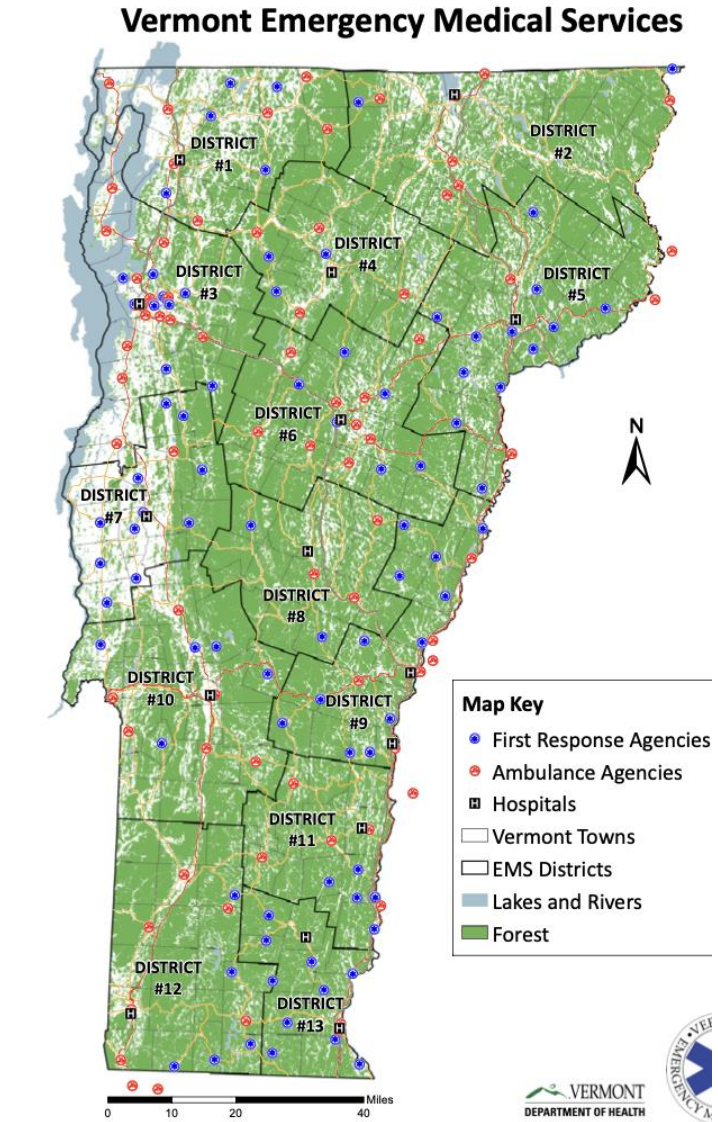


Governance

- The EMS office provides centralized oversight of the EMS system
 - Licensing of Services
 - Licensing of Personal
 - Investigations
 - Data collection
 - Training
 - Protocol Development
- 13 Districts through statute and rule provide varying levels of local system oversight
 - Organization and structure of these districts is inconsistent
 - District medical advisor(s) provides local medical oversight by delegated authority of the commissioner of health
- EMS Advisory Committee
 - Created in statute to advise the commissioner and legislature on EMS
 - Tasked to write and maintain a 5 year plan for EMS



Vermont EMS Assessment

2025



Working Draft Information

*Not for Public Release

We have completed the data collection for ambulance services and to the best of our ability validated that information prior to today's presentation.

Over the next several weeks, each service will receive an individual email with their information for one final opportunity to review and correct any errors. It is unlikely that the aggregated information will be impacted if minor corrections are needed.

Data Limitation Disclaimer

- Data is presented using a combination of data collected through self-reporting surveys, ground ambulance data collection documents, Vermont EMS data systems, and publicly available information. Vermont does not have a system in place that collects and stores all these data points.
- All data points have been verified directly with service leaders to the best of our ability.
- A small percentage of data has been estimated in cases where detailed information was not available.
- Each service reporting period is a 1-year period somewhere between 2023-2025 if the service was using the ground ambulance data collection documents to share information.
- All other data requested was from 2024

Access to data, data assumptions and data sources

Data used in this assessment was targeted toward calendar year 2024. Due to challenges with accessing a complete data set, many different methods were used to collect the data. Service level data may be based on a fiscal year, calendar year or in some cases blended. Services that supplied their ground ambulance cost report provided data for their assigned reporting year.

EMS System Data 2024

- Call numbers
 - About 100,000 911 calls annually - 6% increase
 - 28,000 interfacility transfers (the definition varies from service to service) - 8% increase
 - About 29,500 911 calls did not result in transport

EMS Service information

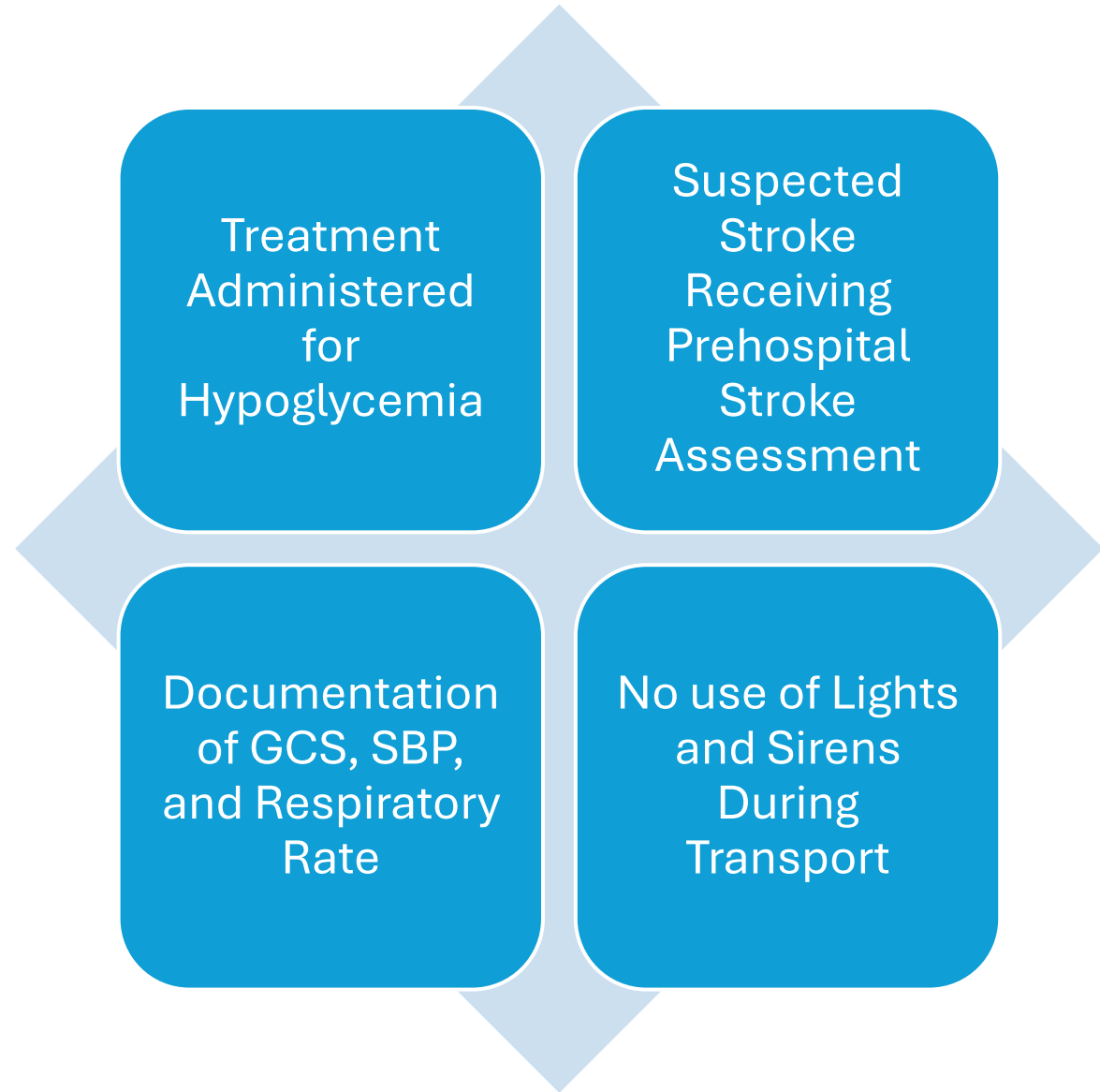
- Number of First Response Services
 - 32 EMT
 - 53 AEMT
 - 5 paramedic
- Number of Vermont Licensed Ambulance services
 - 65 Vermont based ambulance services
 - 2 out of state with instate locations
 - 7 out of state that are licensed in Vermont
 - 15 AEMT
 - 47 paramedic
 - 14 CCP
- Out of state
 - A number that are operating in Vermont without Vermont licenses. (we do not have data on their activity in VT)
 - Air medical service data is not included
- Other Unique EMS service consideration
 - 2 college based services
 - 1 part time ski area service
 - 1 transfer only service

System Finance

- Total system cost
 - Approximately 98 million
- Total reimbursement from insurance payers
 - Approximately 53 million
- Local tax
 - Approximately 43 million
- Fundraising
 - Approximately 1.2 million
- Volunteer labor contribution
 - 9.7 million
- Provider Tax Paid
 - Approximately 1.4 million



