



MARKET SURVEY
REVIEW

January 27, 2022

Market Study Goals/Objectives

Contracted to evaluate:

- Competitive market survey
- Analysis of system including CAD data
- Current deployment model vs. Fitch optimized deployment model
- 200 question Information Data Request to confirm REMSA responses

Market Survey Methodology

- 108 questions in 13 categories were developed and reviewed with REMSA Health leadership
- 22 EMS systems throughout North America, including 2 from Canada, were invited to participate
- The survey was distributed electronically
- 91%(20) of the participants completed the survey



Onsite Visit

- Prior to Arrival: Completed quantitative review
- Kickoff & Executive meeting to review quantitative findings
- Onsite goals:
 - Discuss any reviews from the Market Study that were not captured
 - Review qualitative items and future needs for success



Initial Findings - Summary

- Market Study
 - Outscored both the averaged Public Utility Model & Other Agency Types
 - Scored 1st in the overall agency scoring
 - Cost Per Unit Hour has not increased from the 2010 study
- Independent Data Review
 - 2021 April – July have seeing higher demands for service
 - 2020 & 2021 Overall Performance above 90% compliance.
 - Challenged with 2021 Priority 1 performance
 - Many factors are contributing related to pandemic
- Deployment
 - Deployment plan meets or exceeds Fitch independent review

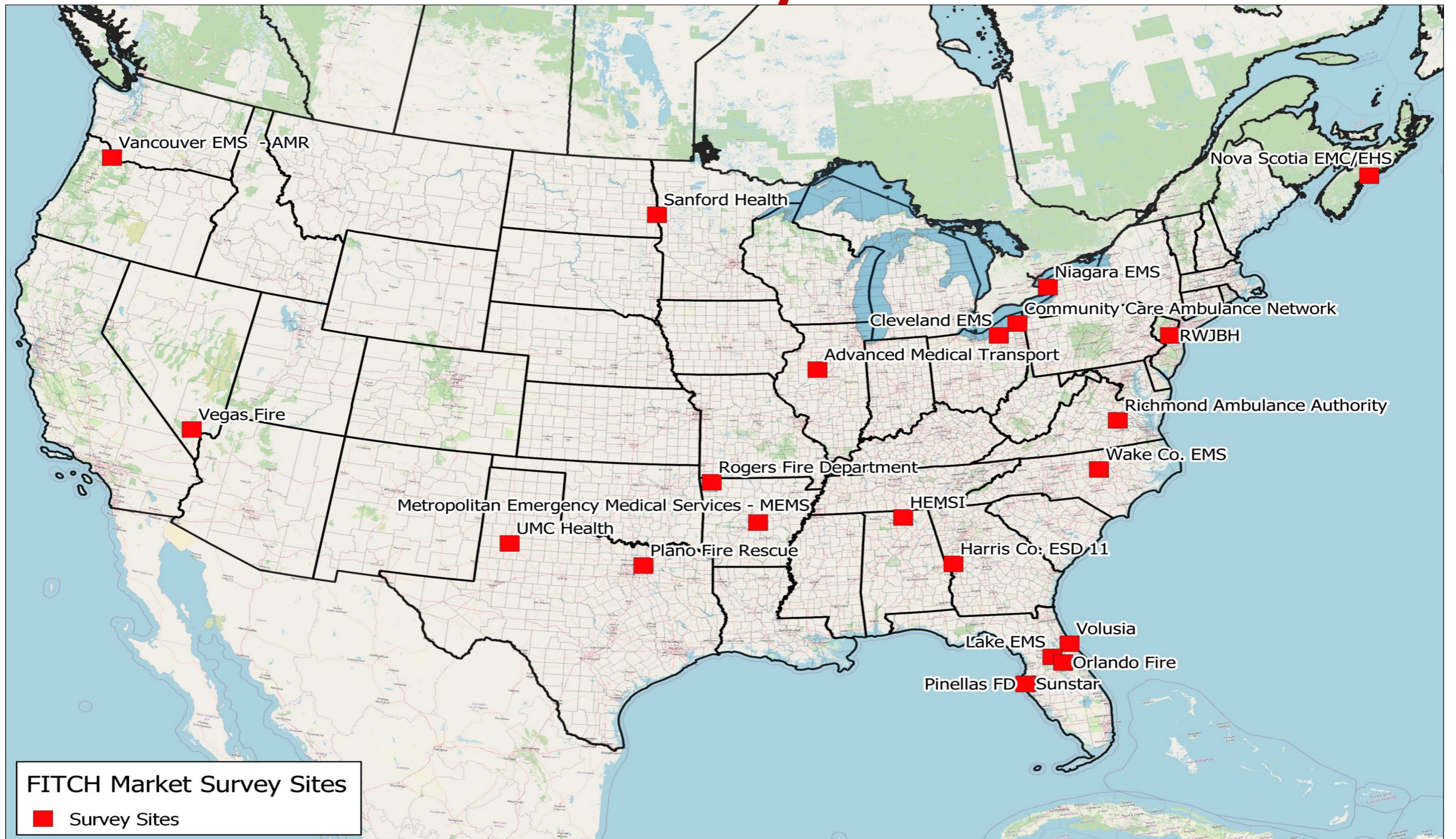
Market Survey Overview

Survey Subscale	Maximum Score Available
Accreditation	3
Communications	13
Response Time Reliability	14
Production Capacity	6
Clinical Care	10
Patient Experience	5
Safety	9
Community Outreach	5
Workforce Focus	9
Leadership	5
Operations	15
Fleet	4
Finance and Reimbursement	10
Total	108

- Maximum total score available on the survey was 108 points
- Responses of “Yes” to scored items received a score of one point; responses of “No” or no responses to scored items received a score of zero points.
- Four items that requested responses other than “Yes” or “No” were scored according to responses presented below

Survey Item	Responses Scored 1 Point
Do you measure averages or fractiles?	Any non-blank response
How often is response time performance evaluated?	Any non-blank response
What is your agency vehicle collision rate per 100,000?	Any response reporting 2 or fewer
What is your agency critical vehicle failure rate during an emergency response per 100,000 miles?	Any response reporting 2 or fewer

Market Study - Agencies Surveyed



Service Area by Type & Location

Agency Type		Agency Location	Square Miles	Population	Area Type	
REMSA		Reno, NV (REMSA)	> 1000	> 250,001	Urban	
Public Utility Authority		Little Rock, AR	> 1000	> 250,001	Suburban	
		Pinellas County, FL (Ambulance)	250-500	> 250,001	Urban	
		Pinellas County, FL (Fire Department)	< 100	> 250,001	Urban	
		Richmond, VA	< 100	200,00 - 250,000	Urban	
		Daytona Beach, FL	> 1000	> 250,001	Urban	
Other		County Operated	Wake County, NC	750-1000	> 250,001	Urban
		Fire Department-Based	Orlando, FL	100-250	> 250,001	Urban
			Plano, TX	< 100	> 250,001	Urban
		Hospital-Based	Lubbock, TX	> 1000	> 250,001	Urban
			New Brunswick, NJ	> 1000	> 250,001	Urban
		Municipal	Dartmouth, NS, Canada	> 1000	> 250,001	Suburban
			Thorold, ON, Canada	> 1000	> 250,001	Urban
		Non-Governmental, For-Profit	Vancouver, WA	500-750	> 250,001	Urban
		Non-Governmental, Not-for-Profit	Ashtabula, OH	> 1000	> 250,001	Suburban
			Fargo, ND	750-1000	200,001- 250,000	Urban
			Huntsville, AL	750-1000	> 250,001	Urban
			Peoria, IL	250-500	150,001- 200,000	Urban
		Third Service	Cleveland, OH	< 100	> 250,001	Urban
			Lake County, FL	750-1000	> 250,001	Urban

