



Multnomah County EMS



Contract Compliance Rate and Regulation Committee (CCRRC)

Six Month Review

Contract Year 4 – (March, 2022 to August, 2022)

Contract Year 5 – (September, 2022 to February, 2023)

Timeline of interventions and system level changes

June 20, 2022	AMR submitted a staffing improvement plan that had actions through December 2022
October 4, 2022	AMR submitted copies of all mutual aid agreements, and engaged in discussions for subcontracting additional capacity which are limited to county fire departments
December 12, 2022	MCEMS formally requested deployment of Basic Life Support Ambulances as a pilot project
December 15, 2022	Hospital Active Zone Management was temporarily suspended
January 4, 2023	Hospital Active Zone Management eliminated permanently
January 17, 2023	Systematic tracking of no ambulance immediately available (level 0) for dispatch was implemented in BOEC CAD
February 22-26, 2023	Multiple interventions implemented for severe weather event
March 15, 2023	MCEMS formally requested a lower acuity queue in the CAD for active management of the calls
April 10, 2023	First Responders received approval from MCEMS MD to clear scene following a ALS assessment being performed and patient had a lower acuity problem with ambulance assigned
April 17, 2023	AMR deployed the first BLS Ambulance
May 17, 2023	Launch of the BOEC CAD queue for lower acuity call types

General Statistics



CY5 – Dispatch Statistics

6 Months (Sept 1, 2022 – Feb 28, 2023)



- 57,724 total calls
- 39,133 transported or 68% of calls
- 99.3% Calls in Urban Zone
- 75.5% Dispatched Code 3

Dispatch Statistics - All 911 Ambulance Responses

Contract Year 5 – First 6 Months (September 1, 2022- February 28, 2023)

With 5-Year Look Back



Multnomah County EMS Dispatch Statistics for ALL 911 Ambulance Response Contract Years 2018 - 2023



	CY1 2018-2019		CY2 2019-2020		CY3 2020-2021		CY4 2021-2022		CY5 Sept 2022 - Feb 2023	
Total Calls	103,720		100,845		106,269		111,161		57,724	
Total Transports	73,471	71%	69,244	69%	70,123	66%	75,850	68%	39,133	68%
Calls by Location										
Urban	102,951	99.3%	100,089	99.3%	105,365	99.1%	110,249	99.2%	57,345	99.3%
Rural	619	0.6%	647	0.6%	749	0.7%	749	0.7%	307	0.5%
Frontier	126	0.1%	93	0.1%	138	0.1%	120	0.1%	48	0.1%
Outside the ASA	24	0.0%	16	0.0%	17	0.0%	43	0.0%	24	0.0%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Totals:	103,720	100.0%	100,845	100.0%	106,269	100.0%	111,161	100.0%	57,724	100.0%
Calls by Response Priority										
Code 3	83,168	80.2%	80,862	80.2%	83,605	78.7%	84,321	75.9%	43,553	75.5%
Code 2	61	0.1%	40	0.0%	42	0.0%	0	0.0%	0	0.0%
Code 1	20,491	19.8%	19,943	19.8%	22,622	21.3%	26,840	24.1%	14,171	24.5%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Totals:	103,720	100.0%	100,845	100.0%	106,269	100.0%	111,161	100.0%	57,724	100.0%

Disclaimers/Notes:

1. Methods for compiling all system data changed in CY4. Previous methods used validated MCEMS monthly tables derived from BOEC CAD. CY4 uses adjudicated data from the FirstWatch Online Compliance Utility (OCU) and raw data from the Incident Details report. This data is still derived from BOEC CAD.
2. Total transports are calculated using a transport timestamp (1st Qual Unit Depart) in the raw OCU data.
3. Previous contracts did not account for "medium" priority calls (aka Code 2). The new contract allowed Code 2 calls for all locations however, the MPDS implementation in CY3 only allows for Code 1 or Code 3 ambulance response priorities at this time.
4. Call by MPDS Call Type: "Other" includes Fire and Police calls not balanced as a medical call.
5. Calls with less than 4 total incidents under the "Other" call type were grouped together as "All Other" call types.
6. Call types after MPDS implementation (5/18/2021 beginning 00:05:00 am) are not the same as before. Call taker questions and the triage process changed. As such, comparing volume before and after MPDS by EMS call type cannot be done with exactness.