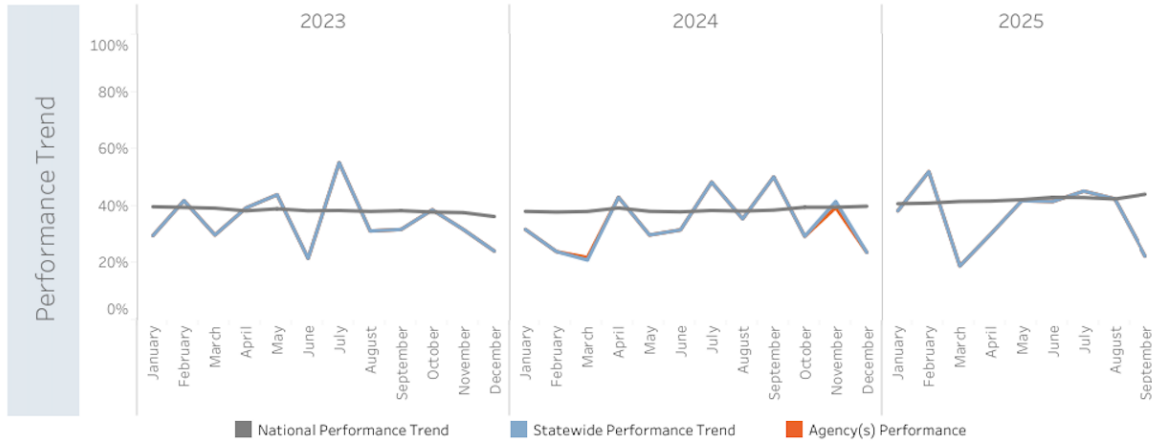
System Performance



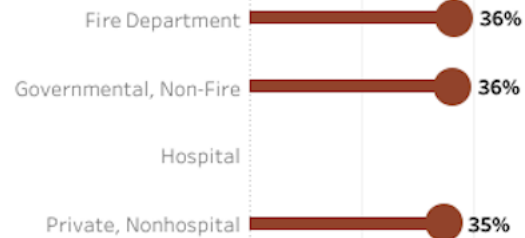
Statewide

Hypoglycemia-01
Treatment Administered for Hypoglycemia

35%

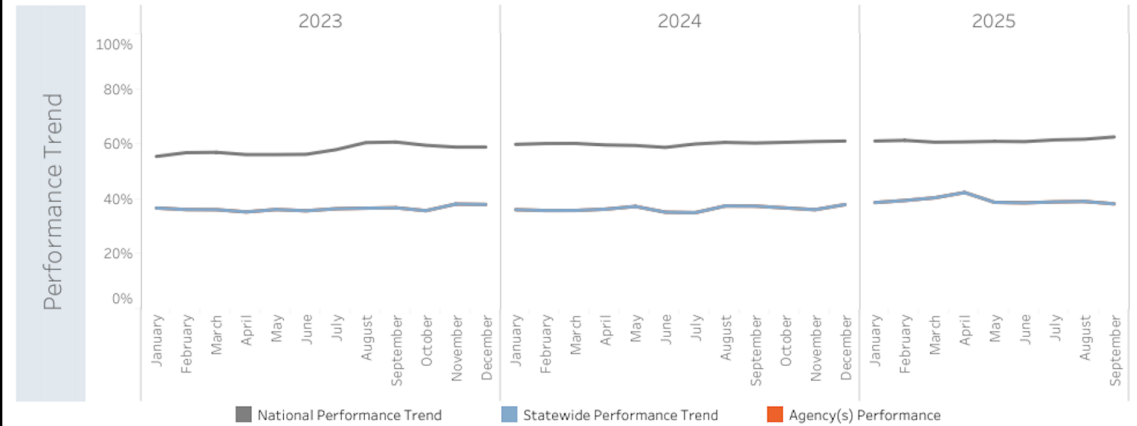


Organizational Type

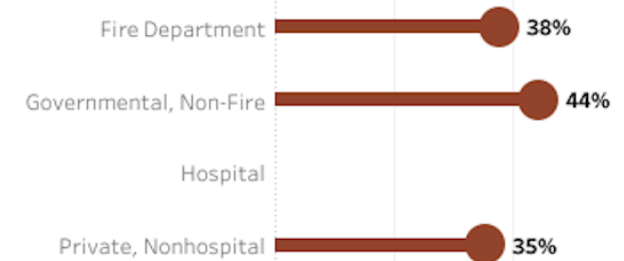


Safety-02
No use of Lights and Sirens During Transport

37%



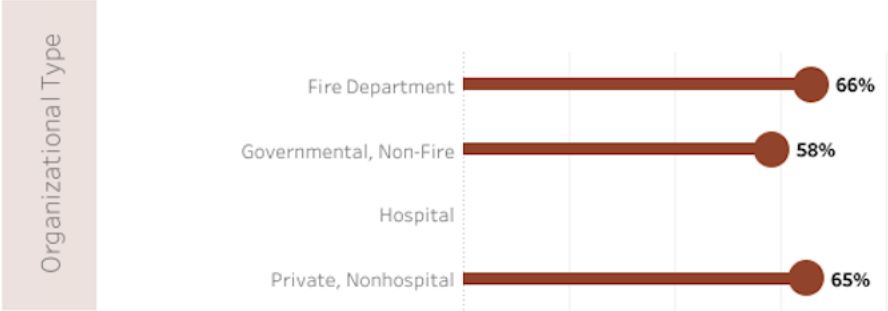
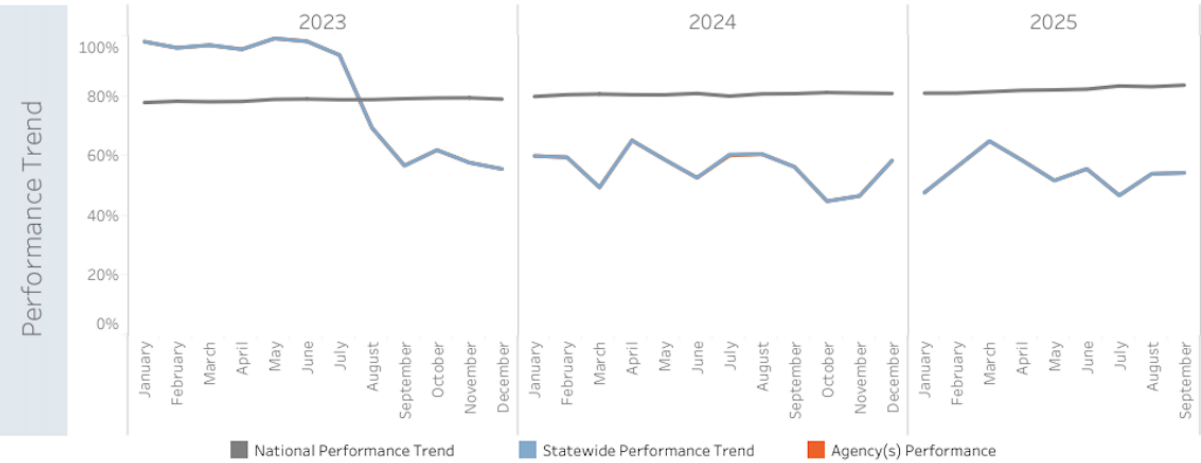
Organizational Type



Statewide

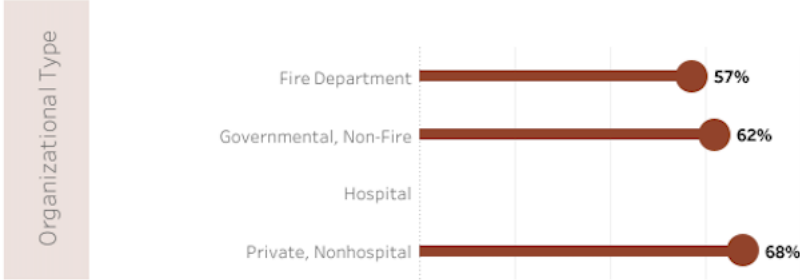
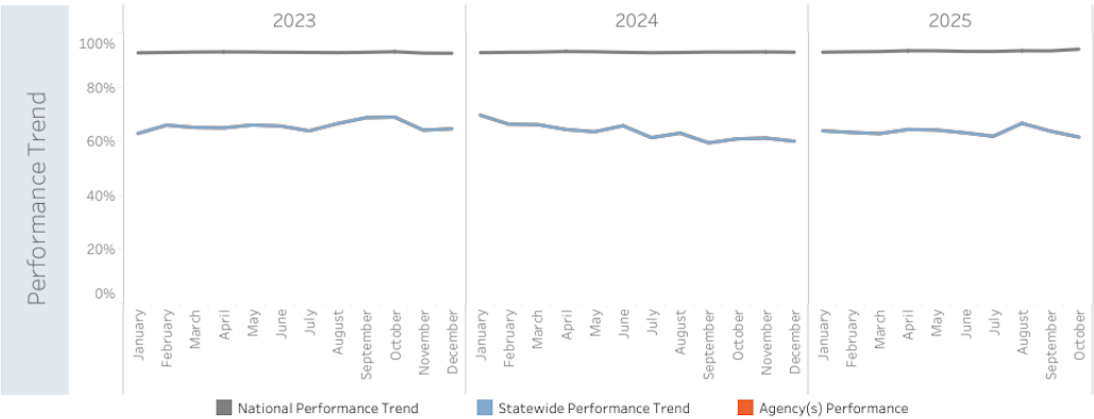
Stroke-01
Suspected Stroke Receiving Prehospital Stroke Assessment

64%



Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

64%



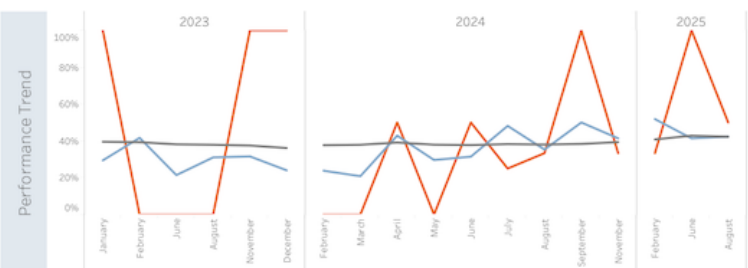
Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 1
39%



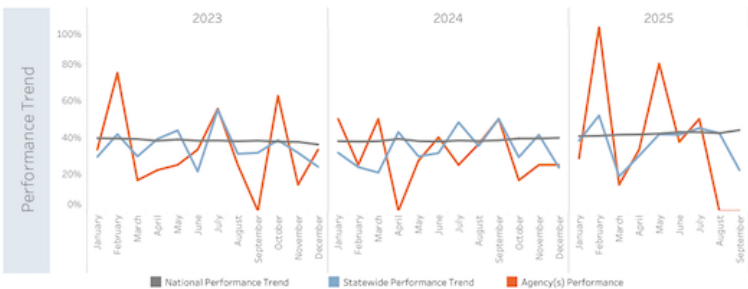
Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 2
44%



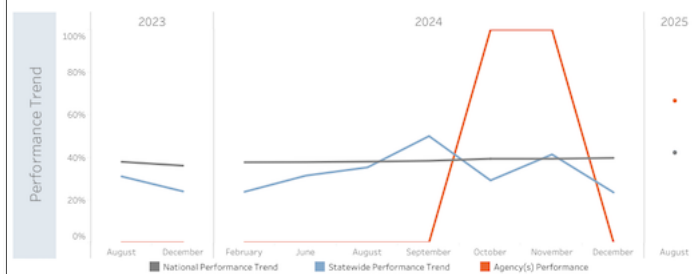
Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 3
35%



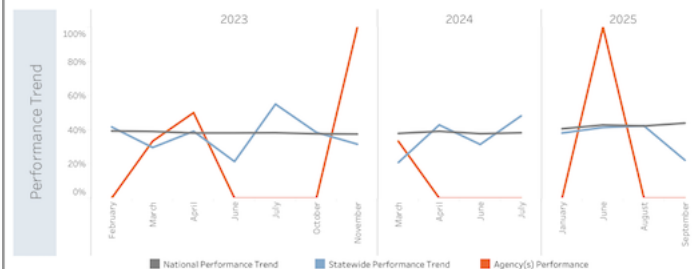
Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 4
22%



Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 5
21%



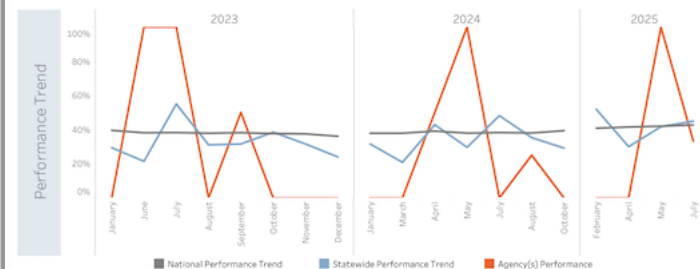
Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 6
33%



Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 7
33%



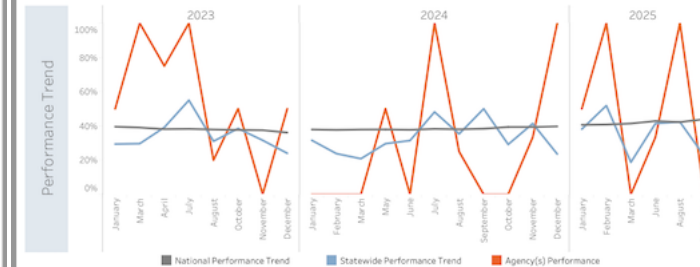
Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 8
44%