Overall Score

Agency	Agency's Total Raw Score	Percent of Maximum Score	Rank
REMSA	91	84.3%	1
UMC Health, Lubbock, TX	90	83.3%	2
Sunstar EMS, Largo, FL	84	77.8%	3
Richmond Ambulance Authority, Richmond, VA	77	71.3%	4
Advanced Medical Transport, Peoria, IL	76	70.4%	5
Vancouver EMS-AMR, Vancouver, WA	74	68.5%	6
Sanford Health, Fargo, ND	73	67.6%	7
Wake County EMS, Raleigh, NC	73	67.6%	8
Niagara EMS, Niagara ON Canada	73	67.6%	9
Plano Fire Rescue, Plano, TX	71	65.7%	10
Robert Wood Johnson EMS, New Brunswick, NH	69	63.9%	11
Metropolitan EMS MEMS, Little Rock, AR	69	63.9%	12
Nova Scotia EMC/EHS, Dartmouth, NS, Canada	69	63.9%	13
Pinellas County Fire Depart., Indian Rocks Beach, FL	66	61.1%	14
Orlando Fire Department, Orlando, FL	63	58.3%	15
Huntsville EMS, Huntsville, AL	62	57.4%	16
Community Care Ambulance, Ashtabula, OH	62	57.4%	17
Volusia County EMS, Daytona Beach, FL	48	44.4%	18
Lake EMS, Tavares, FL	47	43.5%	19
Cleveland Fire Department EMS, Cleveland, OH	41	38.0%	20
Mean Score All Agencies	68.9	63.8%	--

- Overall percent scores ranged from 38.0% to 84.3%
- Overall mean percent score for the sample of 20 agencies was 63.8%
- **REMSA's overall percent score of 84.3%**
- **REMSA ranked number 1 out of 20 scores.**

Overall Scores by Agency Type

Agency Type	Mean Raw Score ¹	Mean Percent Score ¹	Sample Size
Non-REMSA Agency	67.7	62.7%	19
Public Utility Authority	74.0	68.5%	4
Other	66.1	61.2%	15
County Operated	60.5	56.0%	2
Fire Department-Based	67.0	62.0%	2
Hospital-Based	79.5	73.6%	2
Municipal	71.0	65.7%	2
Non-Governmental, For-Profit ¹	74.0	68.5%	1
Non-Governmental, Not-for-Profit	68.3	63.2%	4
Third Service	44.0	40.7%	2
REMSA¹	91.0	84.3%	1
Mean Score All Agencies	68.9	63.8%	20

- Mean percent score for all non-REMSA like agencies was 63.8%
- Mean percent score for the four non-REMSA like agencies that identified as Public Utility Authorities was 68.5%
- Mean percent score for the non-REMSA like agencies that identified as an agency type other than Public Utility Authority was 61.2%.

Subscale Mean Percent Score

Agency Type	Accreditation	Communications	Response Time Reliability	Production Capacity	Clinical Care	Patient Experience	Safety	Community Outreach	Workforce Focus	Leadership	Operations	Fleet	Finance and Reimbursement	Total
Non-REMSA Agency	31.6%	54.3%	82.3%	64.0%	92.6%	52.6%	74.9%	88.4%	55.6%	43.2%	38.6%	80.3%	51.6%	62.7%
Public Utility Authority	50.0%	63.5%	94.6%	70.8%	97.5%	65.0%	80.6%	100.0%	41.7%	55.0%	38.3%	100.0%	52.5%	68.5%
Other	26.7%	51.8%	79.0%	62.2%	91.3%	49.3%	73.3%	85.3%	59.3%	40.0%	38.7%	75.0%	51.3%	61.2%
County Operated	0.0%	23.1%	64.3%	58.3%	95.0%	30.0%	50.0%	90.0%	44.4%	60.0%	60.0%	62.5%	65.0%	56.0%
Fire Department-Based	66.7%	42.3%	67.9%	66.7%	100.0%	50.0%	61.1%	100.0%	77.8%	20.0%	36.7%	100.0%	55.0%	62.0%
Hospital-Based	33.3%	88.5%	96.4%	58.3%	95.0%	80.0%	77.8%	80.0%	66.7%	70.0%	50.0%	75.0%	55.0%	73.6%
Municipal	33.3%	76.9%	82.1%	83.3%	85.0%	60.0%	88.9%	90.0%	55.6%	40.0%	46.7%	62.5%	30.0%	65.7%
Non-Governmental, For-Profit ¹	33.3%	61.5%	92.9%	66.7%	90.0%	80.0%	100.0%	100.0%	66.7%	40.0%	13.3%	100.0%	70.0%	68.5%
Non-Governmental, Not-for-Profit	25.0%	44.2%	87.5%	58.3%	85.0%	55.0%	77.8%	85.0%	63.9%	40.0%	40.0%	87.5%	62.5%	63.2%
Third Service	0.0%	38.5%	60.7%	50.0%	95.0%	0.0%	66.7%	60.0%	38.9%	10.0%	10.0%	37.5%	20.0%	40.7%
REMSA ¹	33.3%	92.3%	100.0%	83.3%	70.0%	100.0%	100.0%	100.0%	66.7%	80.0%	66.7%	100.0%	90.0%	84.3%
Mean Score All Agencies	31.7%	56.2%	83.2%	65.0%	91.5%	55.0%	76.1%	89.0%	56.1%	45.0%	40.0%	81.3%	53.5%	63.8%

Accreditation

Subscale	Agency Location	Total Raw Score	Total Percent Score	Rank (Within Subscale)
Accreditation (Maximum Raw Score = 3)	Pinellas County, FL (Ambulance)	3	100.0%	1
	Dartmouth, NS, Canada	2	66.7%	2 (Tied)
	Orlando, FL	2	66.7%	2 (Tied)
	Plano, TX	2	66.7%	2 (Tied)
	Reno, NV (REMSA)	1	33.3%	5 (Tied)
	Fargo, ND	1	33.3%	5 (Tied)
	Huntsville, AL	1	33.3%	5 (Tied)
	Little Rock, AR	1	33.3%	5 (Tied)
	Lubbock, TX	1	33.3%	5 (Tied)
	New Brunswick, NJ	1	33.3%	5 (Tied)
	Peoria, IL	1	33.3%	5 (Tied)
	Pinellas County, FL (Fire Department)	1	33.3%	5 (Tied)
	Richmond, VA	1	33.3%	5 (Tied)
	Vancouver, WA	1	33.3%	5 (Tied)
	Ashtabula, OH	0	0.0%	15 (Tied)
	Cleveland, OH	0	0.0%	15 (Tied)
	Daytona Beach, FL	0	0.0%	15 (Tied)
	Lake County, FL	0	0.0%	15 (Tied)
	Thorold, ON, Canada	0	0.0%	15 (Tied)
	Wake County, NC	0	0.0%	15 (Tied)
Mean Score All Agencies	1.0	31.7%	--	