Dispatch Statistics - All 911 Ambulance Responses

Contract Year 5 – First 6 Months (September 1, 2022- February 28, 2023)



Multnomah County EMS

Dispatch Statistics for ALL 911 Ambulance Response



Contract Year 5 - First 6 Months (Sept 2022 - Feb 2023)

CY5 Sept 2022 - Feb 2023		
Calls by MPDS Call Type		
Sick Person	8907	15.4%
Breathing Problems	5396	9.3%
Falls	4854	8.4%
Chest Pain	3854	6.7%
Unconscious / Fainting	3529	6.1%
Transfer / Evaluation	3083	5.3%
Overdose / Poisoning	1978	3.4%
Abdominal Pain	1896	3.3%
Psychiatric	1885	3.3%
Hemorrhage	1666	2.9%
Convulsions / Seizures	1664	2.9%
Stroke	1433	2.5%
Traumatic Injuries	995	1.7%
Diabetic Problems	880	1.5%
Transfer / Interfacility	861	1.5%
Assault / Sexual Assault	839	1.5%
Heart Problems	726	1.3%
Back Pain	607	1.1%
Unknown Problem	583	1.0%
Cardiac Arrest	565	1.0%
Allergies	390	0.7%
Headache	329	0.6%
Stab / Gunshot	306	0.5%
Heat / Cold Exposure	247	0.4%
Pregnancy	194	0.3%
Choking	124	0.2%
Eye Problems	115	0.2%
Animal Bites	66	0.1%
Burns	64	0.1%
Electrocution / Lightning	8	0.0%
Carbon Monoxide	4	0.0%
Advanced SEND (Medical Miranda)	3	0.0%
Drowning / SCUBA	2	0.0%
Traffic Accidents	2	0.0%
Code Zero	1	0.0%
Total MPDS Call Type:	48,056	83.2%
Total Incidents CY4: 57,724		

CY5 Sept 2022 - Feb 2023		
Calls by Other Call Type		
Police Request For Medical	3735	6.5%
Traffic Accident	1947	3.4%
Incomplete Triage - Priority Symptoms	1282	2.2%
Cpr In Progress	867	1.5%
Incomplete Triage - No Priority Symptoms	728	1.3%
Incidents Involving Fire	199	0.3%
Portland Street Response	181	0.3%
Lift Assist	103	0.2%
Pubast - Public Assist	126	0.2%
Structure	109	0.2%
Omega - MCEMS Care Plan Referral	55	0.1%
Watres - Water Rescue	38	0.1%
Jump - Potential Jumper	36	0.1%
Miscf - Unknown Type Of Fire Problem	26	0.0%
Unknown/Blank Call Type	21	0.0%
Mutual - Mutual Aid Incident	21	0.0%
Carbon Monoxide Alarm W/Medical	19	0.0%
Lite Rail Incident	13	0.0%
Hazmat	14	0.0%
All Other	148	0.3%
Total Other Call Type:	9,668	16.7%

CY5 AMR Performance: All Calls by Priority and Zones



Multnomah County EMS
ALL SYSTEM CALLS
Contract Year 5 - First 6 Months (Sept 1, 2022 - Feb 28, 2023)
CALLS BY PRIORITY, ZONE, AND SUBZONE



CODE 3 -- LIFE THREATENING								
Code 3	Location /Subzone	All 911 System Calls	# Compliant	# Late	# Excluded	# Time Corrections	Total # Included in compliance	Compliance %
	URBAN	43255	27864	13988	1403	1257	41852	66.58%
	East	7593	4439	2865	289	204	7304	60.77%
	West	9042	6138	2653	251	254	8791	69.82%
	North	14549	9483	4581	485	427	14064	67.43%
	South	12071	7804	3889	378	372	11693	66.74%
	RURAL	234	185	44	5	23	229	80.79%
	FRONTIER	40	40	0	0	8	40	Best Effort
CODE 1 -- NON-IMMEDIATE								
Code 1	Location /Subzone	All 911 System Calls	# Compliant	# Late	# Excluded	# Time Corrections	Total # Included in compliance	Compliance % <i># Compliant/Total Included</i>
	URBAN	14090	12121	1739	230	614	13860	87.45%
	East	2419	1880	484	55	77	2364	79.53%
	West	3117	2789	308	20	161	3097	90.05%
	North	4634	4077	477	80	183	4554	89.53%
	South	3920	3375	470	75	193	3845	87.78%
	RURAL	73	58	14	1	3	72	80.56%
	FRONTIER	7	7	0	0	1	7	Best Effort
OUT OF ASA - ALL PRIORITIES								
All Codes	Location /zone	All 911 System Calls	# Compliant	# Late	# Excluded	# Time Corrections	Total # Included in compliance	Compliance % # Compliant/Total Included
	Out of ASA	26	N/A	N/A	N/A	N/A	N/A	N/A
ALL SYSTEM DATA								
ALL SYSTEM	Location /zone	Total 911 System Calls Includes excluded	# Compliant	# Late	# Excluded	# Time Corrections	Total # Included in compliance	Overall Compliance %
	ALL SYSTEM	57725	40275	15785	1639	1906	56060	71.84%