Hypoglycemia-01
Treatment Administered for Hypoglycemia

District 9
43%



Treatment Administered for Hypoglycemia

District 10

Hypoglycemia-01
Treatment Administered for Hypoglycemia

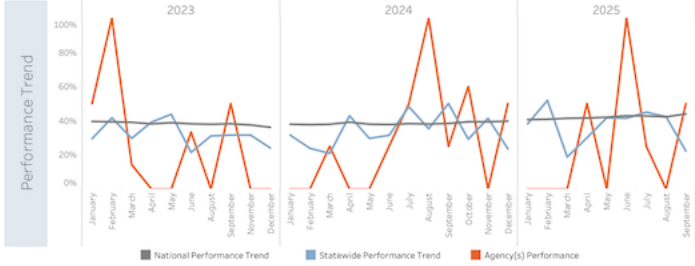
43%



District 12

Hypoglycemia-01
Treatment Administered for Hypoglycemia

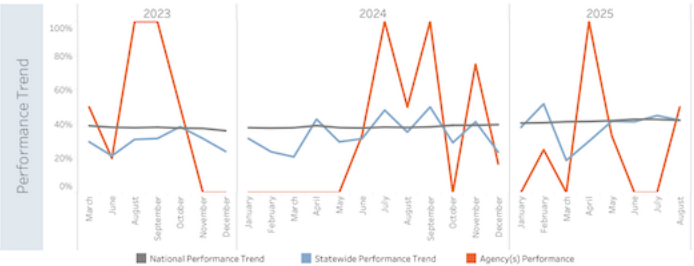
23%



District 11

Hypoglycemia-01
Treatment Administered for Hypoglycemia

33%



District 13

Hypoglycemia-01
Treatment Administered for Hypoglycemia

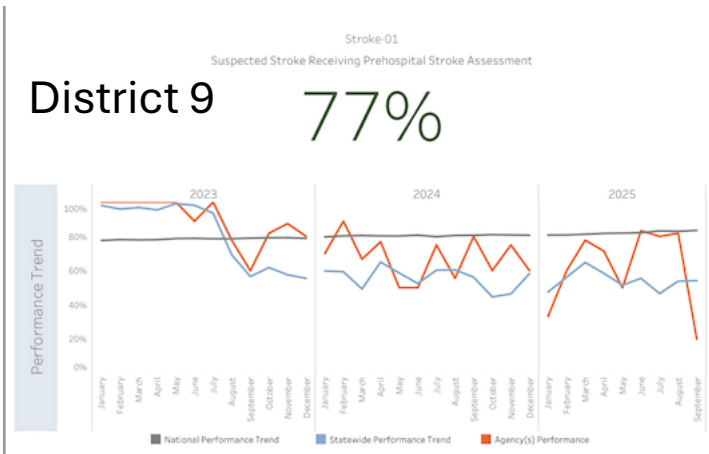
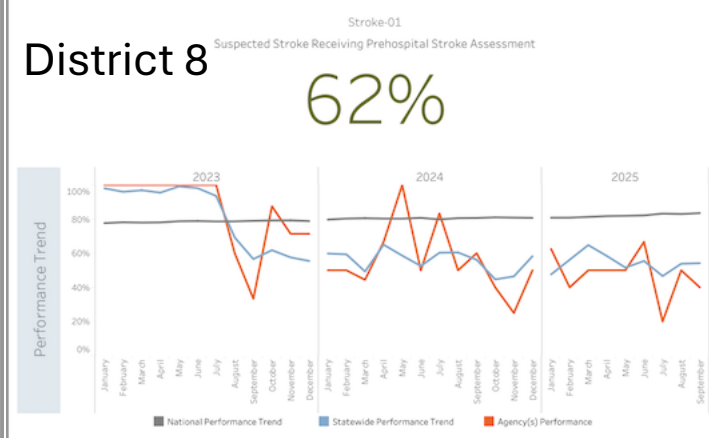
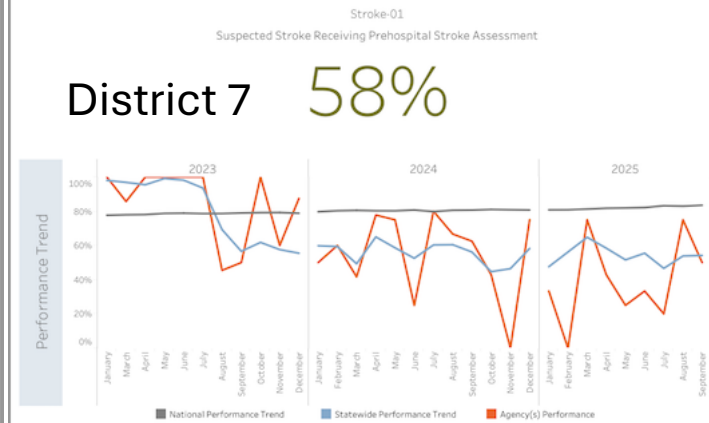
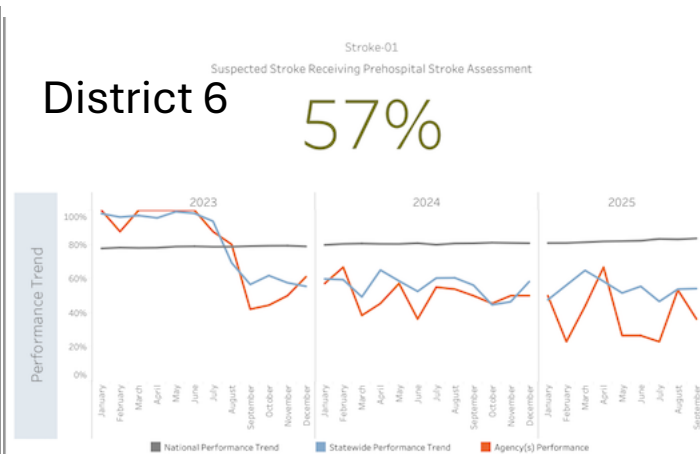
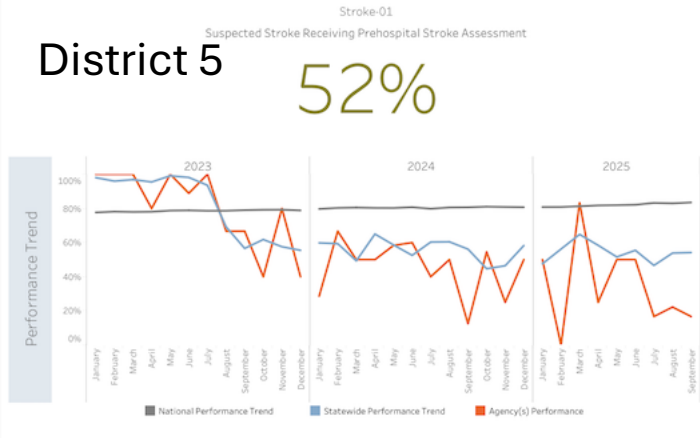
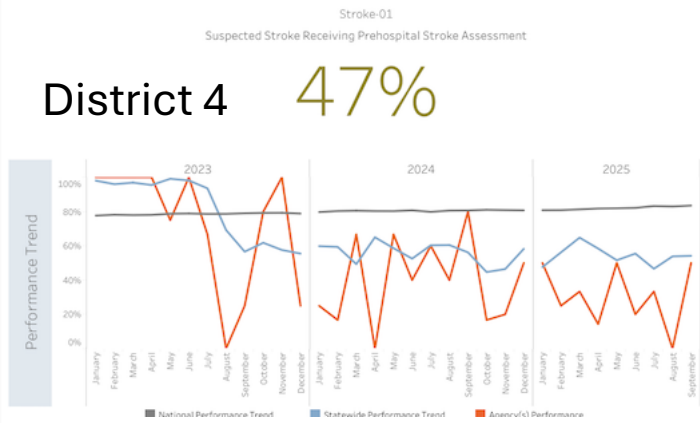
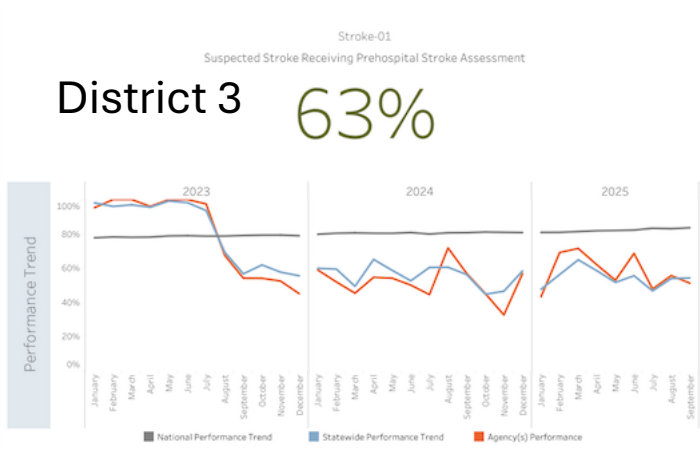
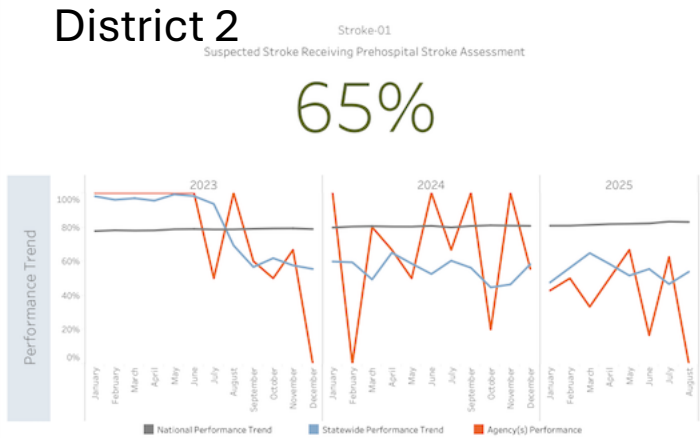
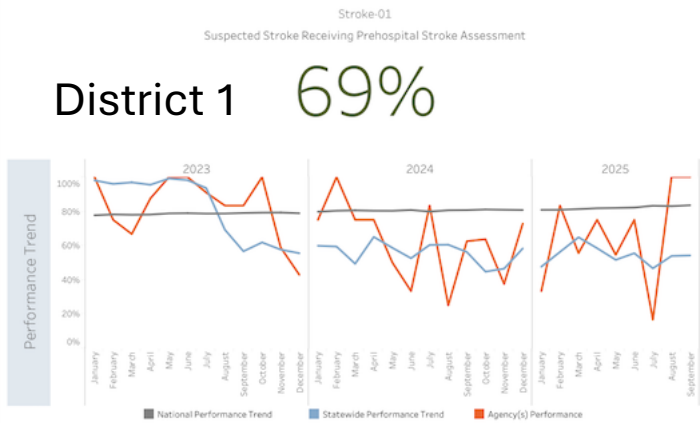
38%



Northeast
Vermont

32%
35%

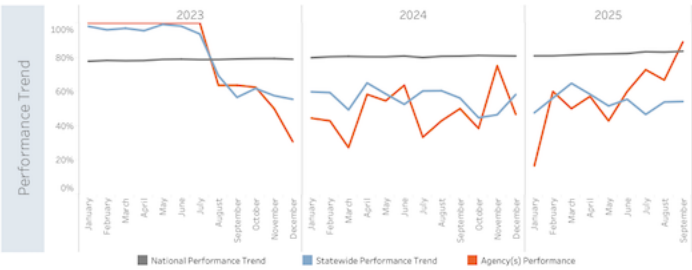
Treatment Administered for Hypoglycemia



Suspected Stroke Receiving Prehospital Stroke Assessment

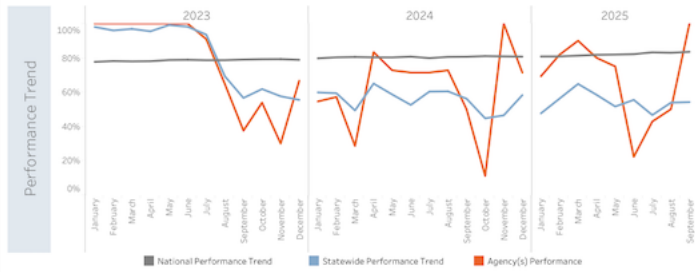
Stroke-01
Suspected Stroke Receiving Prehospital Stroke Assessment

District 10 61%



Stroke-01
Suspected Stroke Receiving Prehospital Stroke Assessment

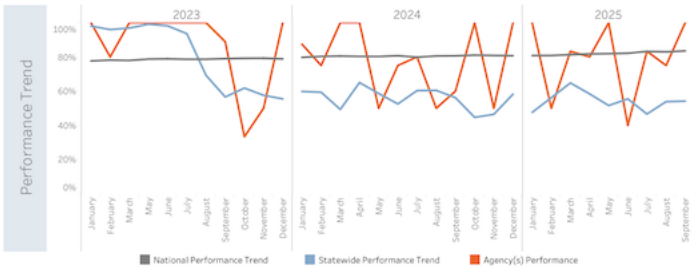
District 12 69%



Northeast
Vermont 69%
64%

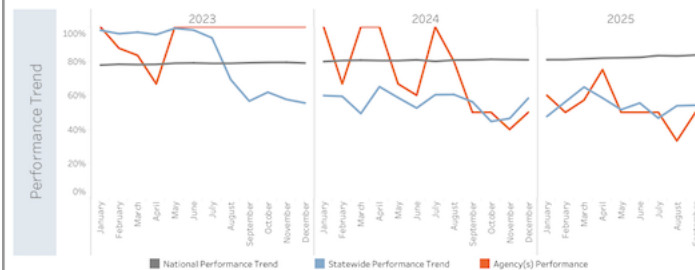
Stroke-01
Suspected Stroke Receiving Prehospital Stroke Assessment

District 11 81%



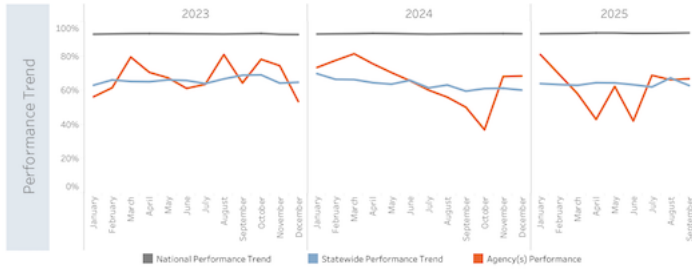
Stroke-01
Suspected Stroke Receiving Prehospital Stroke Assessment

District 13 76%



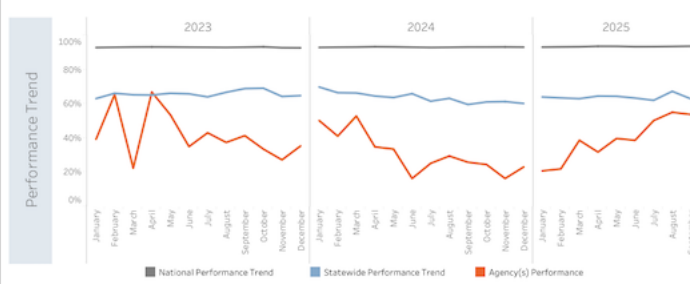
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 1 66%