- REMSA Ranked:
 - Tied for 5th
 - Missing CAAS and CPSE accreditation

Communications

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Communications (Max. Raw Score = 13)	REMSA	12	92.3%	1 (Tied)
	UMC Health	12	92.3%	1 (Tied)
	Sunstar EMS	12	92.3%	1 (Tied)
	Robert Woods Johnson EMS	11	84.6%	4
	Nova Scotia EMC/EHS	10	76.9%	5 (Tied)
	Richmond Ambulance Authority	10	76.9%	5 (Tied)
	Niagara EMS	10	76.9%	5 (Tied)
	Sanford Health	8	61.5%	8 (Tied)
	Huntsville EMS	8	61.5%	8 (Tied)
	Metropolitan EMS	8	61.5%	8 (Tied)
	Vancouver EMS-AMR	8	61.5%	8 (Tied)
	Orlando Fire	7	53.8%	12
	Cleveland Fire EMS	6	46.2%	13
	Community Care Ambulance	5	38.5%	14
	Lake EMS	4	30.8%	15 (Tied)
	Plano Fire Rescue	4	30.8%	15 (Tied)
	Volusia County EMS	3	23.1%	17 (Tied)
Pinellas County Fire Department	3	23.1%	17 (Tied)	
Wake County EMS	3	23.1%	17 (Tied)	
Advanced Medical Transport	2	15.4%	20	
Mean Score All Agencies		7.3	56.2%	--

- REMSA Ranked:
 - Tied for 1st
 - Lacking integrated CAD to CAD transfer system. Pending approval from Reno dispatch center

Response Time Reliability

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Response Time Reliability (Max Raw Score = 14)	REMSA	14	100.0%	1 (Tied)
	UMC Health	14	100.0%	1 (Tied)
	Advanced Medical Transport	14	100.0%	1 (Tied)
	Sunstar EMS	14	100.0%	1 (Tied)
	Community Care Ambulance	13	92.9%	5 (Tied)
	Metropolitan EMS	13	92.9%	5 (Tied)
	Robert Woods Johnson EMS	13	92.9%	5 (Tied)
	Pinellas County Fire	13	92.9%	5 (Tied)
	Richmond Ambulance Authority	13	92.9%	5 (Tied)
	Nova Scotia EMC/EHS	13	92.9%	5 (Tied)
	Vancouver EMS-AMR	13	92.9%	5 (Tied)
	Sanford Health	12	85.7%	12
	Plano Fire Rescue	11	78.6%	13
	Niagara EMS	10	71.4%	14 (Tied)
	Volusia County EMS	10	71.4%	14 (Tied)
	Huntsville EMS	10	71.4%	14 (Tied)
	Lake EMS	9	64.3%	17
	Cleveland Fire	8	57.1%	18 (Tied)
	Orlando Fire	8	57.1%	18 (Tied)
	Wake County EMS	8	57.1%	18 (Tied)
Mean Score All Agencies		11.7	83.2%	--

- REMSA Ranked:
- Tied for 1st

Production Capacity

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Production Capacity (Max Raw Score = 6)	REMSA	5	83.3%	1 (Tied)
	Nova Scotia EMC/EHS	5	83.3%	1 (Tied)
	UMC Health	5	83.3%	1 (Tied)
	Orlando Fire	5	83.3%	1 (Tied)
	Sunstar EMS	5	83.3%	1 (Tied)
	Pinellas County Fire Department	5	83.3%	1 (Tied)
	Niagara EMS	5	83.3%	1 (Tied)
	Community Care Ambulance	4	66.7%	8 (Tied)
	Huntsville EMS	4	66.7%	8 (Tied)
	Richmond Ambulance Authority	4	66.7%	8 (Tied)
	Vancouver EMS	4	66.7%	8 (Tied)
	Wake County EMS	4	66.7%	8 (Tied)
	Cleveland Fire	3	50.0%	13 (Tied)
	Volusia County EMS	3	50.0%	13 (Tied)
	Sanford Health	3	50.0%	13 (Tied)
	Lake EMS	3	50.0%	13 (Tied)
	Metropolitan EMS	3	50.0%	13 (Tied)
	Advance Medical Transport	3	50.0%	13 (Tied)
	Plano Fire Rescue	3	50.0%	13 (Tied)
	Robert Woods Johnson EMS	2	33.3%	20
Mean Score All Agencies	3.9	65.0%	--	

- REMSA Ranked:
 - Tied for 1st
- Questions Missed:
 - Medical first response to Echo and Delta calls
 - Tracking medical first response times

Clinical Care

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Clinical Care (Max Raw Score = 10)	Lake EMS	10	100.0%	1 (Tied)
	Metropolitan EMS	10	100.0%	1 (Tied)
	UMC Health	10	100.0%	1 (Tied)
	Orlando, FL	10	100.0%	1 (Tied)
	Sunstar EMS	10	100.0%	1 (Tied)
	Pinellas County Fire	10	100.0%	1 (Tied)
	Plano Fire Rescue	10	100.0%	1 (Tied)
	Wake County EMS	10	100.0%	1 (Tied)
	Community Care Ambulances	9	90.0%	9 (Tied)
	Cleveland Fire	9	90.0%	9 (Tied)
	Volusia County EMS	9	90.0%	9 (Tied)
	Robert Woods Johnson EMS	9	90.0%	9 (Tied)
	Advanced Medical Transport	9	90.0%	9 (Tied)
	Richmond Ambulance Authority	9	90.0%	9 (Tied)
	Niagara EMS	9	90.0%	9 (Tied)
	Vancouver EMS	9	90.0%	9 (Tied)
	Nova Scotia EMC/EHS	8	80.0%	17 (Tied)
	Sanford Health	8	80.0%	17 (Tied)
	Huntsville Fire	8	80.0%	17 (Tied)
	REMSA	7	70.0%	20
Mean Score All Agencies	9.2	91.5%	--	

- REMSA Ranked:
 - 20th
- Questions Missed:
 - Medical Director(s) have not completed an EMS Fellowship
 - Fully functional HIE

Patient Experience

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Patient Experience (Max Raw Score = 5)	REMSA	5	100.0%	1 (Tied)
	UMC Health	5	100.0%	1 (Tied)
	Sunstar EMS	5	100.0%	1 (Tied)
	Huntsville EMS	4	80.0%	4 (Tied)
	Advance Medical Transport	4	80.0%	4 (Tied)
	Pinellas County Fire	4	80.0%	4 (Tied)
	Plano Fire Rescue	4	80.0%	4 (Tied)
	Richmond Ambulance Authority	4	80.0%	4 (Tied)
	Vancouver EMS	4	80.0%	4 (Tied)
	Nova Scotia EMC/EHS	3	60.0%	10 (Tied)
	Sanford Health	3	60.0%	10 (Tied)
	Robert Woods Johnson EMS	3	60.0%	10 (Tied)
	Niagara EMS	3	60.0%	10 (Tied)
	Wake County EMS	3	60.0%	10 (Tied)
	Orlando Fire	1	20.0%	15
	Community Care Ambulance	0	0.0%	16 (Tied)
	Cleveland Fire	0	0.0%	16 (Tied)
	Volusia County EMS	0	0.0%	16 (Tied)
	Lake EMS	0	0.0%	16 (Tied)
Metropolitan EMS	0	0.0%	16 (Tied)	
Mean Score All Agencies	2.8	55.0%	--	

