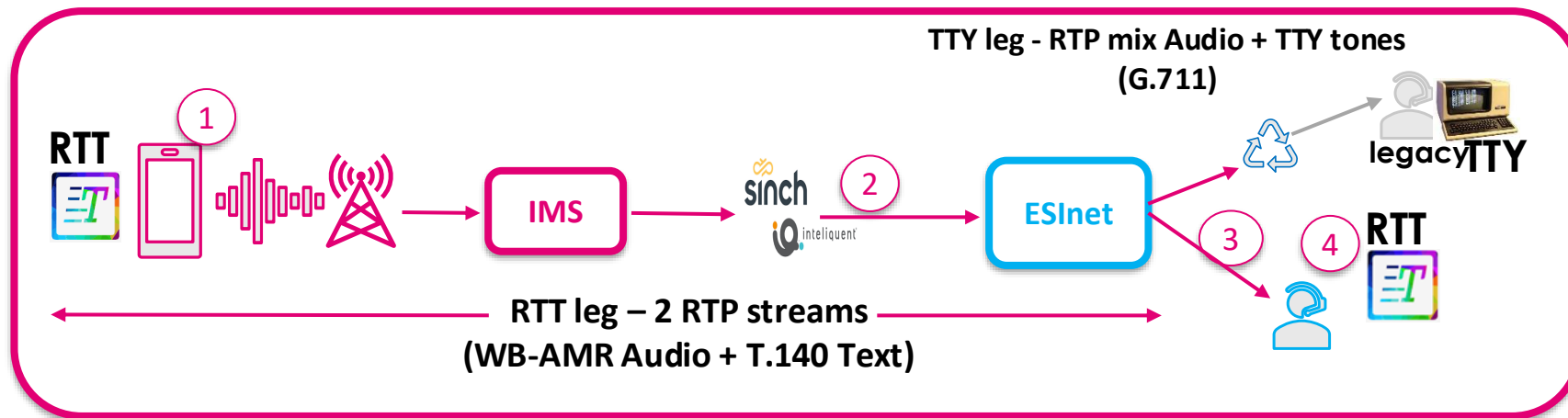
RTT to RTT delivers greater communication access for callers
and public safety

Both PSAPs and 911 callers benefit from this technology

NG911 RTT - Requirements

RTT functionality with full duplex (simultaneous) mode requires the following components in the call path to be available and interoperable

1. RTT-capable Devices
2. Seamless IP-Based multimedia connectivity from callers to NG911 networks (**ESINets**)
3. IP-Based multimedia connectivity NG911 networks (**ESINets**) to NG PSAPs
4. RTT functionality within the NG PSAP's Call Handling Equipment



If any of these components are not available, the RTT call will be processed as a TTY call.

T-Mobile – RTT Ready

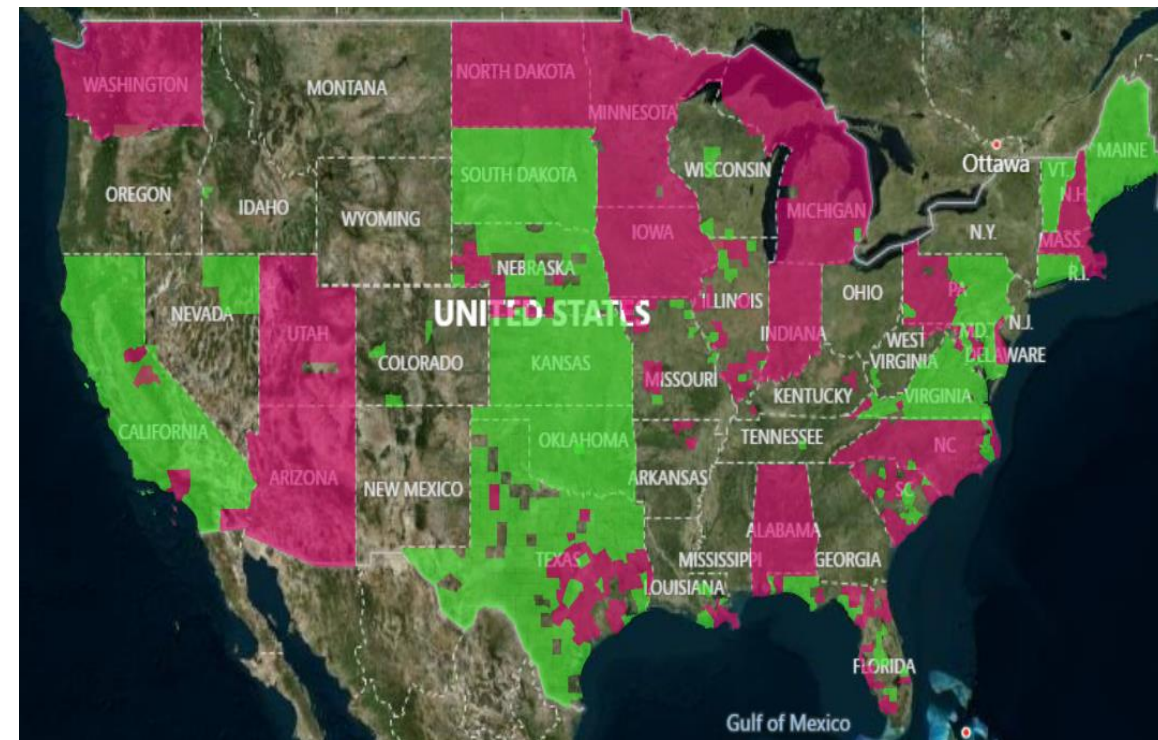
Established Interconnections

- 6 Next Generation Core Service (NGCS) systems across 11 unique NG911 implementations - foundation for future

2023+ Roadmap

- State of Arizona – **Completed**
- State of North Carolina - **Completed**
- State of North Dakota – **Completed**
- State of California – **Currently in process**
- State of Nebraska – **Currently in process**
- State of Pennsylvania – **Currently in process**
- Additional jurisdictions in South Carolina, Illinois, Missouri, Louisiana, Maryland, Wisconsin, Florida, Virginia and Texas – **Currently in process**
- States of Vermont, Connecticut, Maine and Kansas - 2024
- New York City - 2024

1,261 PSAPs in 27 States Migrated to SIP Interconnections



SIP Status ● 2023 In Process ● Completed

RTT Case Study: Concept Proven

- ▶ RTT Implementation is a process
 - ▶ Education/Training
 - ▶ Readiness checklist
 - ▶ Vendor/Carrier partnerships
 - ▶ Testing
 - ▶ Development of SOPs and Public Education strategy

Will YOU Be Next???

Questions?



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