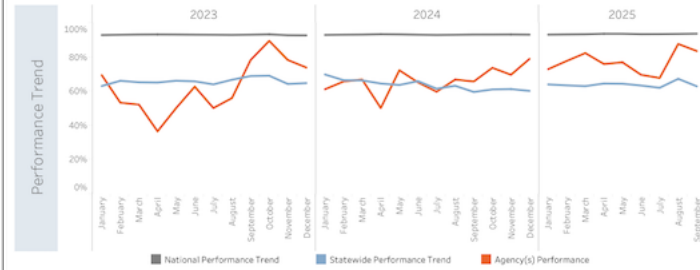
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 4 36%



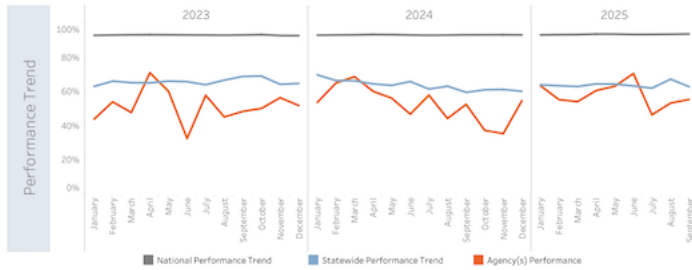
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 7 68%



Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

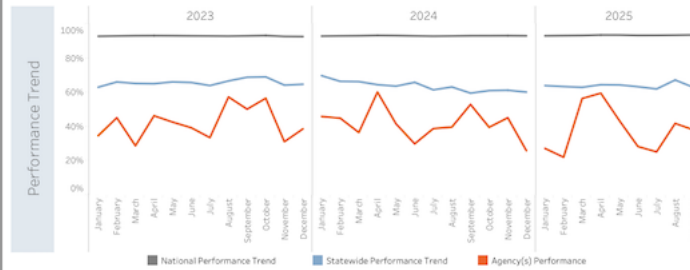
District 2 53%



Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

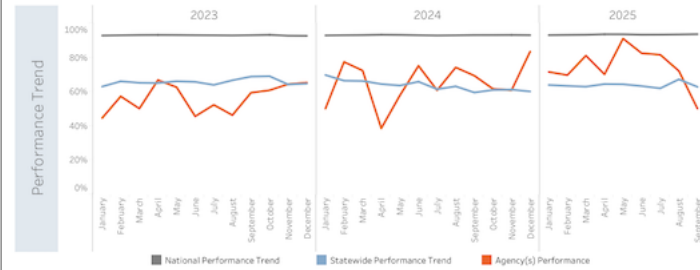
District 5

40%



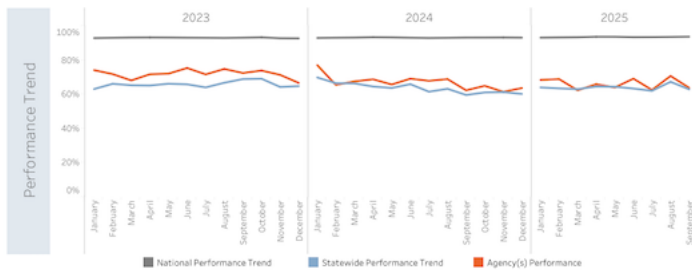
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 8 66%



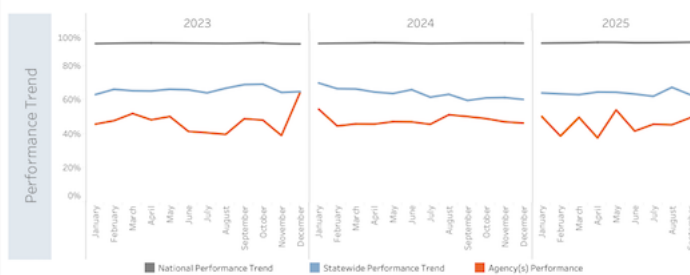
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 3 68%



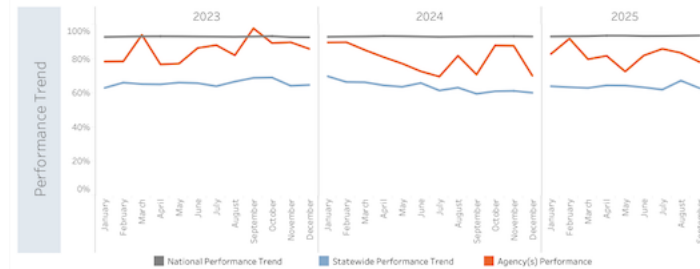
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 6 47%



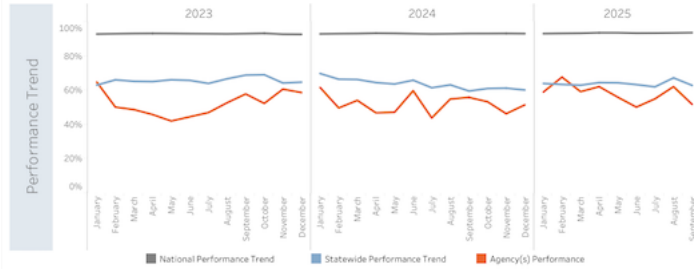
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 9 82%



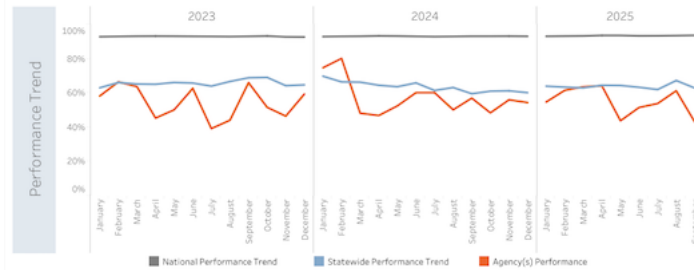
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 10 53%



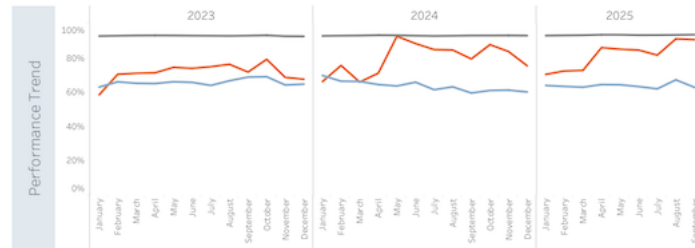
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 11 57%



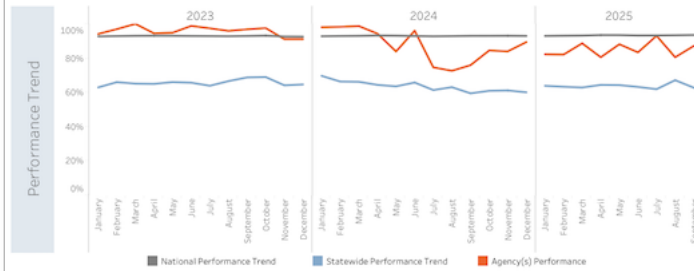
Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 12 77%



Trauma-08
Documentation of GCS, SBP, and Respiratory Rate

District 13 91%



Northeast 66%
Vermont 64%

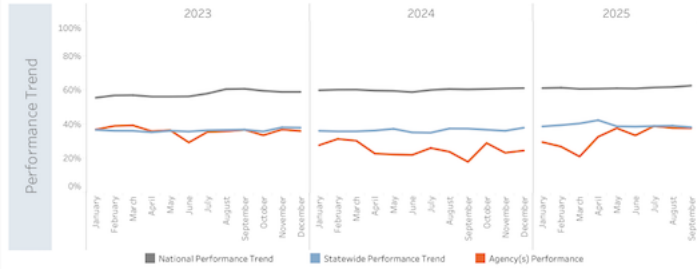
Documentation of GCS, SBP, and Respiratory Rate