- REMSA Ranked:
- Tied for 1st

Safety

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Safety (Max Raw Score = 9)	REMSA	9	100.0%	1 (Tied)
	Metropolitan EMS	9	100.0%	1 (Tied)
	Advanced Medical Transport	9	100.0%	1 (Tied)
	Sunstar EMS	9	100.0%	1 (Tied)
	Vancouver EMS	9	100.0%	1 (Tied)
	Nova Scotia EMC/EHS	8	88.9%	6 (Tied)
	Niagara EMS	8	88.9%	6 (Tied)
	Wake County EMS	8	88.9%	6 (Tied)
	Community Care Ambulance	7	77.8%	9 (Tied)
	Cleveland Fire EMS	7	77.8%	9 (Tied)
	Sanford Health	7	77.8%	9 (Tied)
	UMC Health	7	77.8%	9 (Tied)
	Robert Wood Johnson EMS	7	77.8%	9 (Tied)
	Plano Fire Rescue	6	66.7%	14 (Tied)
	Richmond Ambulance Authority	6	66.7%	14 (Tied)
	Huntsville Fire EMS	5	55.6%	16 (Tied)
	Lake EMS	5	55.6%	16 (Tied)
	Orlando Fire	5	55.6%	16 (Tied)
	Pinellas County Fire	5	55.6%	16 (Tied)
	Volusia County EMS	1	11.1%	20
Mean Score All Agencies		6.9	76.1%	--

- ❖ REMSA Ranked:
- ❖ Tied for 1st

Community Outreach

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Community Outreach (Max Raw Score = 5)	REMSA	5	100.0%	1 (Tied)
	Sanford Health	5	100.0%	1 (Tied)
	Metropolitan EMS	5	100.0%	1 (Tied)
	UMC Health	5	100.0%	1 (Tied)
	Orlando Fire	5	100.0%	1 (Tied)
	Advanced Medical Transport	5	100.0%	1 (Tied)
	Sunstar EMS	5	100.0%	1 (Tied)
	Pinellas County Fire	5	100.0%	1 (Tied)
	Plano Fire Rescue	5	100.0%	1 (Tied)
	Richmond Ambulance Authority	5	100.0%	1 (Tied)
	Niagara EMS	5	100.0%	1 (Tied)
	Vancouver EMS	5	100.0%	1 (Tied)
	Wake County EMS	5	100.0%	1 (Tied)
	Nova Scotia EMC/EHS	4	80.0%	14 (Tied)
	Volusia County EMS	4	80.0%	14 (Tied)
	Huntsville EMS	4	80.0%	14 (Tied)
	Community Care Ambulance	3	60.0%	17 (Tied)
	Cleveland Fire EMS	3	60.0%	17 (Tied)
	Lake EMS	3	60.0%	17 (Tied)
	Robert Wood Johnson EMS	3	60.0%	17 (Tied)
Mean Score All Agencies		4.5	89.0%	--

- REMSA Ranked:
- Tied for 1st

Workforce Focus

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Workforce Focus (Max Raw Score = 9)	Plano Fire Rescue	8	88.9%	1
	Community Care Ambulance	7	77.8%	2 (Tied)
	Sanford Health	7	77.8%	2 (Tied)
	UMC Health	7	77.8%	2 (Tied)
	Advanced Medical Transport	7	77.8%	2 (Tied)
	Wake County EMS	7	77.8%	2 (Tied)
	REMSA	6	66.7%	7 (Tied)
	Orlando Fire	6	66.7%	7 (Tied)
	Vancouver EMS	6	66.7%	7 (Tied)
	Cleveland Fire EMS	5	55.6%	10 (Tied)
	Nova Scotia EMC/EHS	5	55.6%	10 (Tied)
	Robert Wood Johnson EMS	5	55.6%	10 (Tied)
	Pinellas County Fire	5	55.6%	10 (Tied)
	Richmond Ambulance Authority	5	55.6%	10 (Tied)
	Niagara EMS	5	55.6%	10 (Tied)
	Sunstar EMS	4	44.4%	16
	Huntsville EMS	2	22.2%	17 (Tied)
	Lake EMS	2	22.2%	17 (Tied)
	Volusia County EMS	1	11.1%	19 (Tied)
	Metropolitan EMS	1	11.1%	19 (Tied)
Mean Score All Agencies		5.1	56.1%	--

- REMSA Ranked:
 - Tied for 7th
- Questions missed:
 - Does not require National Registry
 - EMT salary is not above 50th percentile
 - Annual attrition rate is above 15%

Leadership

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Leadership (Max Raw Score = 5)	REMSA	4	80.0%	1 (Tied)
	UMC Health	4	80.0%	1 (Tied)
	Sunstar EMS	4	80.0%	1 (Tied)
	Wake County EMS	4	80.0%	1 (Tied)
	Metropolitan EMS	3	60.0%	5 (Tied)
	Robert Wood Johnson EMS	3	60.0%	5 (Tied)
	Advanced Medical Transport	3	60.0%	5 (Tied)
	Niagara EMS	3	60.0%	5 (Tied)
	Community Care Ambulance	2	40.0%	9 (Tied)
	Volusia County EMS	2	40.0%	9 (Tied)
	Sanford Health	2	40.0%	9 (Tied)
	Pinellas County Fire	2	40.0%	9 (Tied)
	Richmond Ambulance Authority	2	40.0%	9 (Tied)
	Vancouver EMS	2	40.0%	9 (Tied)
	Nova Scotia EMC/EHS	1	20.0%	15 (Tied)
	Huntsville EMS	1	20.0%	15 (Tied)
	Lake EMS	1	20.0%	15 (Tied)
	Orlando Fire	1	20.0%	15 (Tied)
	Plano Fire Rescue	1	20.0%	15 (Tied)
	Cleveland Fire EMS	0	0.0%	20
Mean Score All Agencies		2.3	45.0%	--

- REMSA Ranked:
 - Tied for 1st
- Questions missed:
 - No requirement for supervisors or senior leaders to obtain ACPE credentialing

Operations

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Operations (Max Raw Score = 15)	REMSA	10	66.7%	1 (Tied)
	UMC Health	10	66.7%	1 (Tied)
	Wake County EMS	10	66.7%	1 (Tied)
	Volusia County EMS	8	53.3%	4
	Nova Scotia EMC/EHS	7	46.7%	5 (Tied)
	Metropolitan EMS	7	46.7%	5 (Tied)
	Advanced Medical Transport	7	46.7%	5 (Tied)
	Plano Fire Rescue	7	46.7%	5 (Tied)
	Niagara EMS	7	46.7%	5 (Tied)
	Advanced Medical Transport	6	40.0%	10 (Tied)
	Sanford Health	6	40.0%	10 (Tied)
	Richmond Ambulance Authority	6	40.0%	10 (Tied)
	Huntsville EMS	5	33.3%	13 (Tied)
	Robert Wood Johnson EMS	5	33.3%	13 (Tied)
	Sunstar EMS	5	33.3%	13 (Tied)
	Pinellas County Fire	5	33.3%	13 (Tied)
	Orlando Fire	4	26.7%	17
	Lake EMS	3	20.0%	18
Vancouver EMS	2	13.3%	19	
Cleveland Fire EMS	0	0.0%	20	
Mean Score All Agencies		6.0	40.0%	--

- REMSA Ranked:
- Tied for 1st

Fleet

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Fleet (Max Raw Score = 4)	REMSA	4	100.0%	1 (Tied)
	Sanford Heath	4	100.0%	1 (Tied)
	Metropolitan EMS	4	100.0%	1 (Tied)
	UMC Health	4	100.0%	1 (Tied)
	Orlando Fire	4	100.0%	1 (Tied)
	Advanced Medical Transport	4	100.0%	1 (Tied)
	Sunstar EMS	4	100.0%	1 (Tied)
	Pinellas County Fire	4	100.0%	1 (Tied)
	Plano Fire Rescue	4	100.0%	1 (Tied)
	Richmond Ambulance Authority	4	100.0%	1 (Tied)
	Niagara EMS	4	100.0%	1 (Tied)
	Vancouver EMS	4	100.0%	1 (Tied)
	Wake County EMS	4	100.0%	1 (Tied)
	Community Care Ambulance	3	75.0%	14 (Tied)
	Huntsville EMS	3	75.0%	14 (Tied)
	Lake EMS	3	75.0%	14 (Tied)
	Robert Woods Johnson EMS	2	50.0%	17
	Nova Scotia EMC/EHS	1	25.0%	18 (Tied)
	Volusia County EMS	1	25.0%	18 (Tied)
Cleveland Fire EMS	0	0.0%	20	
Mean Score All Agencies		3.3	81.3%	--

- REMSA Ranked:
- Tied for 1st

Finance & Reimbursement

Category	Agency	Total Raw Score	Total Percent Score	Rank (Within Category)
Finance and Reimbursement (Max Raw Score = 10)	REMSA	9	90.0%	1
	Advanced Medical Transport	8	80.0%	2 (Tied)
	Richmond Ambulance Authority	8	80.0%	2 (Tied)
	Sanford Health	7	70.0%	4 (Tied)
	Huntsville EMS	7	70.0%	4 (Tied)
	Vancouver EMS	7	70.0%	4 (Tied)
	Wake County EMS	7	70.0%	4 (Tied)
	Volusia County EMS	6	60.0%	8 (Tied)
	UMC Health	6	60.0%	8 (Tied)
	Plano Fire Rescue	6	60.0%	8 (Tied)
	Nova Scotia EMC/EHS	5	50.0%	11 (Tied)
	Metropolitan EMS	5	50.0%	11 (Tied)
	Robert Wood Johnson EMS	5	50.0%	11 (Tied)
	Orlando Fire	5	50.0%	11 (Tied)
	Lake EMS	4	40.0%	15 (Tied)
	Sunstar EMS	4	40.0%	15 (Tied)
	Pinellas County Fire	4	40.0%	15 (Tied)
	Community Care Ambulance	3	30.0%	18
	Niagara EMS	1	10.0%	19
	Cleveland Fire EMS	0	0.0%	20
Mean Score All Agencies		5.4	53.5%	--

- REMSA Ranked:
 - 1st
- Questions missed:
 - REMSA does not currently collect subsidies

COVID-19 Hospital Turnaround Time

			Increase in Hospital Turnaround Time Due to Covid-19	
Agency Type	Agency Location	Observed	Minutes	
REMSA	Reno, NV (REMSA)	Yes	> 20	
Public Utility Authority	Little Rock, AR	Yes	> 20	
	Pinellas County, FL (Ambulance)	Yes	> 20	
	Pinellas County, FL (Fire Department)	Yes	> 20	
	Richmond, VA	Yes	16-20	
	Daytona Beach, FL	Yes	11-15	
Other	County Operated	Wake County, NC	Yes	11-15
	Fire Department-Based	Orlando, FL	Yes	0-5
		Plano, TX	Yes	0-5
	Hospital-Based	Lubbock, TX	Yes	6-10
		New Brunswick, NJ	Yes	11-15
	Municipal	Dartmouth, NS, Canada	Yes	> 20
		Thorold, ON, Canada	Yes	> 20
	Non-Governmental, For-Profit	Vancouver, WA	Yes	> 20
	Non-Governmental, Not-for-Profit	Ashtabula, OH	Yes	6-10
		Fargo, ND	NR ¹	NR ¹
		Huntsville, AL	Yes	11-15
		Peoria, IL	Yes	11-15
	Third Service	Cleveland, OH	Yes	0-5
		Lake County, FL	Yes	> 20

Production Capacity

2010 Market Study: \$197.32 REMSA Unit Hour Cost

Cost/Unit Hour	Number of Response	
\$100.01 - \$120	3	
\$120.01 - \$140	2	
\$160.01 - \$180	3	REMSA Scored***
Greater than \$200	1	Canada***
Not Rated	10	

Market Survey Summary

- REMSA scored 1st overall as well as 1st in numerous categories
- REMSA answered no to several questions
 - Agency Data – Lacking CAAS and CPSE Accreditation
 - Communications – Lacking approval from Reno dispatch for CAD-to-CAD transfer
 - Operations - Only 1 paramedic and no medical first response to ECHO calls and does utilize BLS to respond to low acuity calls
 - Clinic Care - Medical Director does not have an EMS fellowship and has minimal out of hospital medical experience, and lacks a fully functional HIE
 - Leadership – Do not require leaders to obtain leadership credentialing such as ACPE
 - Work force – EMT Salary is below 50th percentile, annual attrition rate is greater than 15%, no requirement for National Registry
 - Finance & Reimbursement – Does not collect subsidy for services provided

Data Analysis

Methodology

- Data was exported by REMSA from FirstWatch data management software
- Report includes data from 2016 through August 28, 2021
- Collected four data sets including: incident, chute time, hospital drop time, and time on task
- Busy time of a unit is broken down into four components: turnout & travel time, on-scene time, transport time, and at destination time