Trauma-08

Safety-02
No use of Lights and Sirens During Transport

District 1

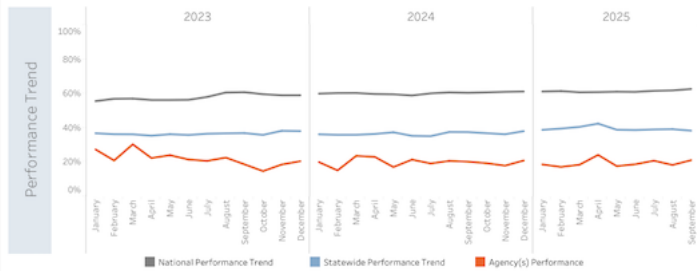
31%



Safety-02
No use of Lights and Sirens During Transport

District 2

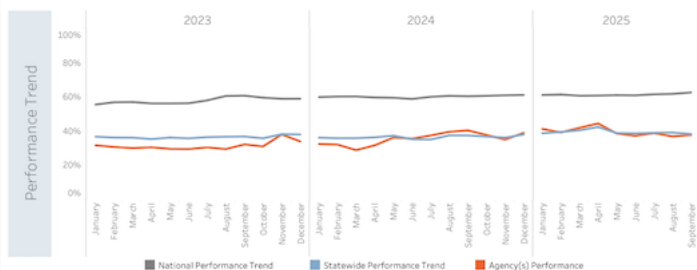
20%



Safety-02
No use of Lights and Sirens During Transport

District 3

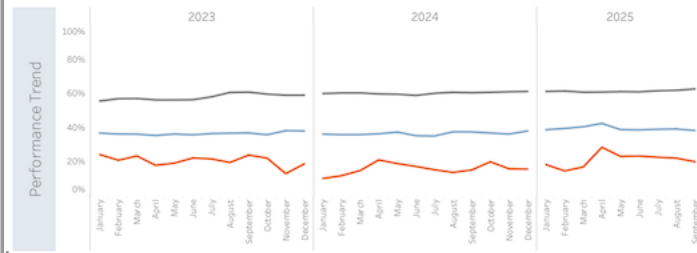
35%



Safety-02
No use of Lights and Sirens During Transport

District 4

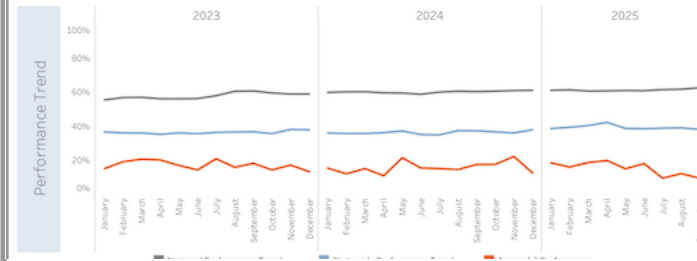
19%



Safety-02
No use of Lights and Sirens During Transport

District 5

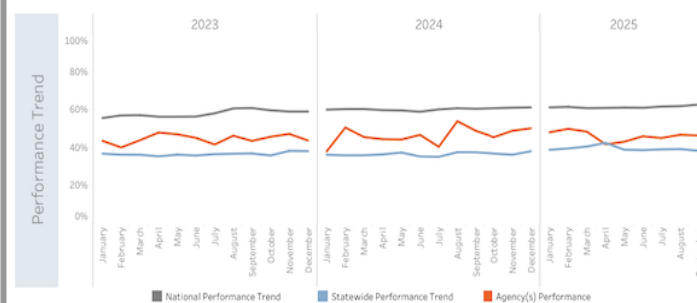
16%



Safety-02
No use of Lights and Sirens During Transport

District 6

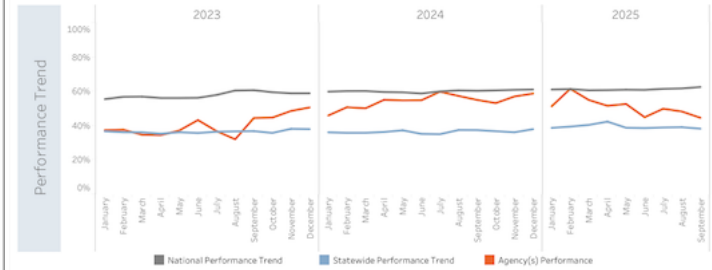
45%



Safety-02
No use of Lights and Sirens During Transport

District 7

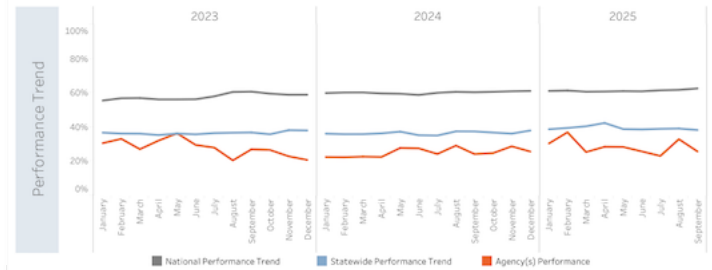
48%



Safety-02
No use of Lights and Sirens During Transport

District 8

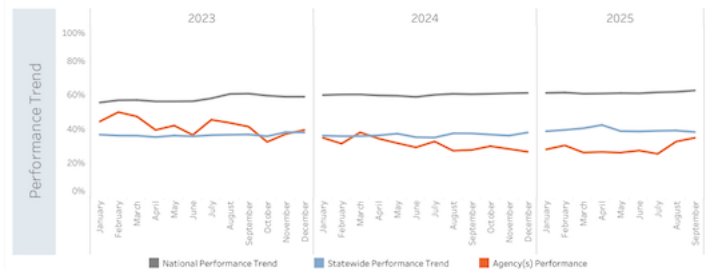
27%



Safety-02
No use of Lights and Sirens During Transport

District 9

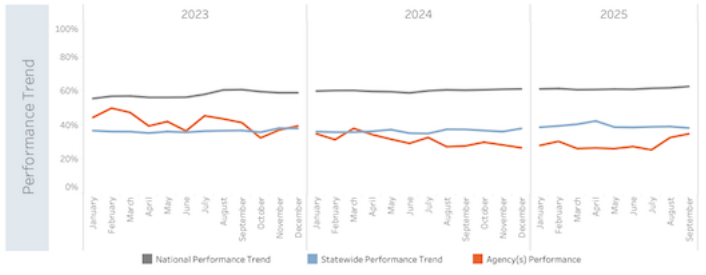
34%



No use of Lights and Sirens During Transport

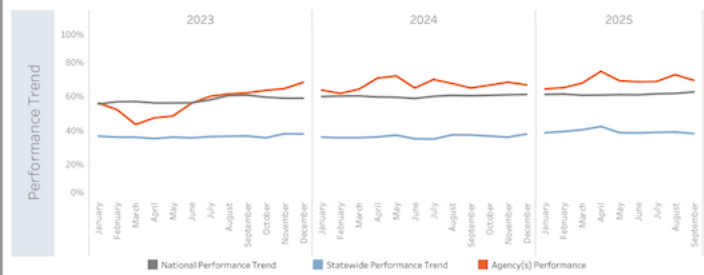
Safety-02
No use of Lights and Sirens During Transport

District 10 34%



Safety-02
No use of Lights and Sirens During Transport

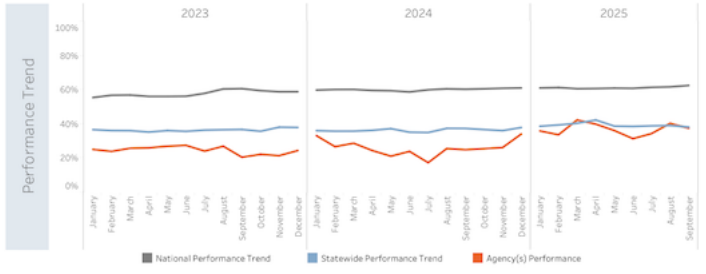
District 12 63%



Northeast Vermont 30%
Vermont 37%

Safety-02
No use of Lights and Sirens During Transport

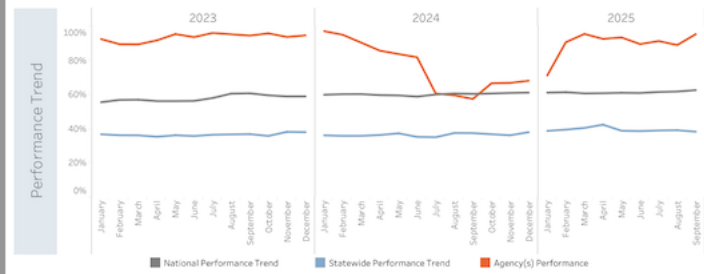
District 11 29%



No use of Lights and Sirens During Transport

Safety-02

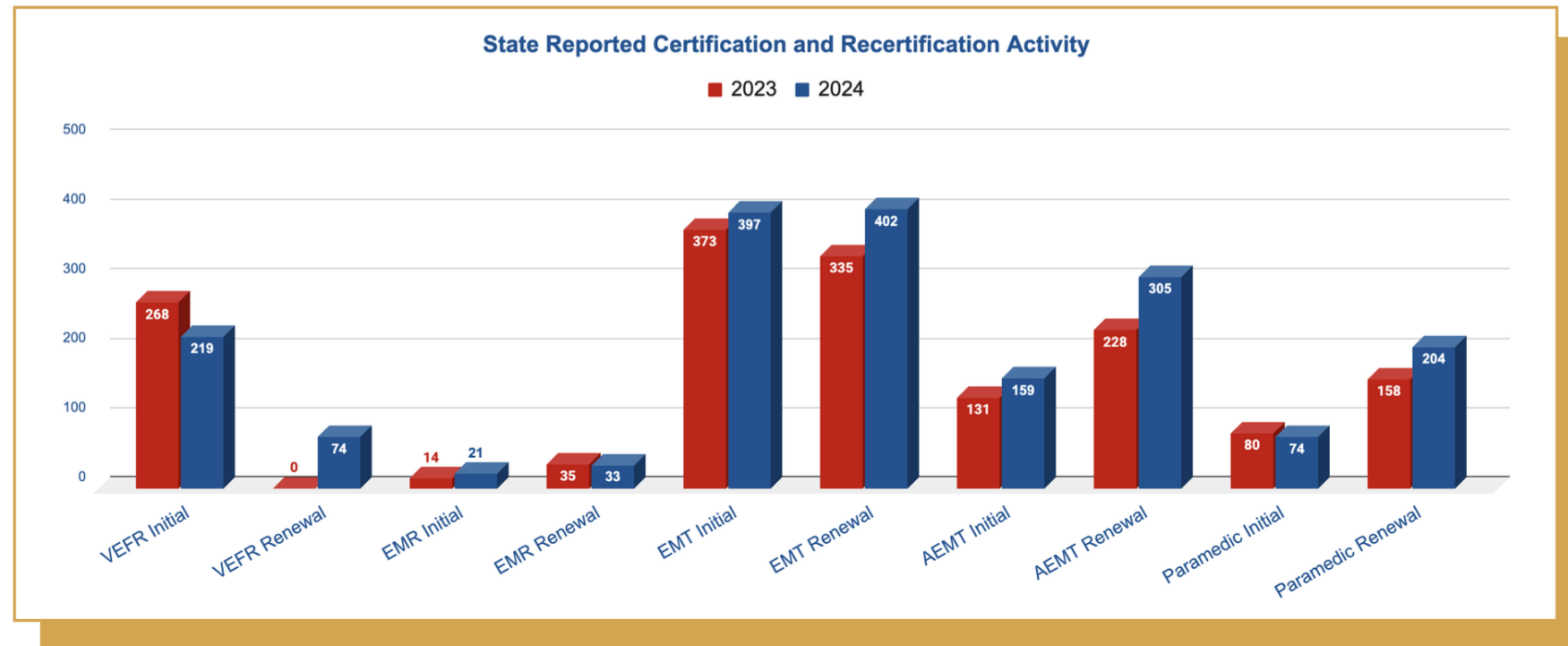
District 13 87%



No use of Lights and Sirens During Transport

Education and Work Force Development

- Number of providers
 - location
- License level
 - location
- Education Location
 - access
 - success

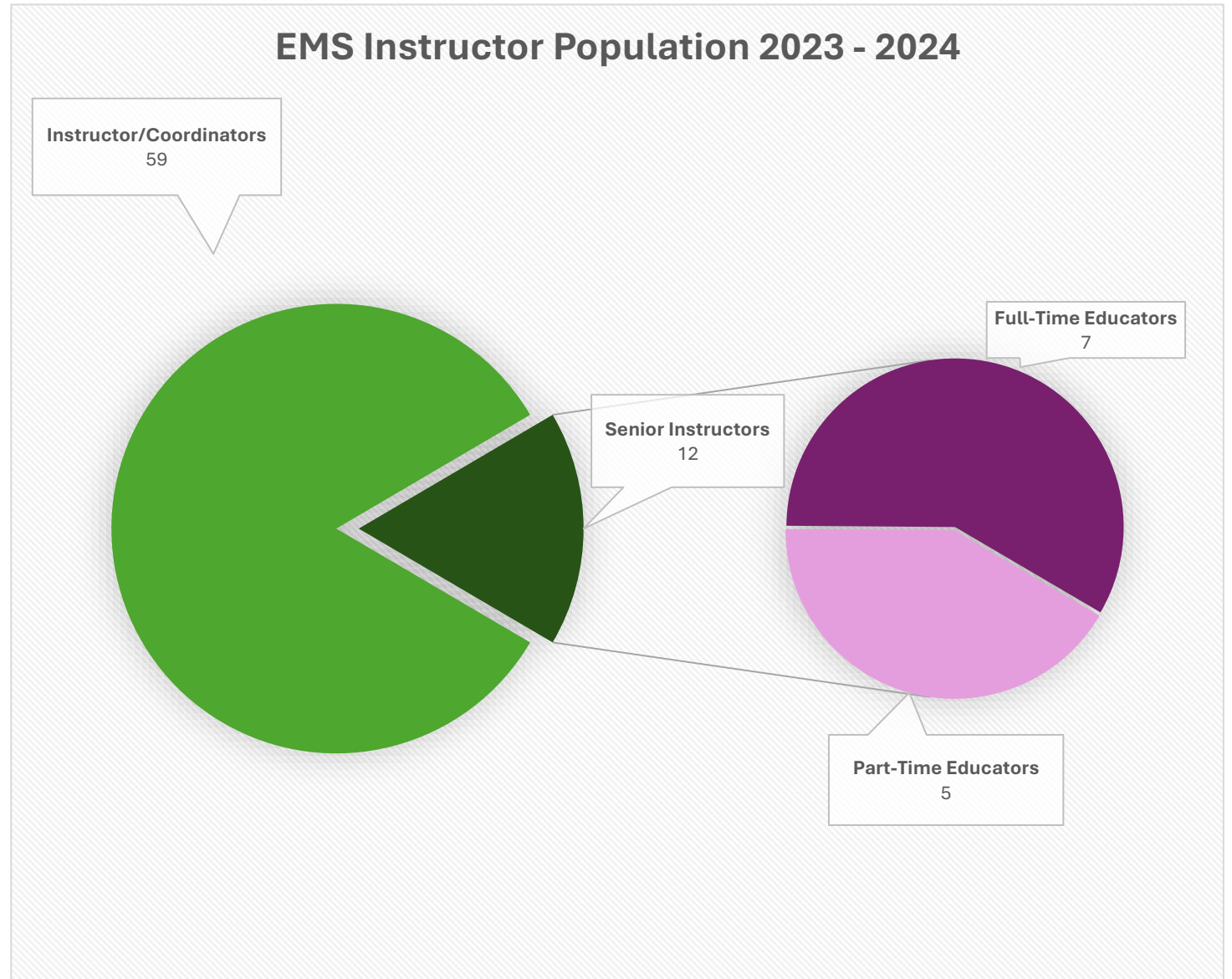


Workforce and Location

District	Critical Care Paramedic	Paramedic	AEMT	EMT	EMR	VFER	Total Providers
1	3	16	43	62	7	41	172
2	2	18	34	54	3	16	127
3	15	89	238	283	5	41	671
4	2	15	46	84	4	24	175
5	1	31	31	94	7	20	184
6	7	25	78	102	6	78	296
7	0	8	25	67	4	21	125
8	6	14	16	26	1	48	111
9	8	50	82	121	8	33	302
10	8	25	42	82	3	43	203
11	3	38	52	101	7	76	277
12	9	37	32	102	7	54	241
13	5	23	38	72	9	33	180
	69	389	757	1250	71	528	3064