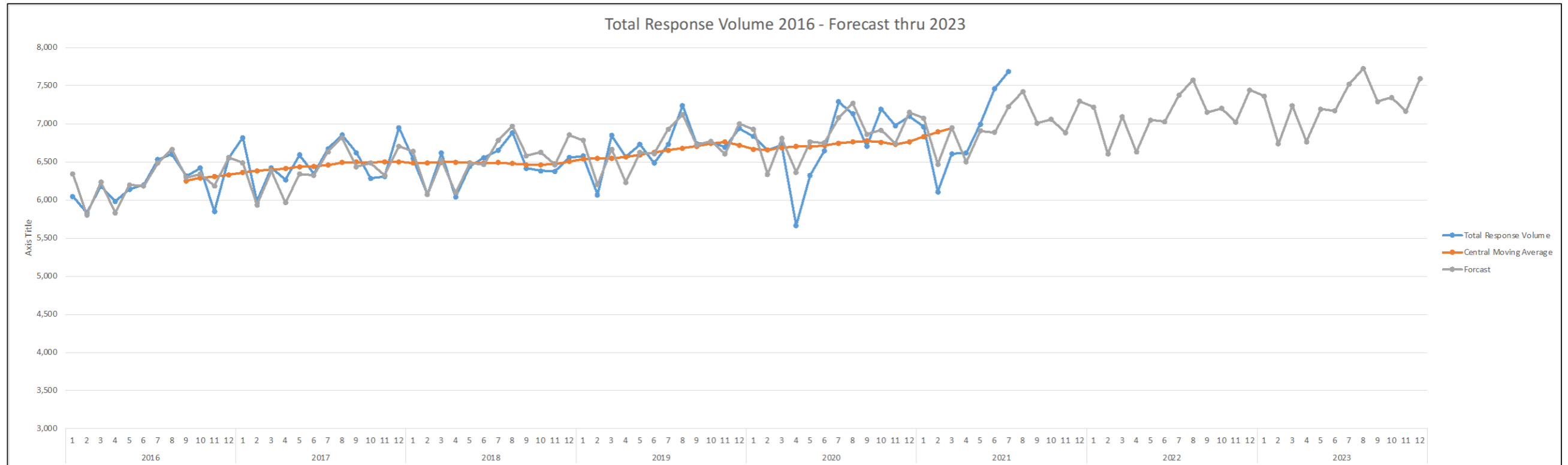
Responses by Month and Year

All Responses						
Month	2016	2017	2018	2019	2020	2021
Jan	6,046	6,818	6,542	6,576	6,832	6,962
Feb	5,834	5,981	6,068	6,065	6,657	6,104
Mar	6,179	6,422	6,617	6,845	6,721	6,605
Apr	5,980	6,263	6,038	6,566	5,664	6,615
May	6,140	6,590	6,443	6,727	6,324	6,995
Jun	6,199	6,342	6,552	6,484	6,642	7,462
Jul	6,529	6,673	6,648	6,727	7,289	7,687
Aug	6,600	6,853	6,882	7,238	7,130	
Sep	6,314	6,619	6,414	6,733	6,703	
Oct	6,417	6,285	6,381	6,757	7,192	
Nov	5,849	6,308	6,374	6,691	6,974	
Dec	6,552	6,948	6,558	6,940	7,098	
Total	74639	78,102	77,517	80,349	81,226	48,430
Jan-July	42,907	45,089	44,908	45,990	46,129	48,430

Responses - Percentage Increase

Month	Year over Year (Percentage Difference)					CAGR
	2017 vs 2016	2018 vs 2017	2019 vs 2018	2020 vs 2019	2021 vs 2020	
Jan	12.8%	-4.0%	0.5%	3.9%	1.9%	2.9%
Feb	2.5%	1.5%	0.0%	9.8%	-8.3%	0.9%
Mar	3.9%	3.0%	3.4%	-1.8%	-1.7%	1.3%
Apr	4.7%	-3.6%	8.7%	-13.7%	16.8%	2.0%
May	7.3%	-2.2%	4.4%	-6.0%	10.6%	2.6%
Jun	2.3%	3.3%	-1.0%	2.4%	12.3%	3.8%
Jul	2.2%	-0.4%	1.2%	8.4%	5.5%	3.3%
Aug	3.8%	0.4%	5.2%	-1.5%		
Sep	4.8%	-3.1%	5.0%	-0.4%		
Oct	-2.1%	1.5%	5.9%	6.4%		
Nov	7.8%	1.0%	5.0%	4.2%		
Dec	6.0%	-5.6%	5.8%	2.3%		
Total	4.6%	-0.7%	3.7%	1.1%		
Jan-July	5.1%	-0.4%	2.4%	0.3%	5.0%	2.5%

Forecast Modeling



<u>Evaluated Type</u>	<u>Year</u>	<u>Responses</u>	<u>% Change</u>
Actual	2016	74,639	
Actual	2017	78,102	4.4%
Actual	2018	77,517	-0.8%
Actual	2019	80,349	3.5%
Actual	2020	81,226	1.1%
Actual/Projected	2021	84,093	3.4%
Projected	2022	85,379	1.5%
Projected	2023	87,091	2.0%

2021 – Compliance Summary

Threshold	Total Calls	Compliant Calls	Compliant %	Average Turnout and Travel Time	90th Percentile Turnout and Travel Time
8:59	16,990	14,691	86.5%	6:00	9:50
12:59	14,059	13,114	93.3%	6:47	11:31
15:59	500	404	80.8%	12:03	18:36
19:59	12,185	11,366	93.3%	9:29	17:27
20:59	116	114	98.3%	12:32	18:17
24:59	353	320	90.7%	15:14	24:27
29:59	6,292	5,178	82.3%	17:20	48:04
30:59	13	12	92.3%	20:51	29:28
34:59	14	13	92.9%	18:31	34:54
39:59	8	8	100.0%	24:16	37:23
Total Raw Compliance	50,530	45,220	89.5%	8:37	14:36
ASAP	371	371			
Cancelled Enroute	3,682	3,682			
Exemption Approve	364	364			
Total Actual Compliance	54,947	49,637	90.3%		

Data Analysis Summary

- For 2020 & 2021: REMSA meets or exceeds overall 90% performance
 - 2021 Raw Performance at 89.5% compliant
 - 2021 Priority 1 Raw Performance at 86.5% compliant
- Responded to 81,226 requests in 2020, or 222 trips per day on average
- The average daily trips in 2020 were 9% higher than in 2016 and increased at a Compound Annual Growth Rate (CAGR)s of 2.1%.
- 2021 demand increased at 3.6%.
- 2021 Turnout and travel time increased by ~3 minutes from 2019

Deployment Models

Density Map

Figure 3: Heat Map

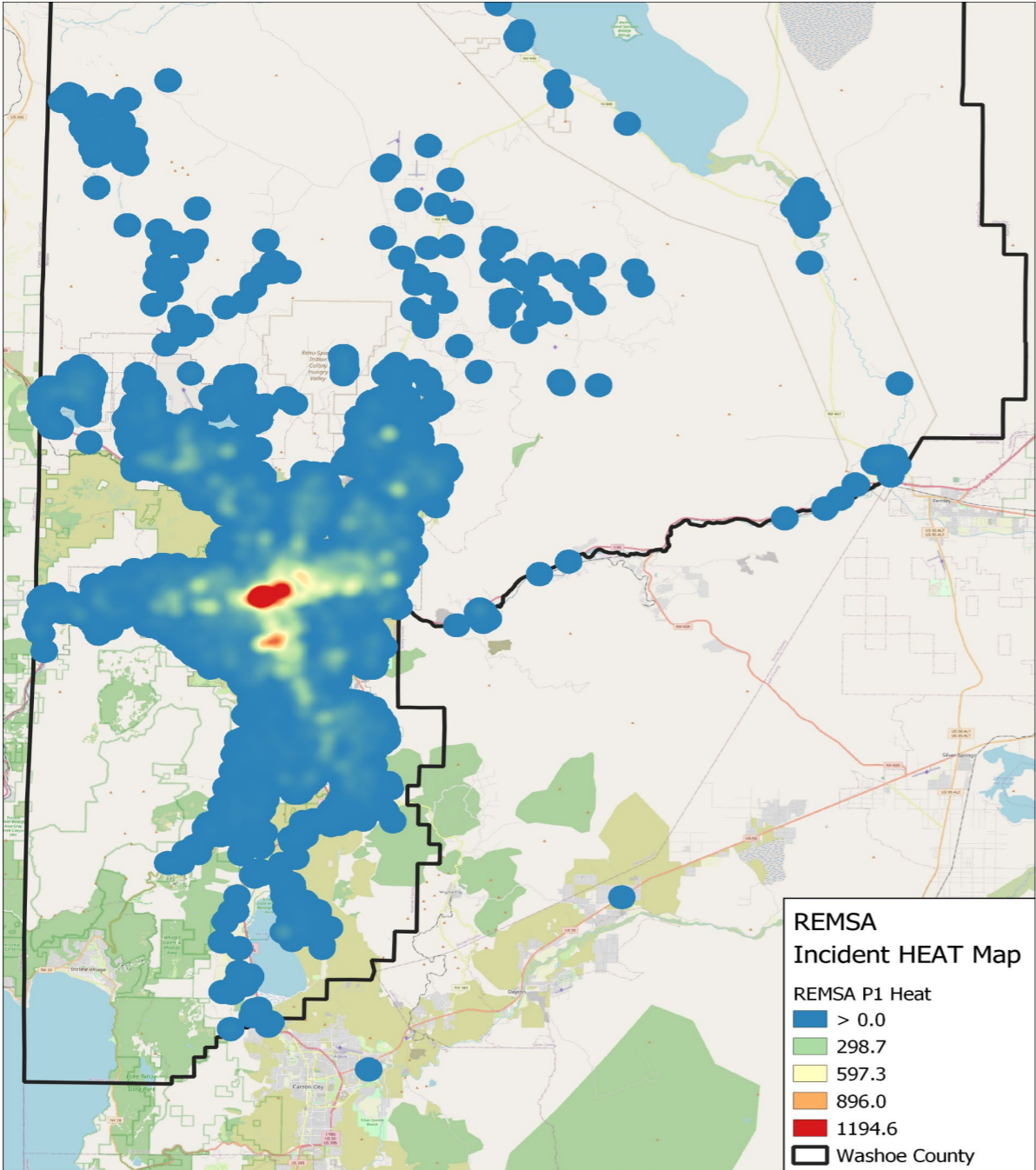
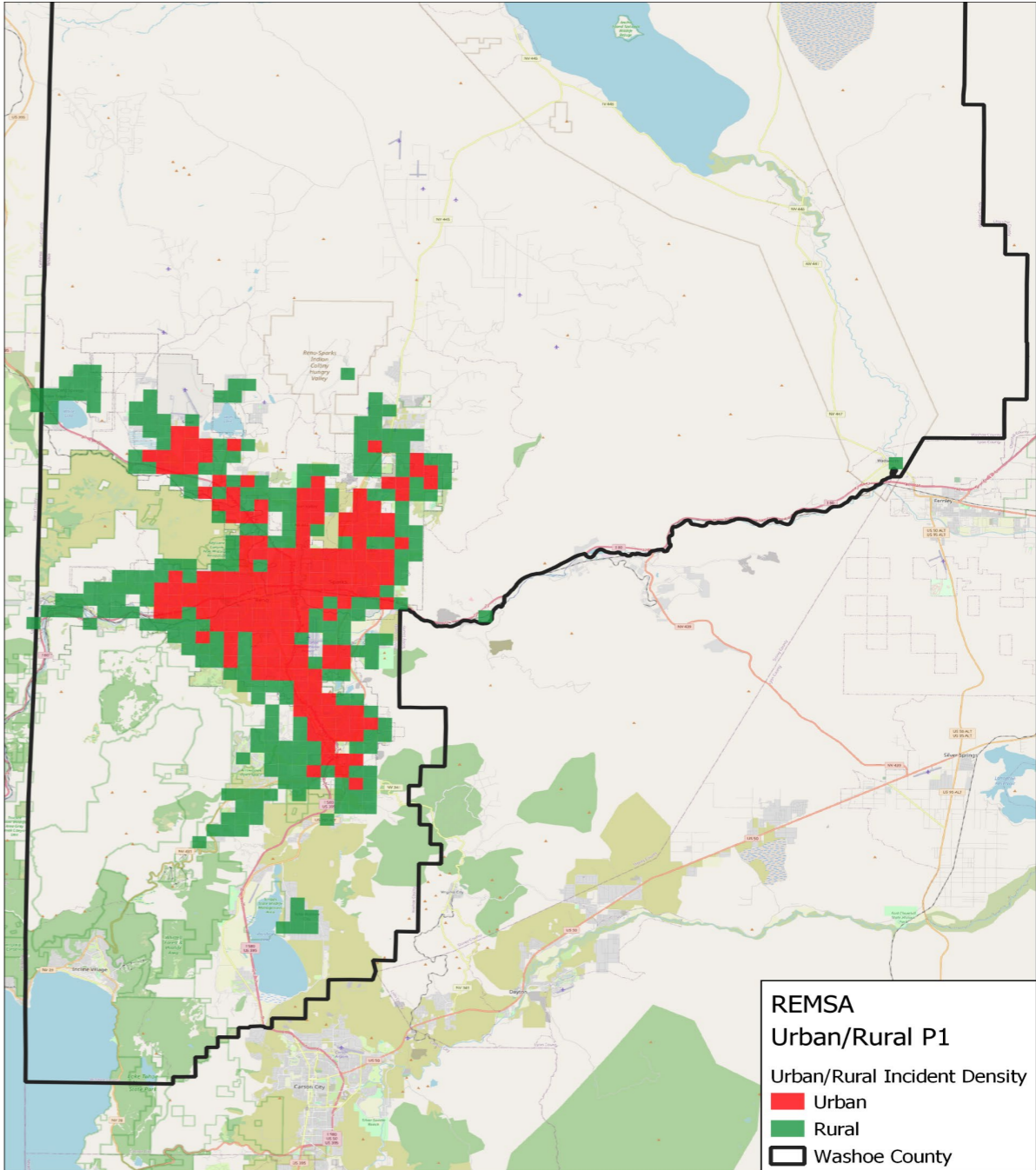
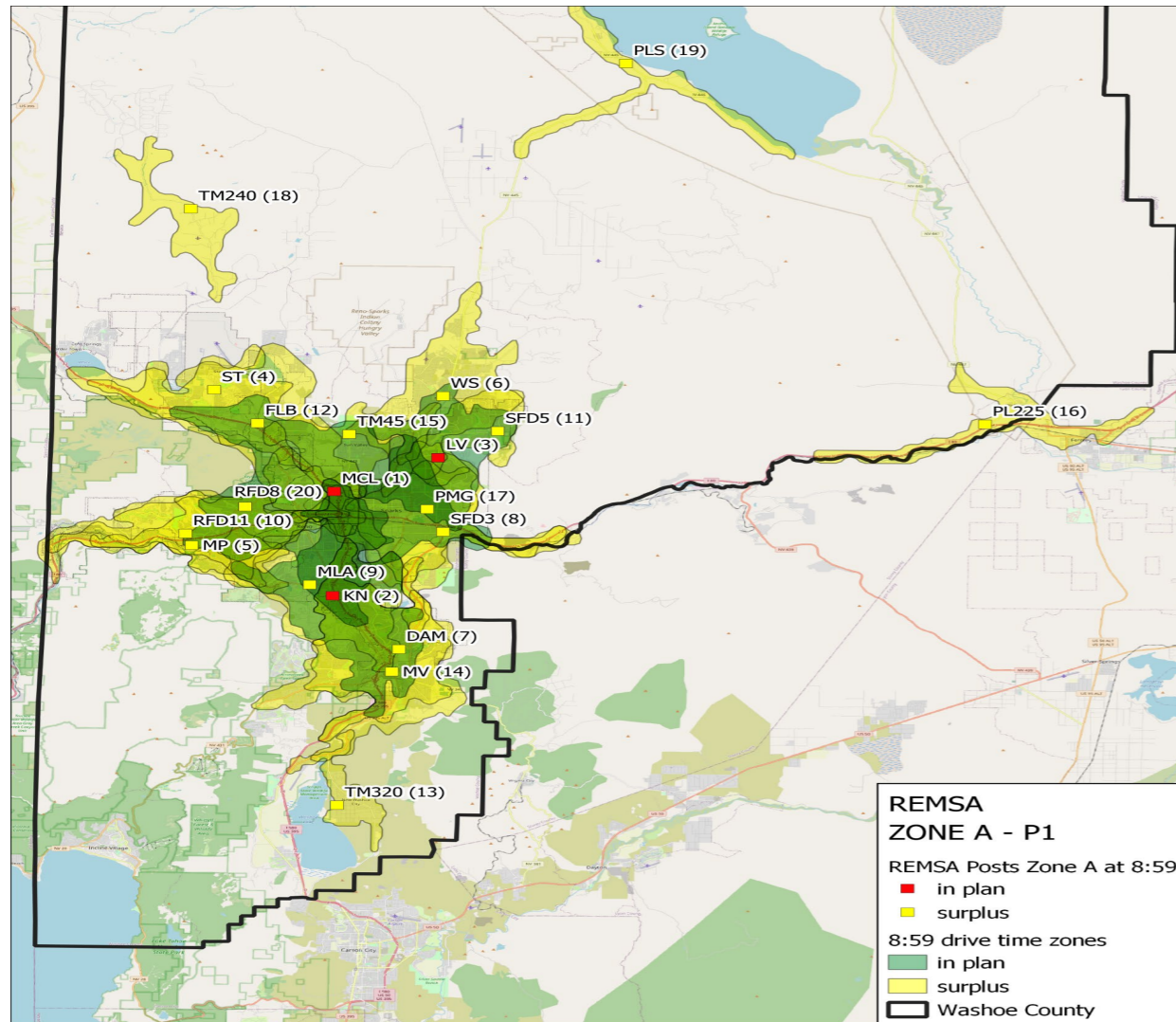