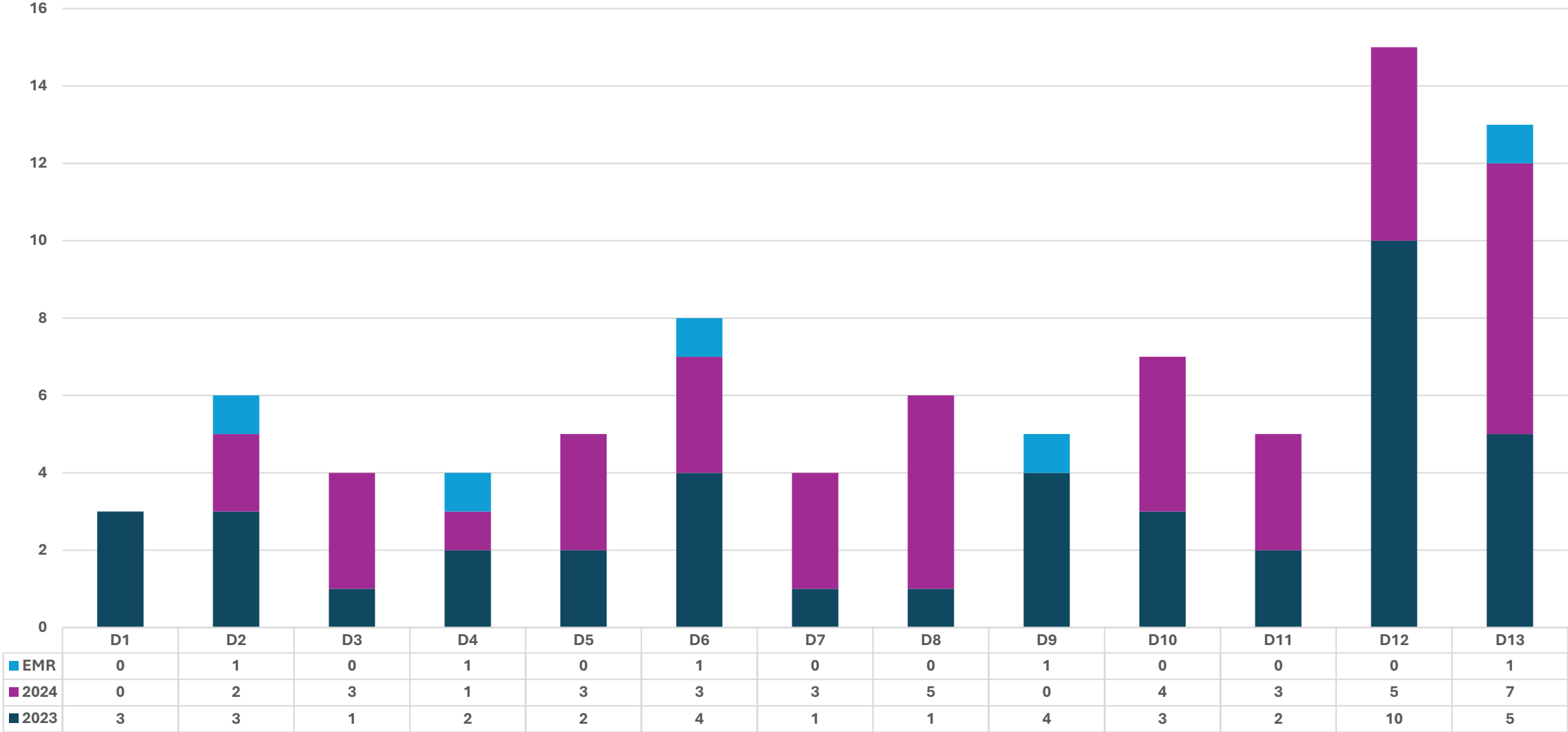
Who Is Teaching

- *Note: Number of Instructor Coordinators and Senior Instructors (both full and part time educators) from 2023-2024*