Figure 4: Urban / Rural



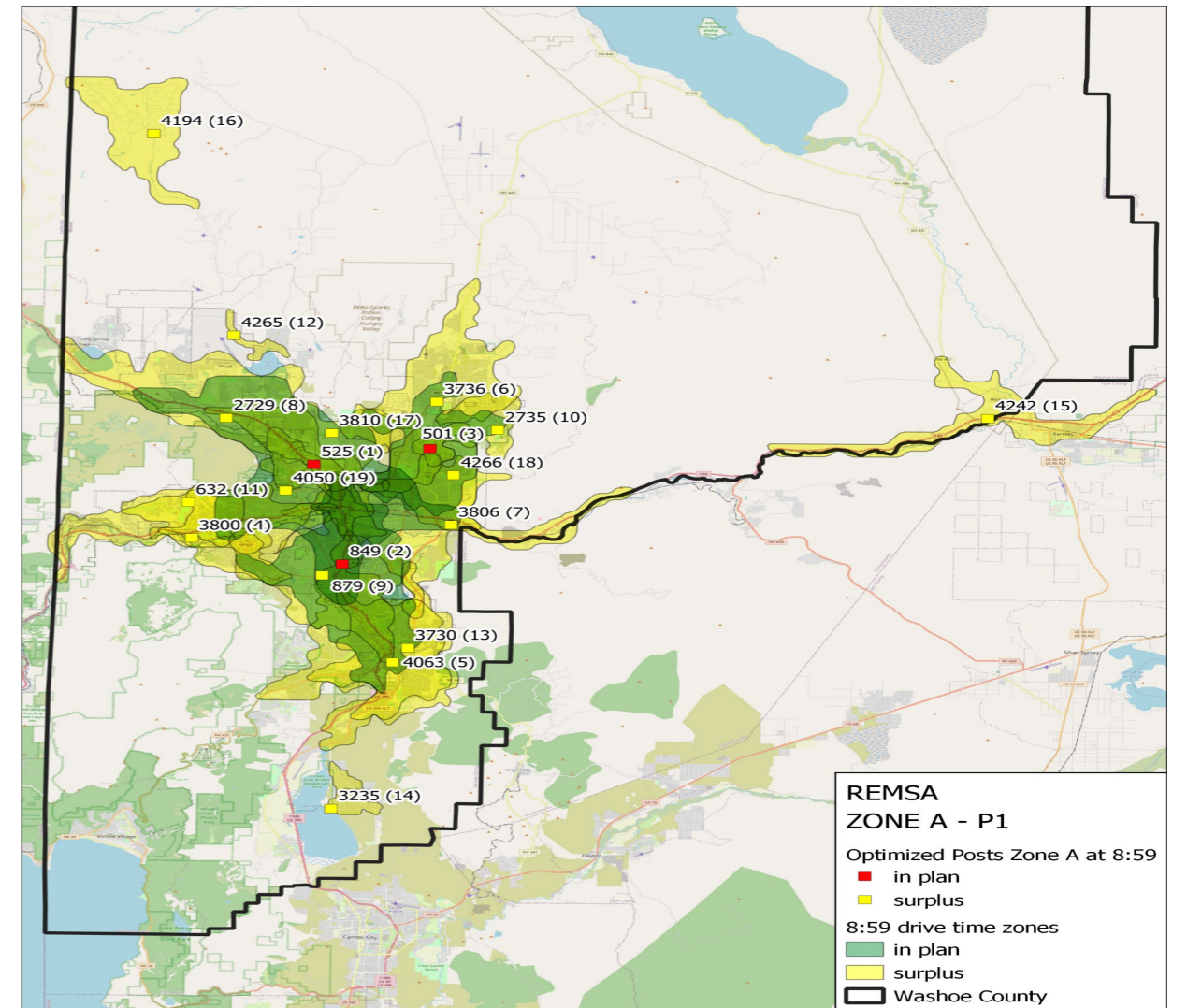
Deployment - Zone A - 8:59

REMSA Post Deployment



Post Rank	Post Number	Drive Time	Latitude	Longitude	Post Class	Post Capture	Total Capture	% Capture
1	MCL	8.98	39.556386	-119.791367	U	35747	35747	81.60%
2	KN	8.98	39.467215	-119.790999	U	2924	38671	88.27%
3	LV	8.98	39.585933	-119.715002	U	2012	40683	92.86%
4	ST	8.98	39.642333	-119.881568	X	937	41620	95.00%

Fitch Optimized Modeling



Post Rank	Post Number	Drive Time	Latitude	Longitude	Post Class	Post Capture	Total Capture	% Capture
1	525	8.98	39.573769	-119.808666	U	32687	32687	74.61%
2	849	8.98	39.487724	-119.785588	U	4193	36880	84.18%
3	501	8.98	39.588321	-119.720789	U	3525	40405	92.23%
4	3800	8.98	39.509058	-119.900163	X	1630	42035	95.95%

Deployment Findings - Summary

Deployment plan meets or exceeds Fitch independent review

Final Summary

➤ Market Study

- Outscored both the averaged Public Utility Model & Other Agency Types
- Scored 1st overall
- REMSA has opportunity to improve in certain categories
- Cost Per Unit Hour has not increased since the 2010 study

➤ Independent Data Review

- 2021 April – July have seeing higher demands for service
- 2020 & 2021 Overall Performance above 90% compliance.
 - Challenged with 2021 Priority 1 performance
 - Many factors are contributing related to pandemic, however REMSA has maintained overall 90% compliance

➤ Deployment

- Deployment plan meets or exceeds Fitch independent review

Final Summary

- No evidence to support the need to place the ground ambulance contract out to competitive bid
- Washoe County and REMSA are experiencing changes with significant urban sprawl, increased 911 call volume, increased costs, and increased demand for staffing
- EMS system must continue to enhance performance and quality to validate that performance through the current assurance processes
- If the EMS system is unable to sustain performance in all zones, keep up with growth, or requests community tax support we recommend a robust full EMS system modeling review to continue to support EMS in the region for the future

Questions?

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