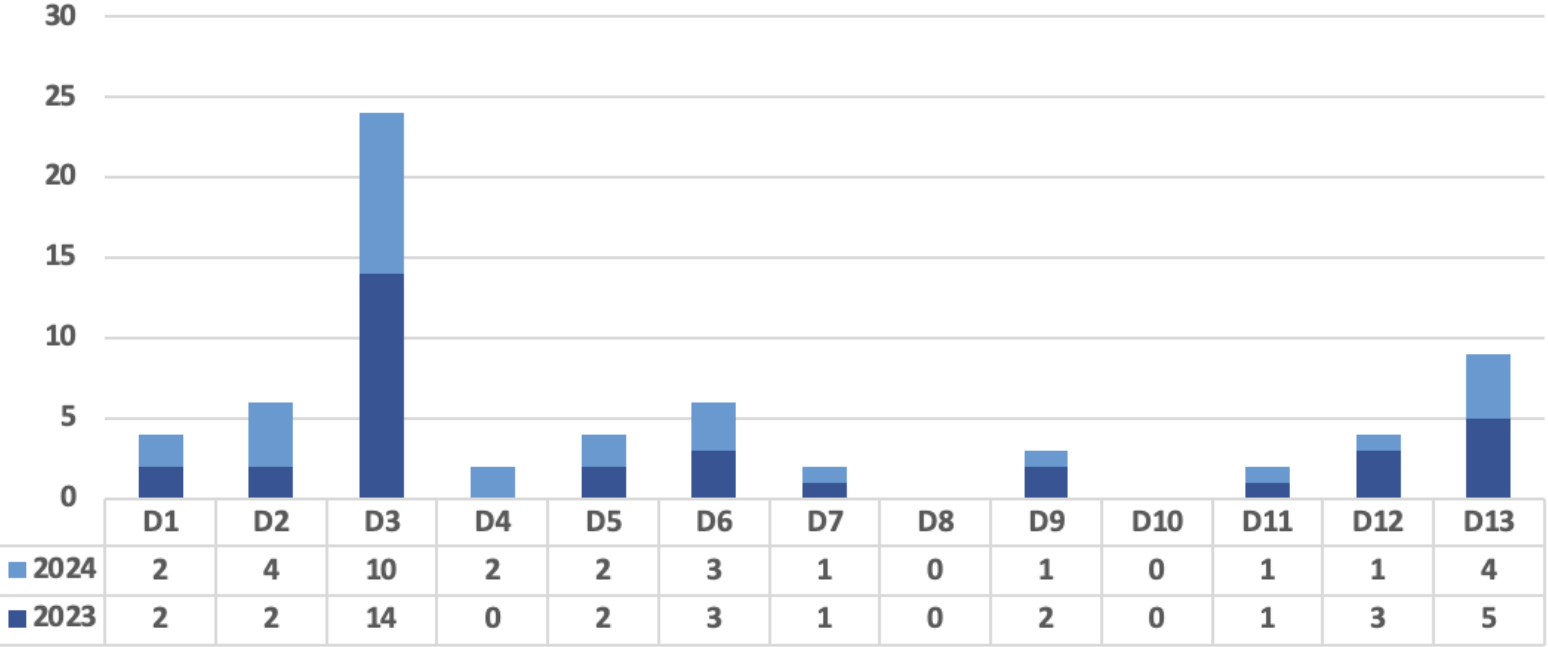


VEFR & EMR Courses Per District 2023-2024

EMR courses all occurred in 2023

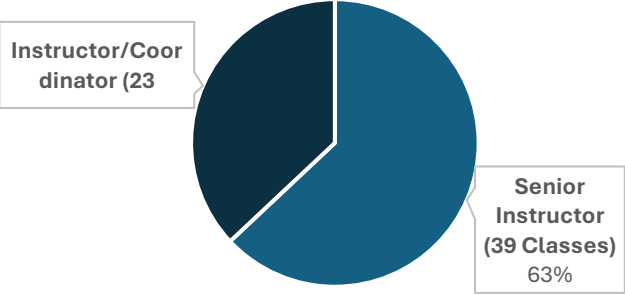


EMT Courses Per District in 2023-2024

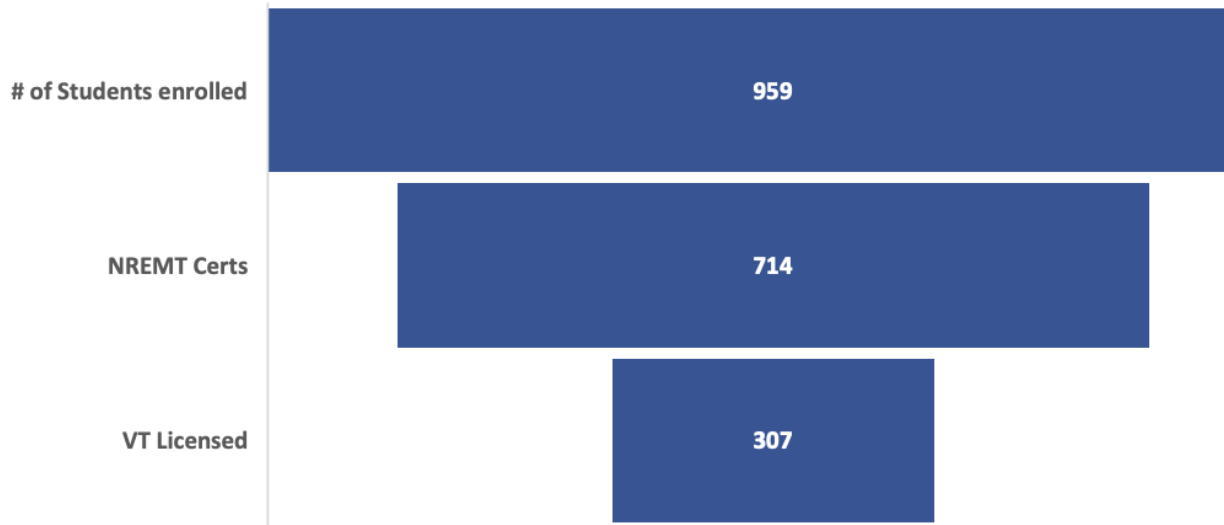


EMT Course Instruction

62 EMT Courses Total from 2023-2024

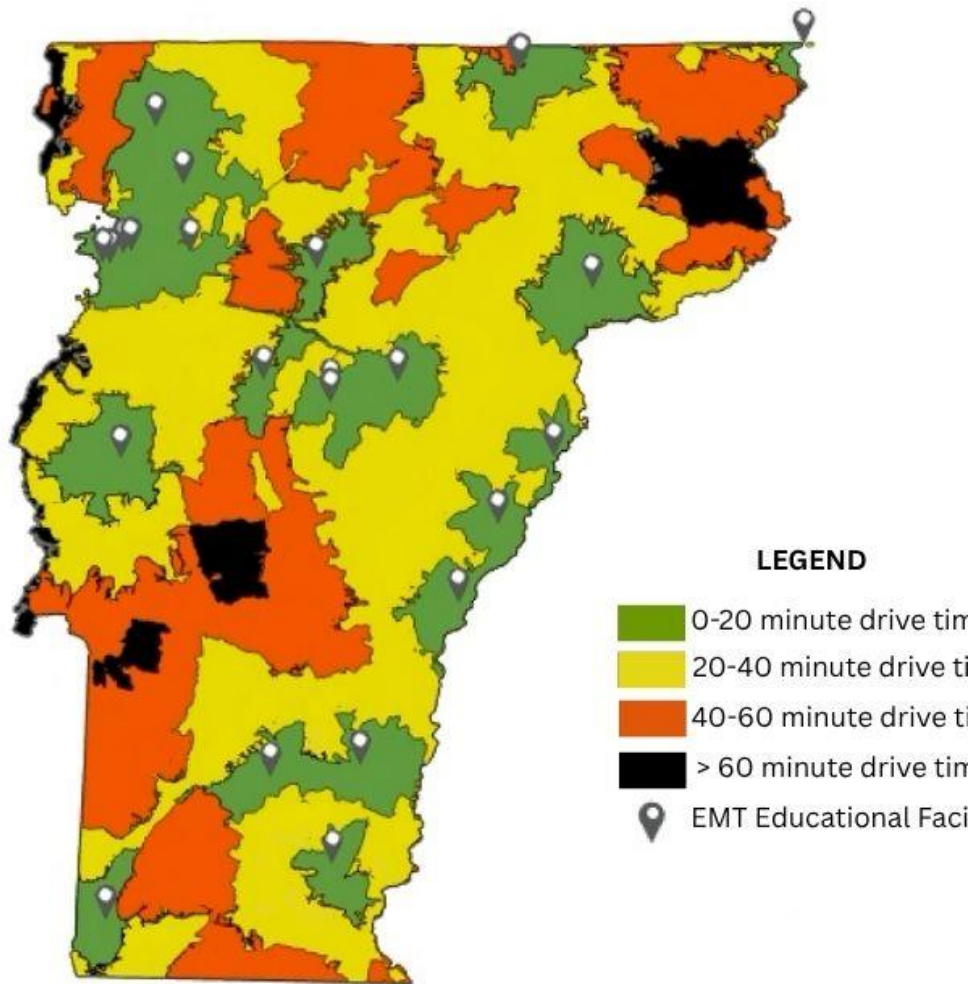


Progression of EMT Students in 2023-2024



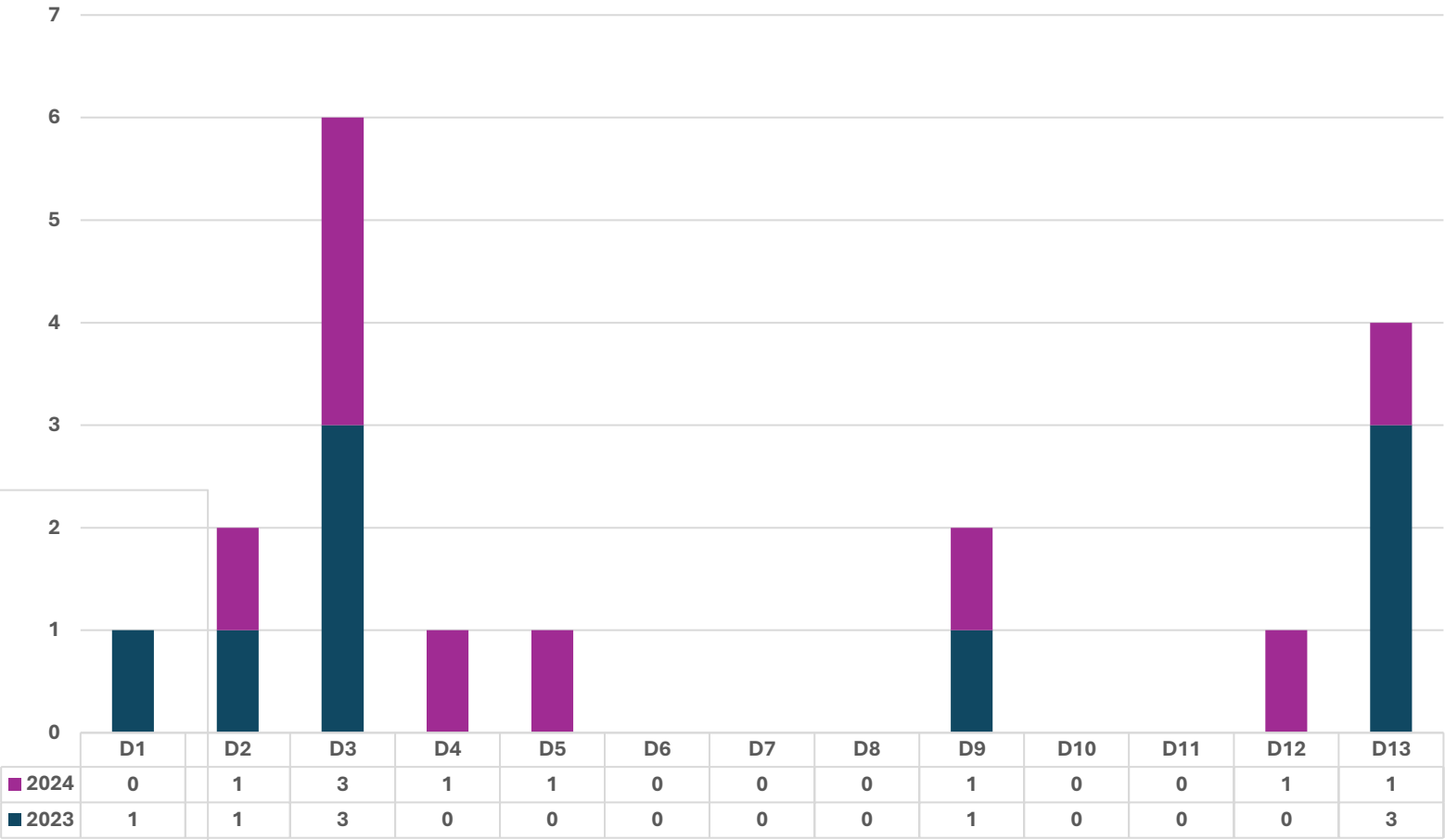
**DISCLAIMER* - some students enrolled in EMT classes prior to the 23-24 window completed only the NREMT license steps during the 23-24 period. Also, some EMT students enrolled in 23-24 classes are still in the current testing cycle.*

Drive Time Accessibility to Vermont EMT Educational Facilities



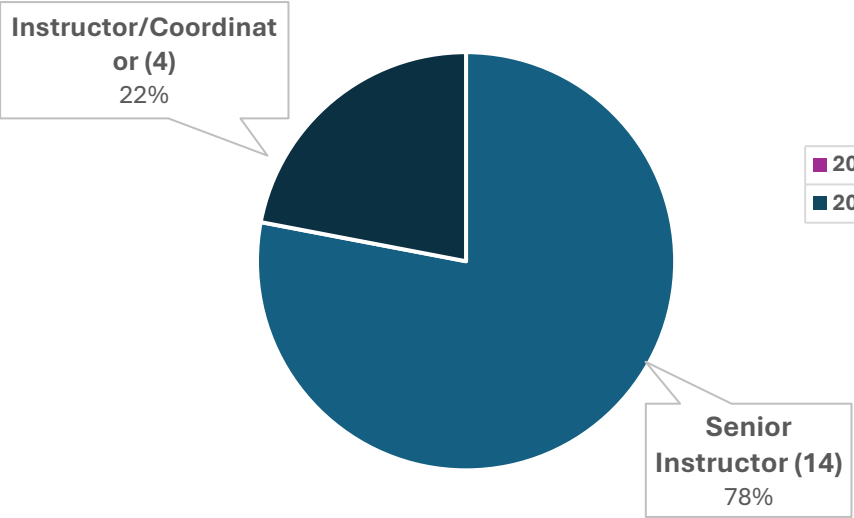
© Jack Foster, 2025
University of Vermont
Created using ArcGIS Pro
Data provided by VEMSAC and IREMS

AEMT Courses Per District 2023-2024

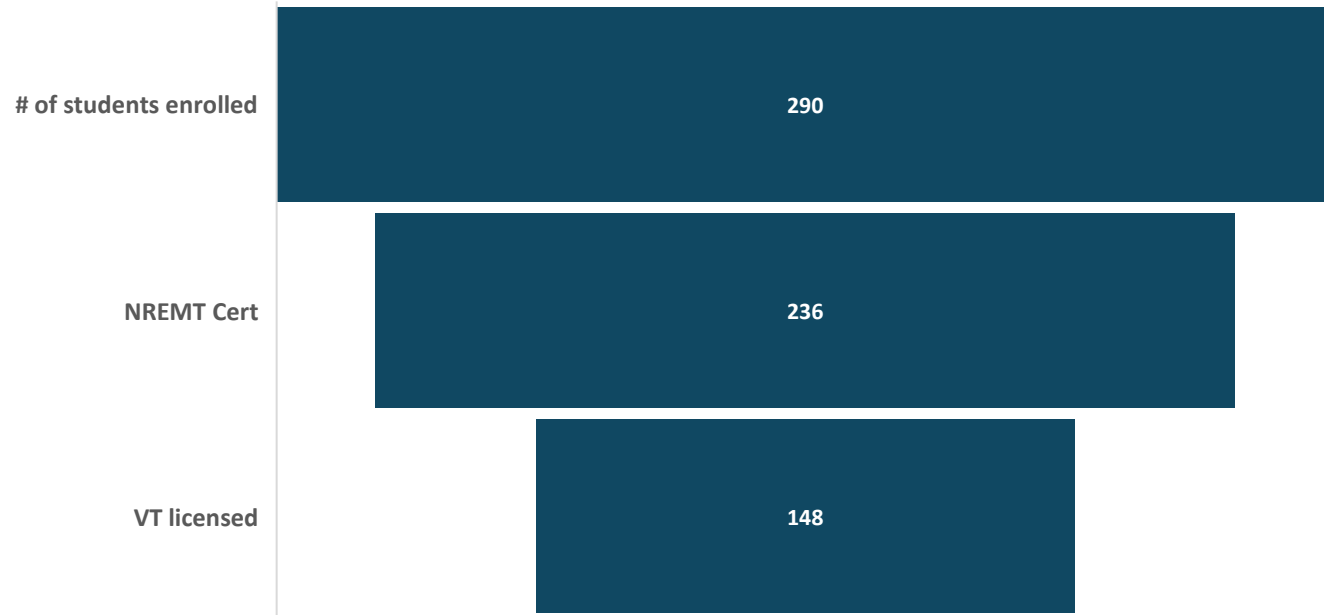


AEMT Course Instruction

18 Courses Total from 2023-2024

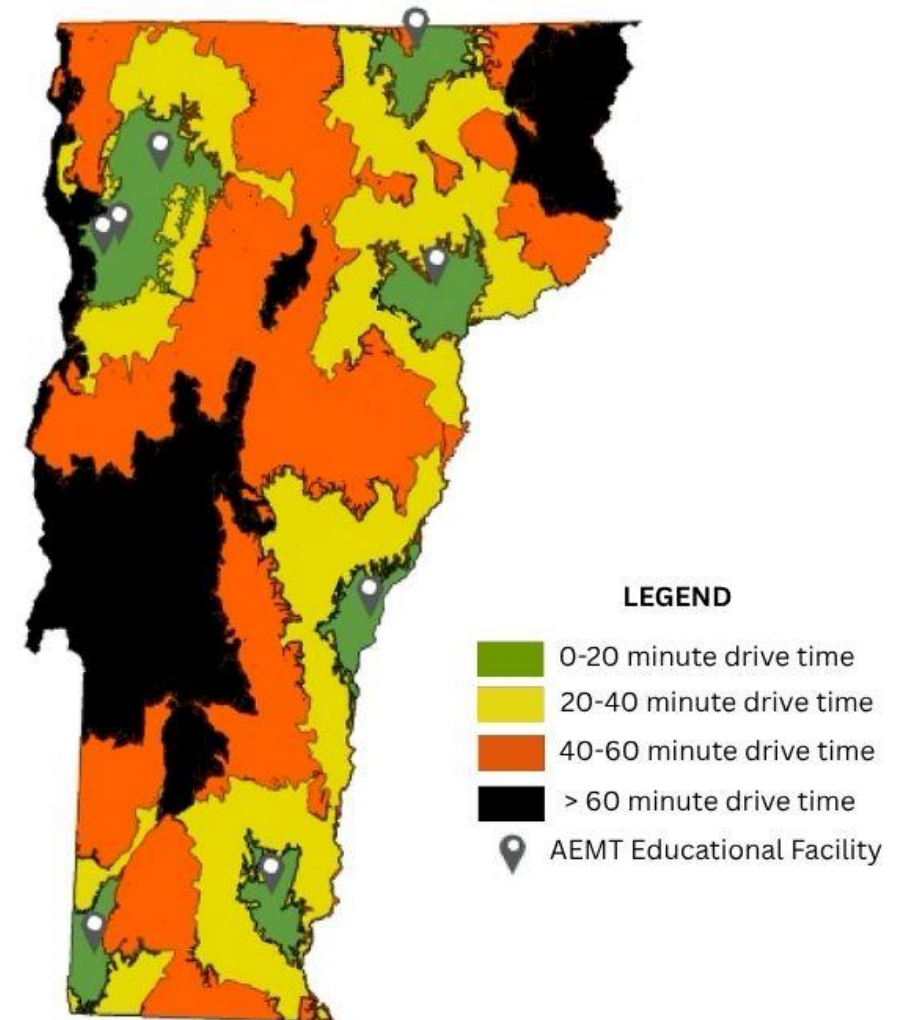


Progression of AEMT Students in 2023-2024

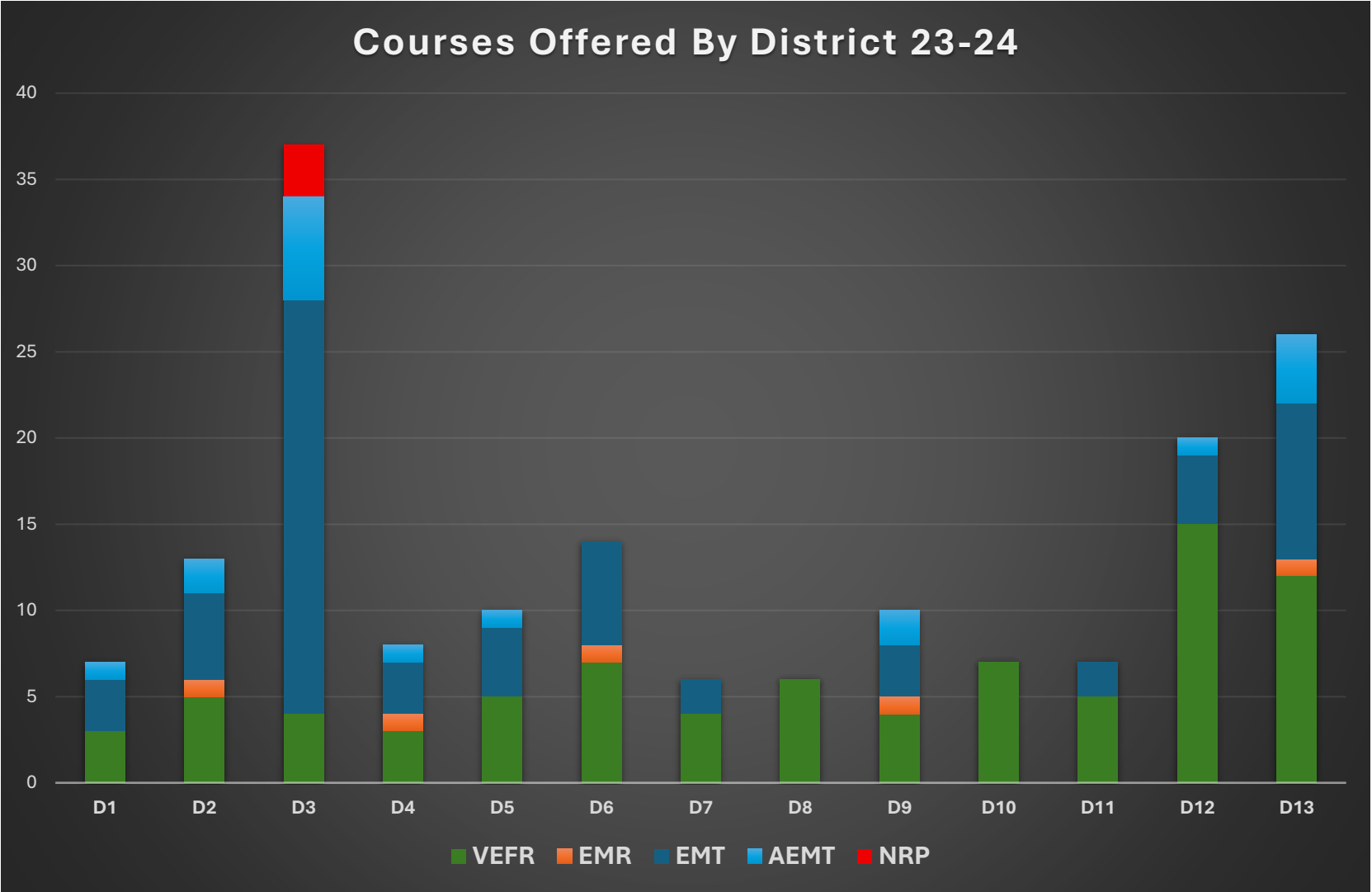


- *DISCLAIMER* - some students enrolled in EMT classes prior to the 23-24 window completed only the NREMT & VT License steps during the 23-24 period. Also, some EMT students enrolled in 23-24 classes are still in the current testing cycle.*

Drive Time Accessibility to Vermont AEMT Educational Facilities



Courses Offered By District 23-24



Transfer Activity

- 28k transfers statewide
- 19k transfers between hospitals
- 10k to nursing homes, rehab or other destinations
- 12k transfers being sent from Vermont hospitals to other hospitals (DHMC is included)
- 25% leave Vermont

Transfer Data

71% of hospital to hospital transfers are completed by 6 services

- Lamoille
- Rescue Inc
- Regional
- Barre Town
- Newport
- Amcare



Hospital to Hospital

- 83% BLS stable
- 14% potentially unstable
- 1% unstable
- 2% critical care
- 72 separate receiving hospitals

Trauma Center Inbound Transfers

Albany 479
DHMC 2582
UVM 4521

Sending Facility	Non-Acute - EMT	Stable - AEMT/EMT	Potentially Unstable - NRP-AEMT	Unstable - NRP	Critical - NRP/CCP
Brattleboro Memorial Hospital	123	549	286	0	150
Brattleboro Retreat	6	25	3	0	0
Copley Hospital	58	446	178	11	6
Dartmouth Hitchcock Medical Center	239	471	9	0	0
Gifford Medical Center	70	228	65	5	2
Grace Cottage Hospital	17	112	105	0	35
MT ASCUTNEY Hospital	92	235	40	2	1
North Country Hospital	133	707	164	14	13
Northeastern VT Regional Hospital	112	574	154	9	14
Northwestern Medical Center	146	733	179	0	23
Rutland Regional Hospital	562	1331	186	23	20
Southwestern VT Medical Center	60	751	147	10	55
Springfield Hospital	116	734	88	1	11
University of Vermont Medical Center	874	2190	64	9	11
UVM - Alice Hyde Medical Center	3	10	12	2	0
UVM - Central Vermont Medical Center	240	993	413	37	26
UVM - Champlain Valley Physicians	44	281	135	4	6

When do hospital transfers happen?

11% 0000-0600
26% 0600-1200
44% 1200-1800
19% 1800-0000

Total Interfacility transports initiated by Day or week							
Sending Facility	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Brattleboro Memorial Hospital	127	161	180	182	178	153	127
Brattleboro Retreat	5	4	4	6	9	3	4
Copley Hospital	92	97	122	95	97	95	101
Dartmouth Hitchcock Medical Center	12	105	148	172	131	138	21
Gifford Medical Center	37	60	57	45	64	60	48
Grace Cottage Hospital	20	36	42	49	47	43	32
MT ASCUTNEY Hospital	34	53	57	69	73	48	36
North Country Hospital	115	148	155	151	139	172	156
Northeastern VT Regional Hospital	89	121	133	116	123	160	125
Northwest Medical Center	108	176	165	164	184	177	143
Rutland Regional Hospital	177	320	325	324	366	372	246
Southwestern VT Medical Center	107	148	190	138	164	162	125
Springfield Hospital	81	169	163	134	135	162	106
University of Vermont Medical Center	174	474	594	552	547	576	245
UVM - Alice Hyde Medical Center	6	4	1	4	6	1	5
UVM - Central Vermont Medical Center	178	259	271	277	259	265	205
UVM - Champlain Valley Physicians	52	54	68	95	75	71	55
UVM - Elizabethtown Community Hospital (Elizabethtown)	35	26	35	42	26	38	42
UVM - Elizabethtown Community Hospital (Ticonderoga)	89	89	101	94	90	74	75
UVM - Fanny Allen Medical Center	75	111	123	102	119	112	98
UVM - Porter Medical Center	107	132	158	153	148	185	139
VA - White River Junction	15	21	18	19	25	38	17
	1735	2768	3110	2983	3005	3105	2151

Data calculation method

- Cost
- Staffing
- First response was not specifically included due to lack of data
- In some cases, data was received indirectly from services and IS NOT verifiable.
- Partial towns were not assigned

Assumptions

- Formula to calculate expenses for services with mixed business lines
 - Total volume divided by ground ambulance volume
- Staffing formula
 - 1 crew for every 1200 calls
 - 9 FTE/crew or 18pt or a combination
 - Only using the fulltime staffing numbers provided
- Tax Contributions were calculated for governmental services as the difference between net patient revenue and the calculated EMS expense line
- For services that contract with a municipality, the contract rate was used if not provided.
- Regional services serve 4 or more towns
- Partial towns were not assigned

The committee decided to look at the system data in different ways

Size of the service

- 0-500 calls
- 500-1200 calls
- 1200+ calls

Structure

- Municipal Fire based
- Municipal
- Regional (5+ towns covered)
- Local (less than 4 towns covered)

0 to 500 emergency calls

- 5 services
- Covering 14 towns
- About 400 sq miles
- Population of 18K
- Average cost per call of \$793
- Average per capita \$75



500-1200 emergency calls

- 17 services
- Covering 56 towns
- About 1900 sq miles
- Population of 110,000 people
- Average cost per call of \$641
- Average per capita \$28



1200+

- 34 services
- Covering 156 towns
- About 5400 sq miles
- Population of 470,000
- Average cost per call of \$756
- Average per capita \$55



Photo by Randy Dame

www.firenews.org





Municipal Fire Based EMS Ambulance

- Most reported their data by providing their Medicare Ground Ambulance Data Collection documents.
- Town Budget information and US census data was used in calculations.
- Cost information is displayed using simple percentage of call volume calculation. The same calculation was used for all services that provide services in addition to ground ambulance service.

Fire Based Ambulance Services

- 10 Licensed Services operating 31 ambulances
- 100% licensed at the Paramedic level
- Provide 911 service to 18 towns in Vermont
- Covering 204 sq miles, about 2% of the state
- Provide 911 service to 121,000 residents, 19% of Vermont's population



Fire Based Ambulance



- Respond to 27,500 911 EMS calls a year
- Transport 20,500 911 patients a year
- 26% of 911 calls do not result in transport
- Average reported response time to critical incidents of 6 minutes
- Agencies report that between 59% and 92% of total call volume is because of ground ambulance work. With the average fire department doing 80% ambulance work.



Non-Emergency Transports

- 2 Fire Departments provide IFT services with each reporting that 20% of their call volume is IFT
- Fire based IFT provides 3% of the states IFT services

Fire department Expense/Revenue

- A combined \$34.8 million operating budget for EMS
- Local taxes provide \$25.5 million to support ambulance operations. Average per capita cost of \$189 with a range from \$12 to \$285
- Net patient receivables of \$8.7 million or 14% of the total state-wide reimbursement
- Average reimbursement per transport is \$476
- Average cost per 911 call is \$1168 with a range from \$735 to \$1141
- 100% FT coverage



Photo by Randy Dame

www.firenews.org

Municipal Ambulance Services

- 11 Licensed Services operating 27 ambulances
- 3 Critical Care
- 91% licensed at the Paramedic level
- Provide 911 service to 25 towns in Vermont
- Covering 955 sq miles, about 11% of the state
- Provide 911 service to 80k residents, 12% of Vermont's population



Municipal Ambulance

- Respond to 14,000 911 EMS calls a year
- Transport 10,500 911 patients a year
- 24% of 911 calls do not result in transport
- Average reported response time to critical incidents of 11 minutes





Photo by Randy Dame www.firenews.org

Non-Emergency Transports

- 2 services provide IFT services with one reporting that 37% of their call volume is IFT
- Municipal services provide 11% of the states IFT services

Municipal Cost

- 10.9 million in annual cost
- 6.4 million in reimbursement
- Average Cost per call \$801
- Cost range is from \$6 - \$163 Per capita
- Average Per capita rate \$57
- Average reimbursement per transport is \$476
- 2 provide subscription services
- 43% FT coverage



Regional Ambulance Services

- 19 Licensed Services operating 77 ambulances
- 79% licensed at the Paramedic level
- 6 Critical Care Services
- Provide 911 service to 146 towns in Vermont
- Covering about 4800 sq miles, about 52% of the state
- Provide 911 service to 260,000 residents, 40% of Vermont's population



Regional

- Respond to 43,500 911 EMS calls a year
- Transport 35,000 911 patients a year
- 20% of 911 calls do not result in transport
- Average reported response time to critical incidents of 9.5 minutes





Non-Emergency Transports

- 14 provide IFT services with each reporting up to 37% of their call volume is IFT
- Regional services provides 47% of the states IFT services

Regional Cost

- Total cost of 32 million
- Reimbursement of 22 million
- \$665 average reimbursement per call
- Cost range from \$4 - \$91 per capita
- Average cost \$31 per capita
- Average cost per call \$670
- 13 provide subscription services
- 57% FT coverage



Local Ambulance Services

(Less than 4 towns)

- 18 Licensed Services operating 36 ambulances
- 72% licensed at the Paramedic level
- Provide 911 service to 40 towns in Vermont
- Covering about 1100 sq miles, about 12% of the state
- Provide 911 service to 81,000 residents, 12% of Vermont's population



Local

- Respond to 15,500 911 EMS calls a year
- Transport 10,500 911 patients a year
- 20% of 911 calls do not result in transport
- Average reported response time to critical incidents of 11 minutes



Photo by Randy Dame

www.firenews.org



Local IFT

- 15 departments provide IFT services with up to 29% of their call volume is IFT
- Provides 12% of the states IFT services



Local Cost

- Cost range from \$11 - \$252 per capita
- Average cost \$53 per capita
- Average cost per call \$729
- 7 provide subscription services
- 44% FT coverage



Other service data

- Two college based services
 - They provide primary coverage to the college and parts of the local community. Provide significant mutual aid to the District 3 area. Conduct 1.5 million in net patient revenue
- Stratton Mt Rescue
 - Part time service covering the ski area and providing mutual aid to the region during business hours. Conducting \$328,000 in net patient revenue
- UVM and DHMC critical care team
 - 1.1million in net patient revenue

Ambulance services based out of state

NORTH ADAMS AMBULANCE SERVICE
45th Parallel Emergency Medical Services
GROVETON AMBULANCE SERVICE
HANOVER FIRE DEPT AMBULANCE SERVICE
LANCASTER FIRE DEPARTMENT
WOODSVILLE RESCUE AND AMBULANCE SERVICE

Report \$550,000 in net patient revenue
Other services are operating in Vermont that are not licensed in Vermont