Exceptions/Exclusions: Contract allows AMR to request exceptions or exclusions. Often these are for circumstances outside of the Provider's reasonable control, e.g. MDT failure, inaccurate info/disrupted radio, stopped trains, excess demand periods, active zone management events.

Time Corrections: Contract allows AMR to provide to MCEMS an alternate and validated time for consideration of call compliance, e.g. when the BOEC time such as onscene or staged time, is missing.



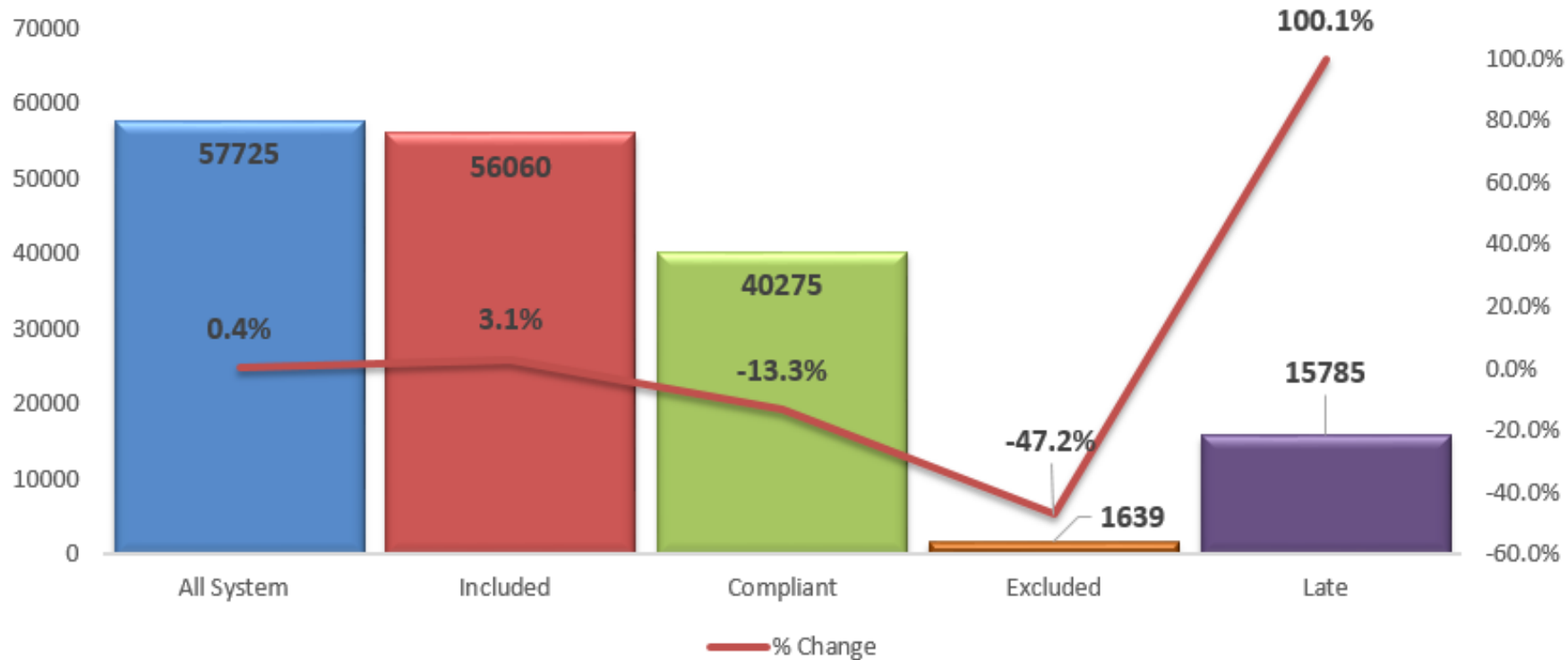
CY5

System Volume, Included, Compliant, Excluded and Late Calls



Contract Year 5 - First 6 Months:

All 911 Calls, Included, Compliant, Excluded and Late with % change from last 6 months of CY4





CY4 and CY5 All System Compliance



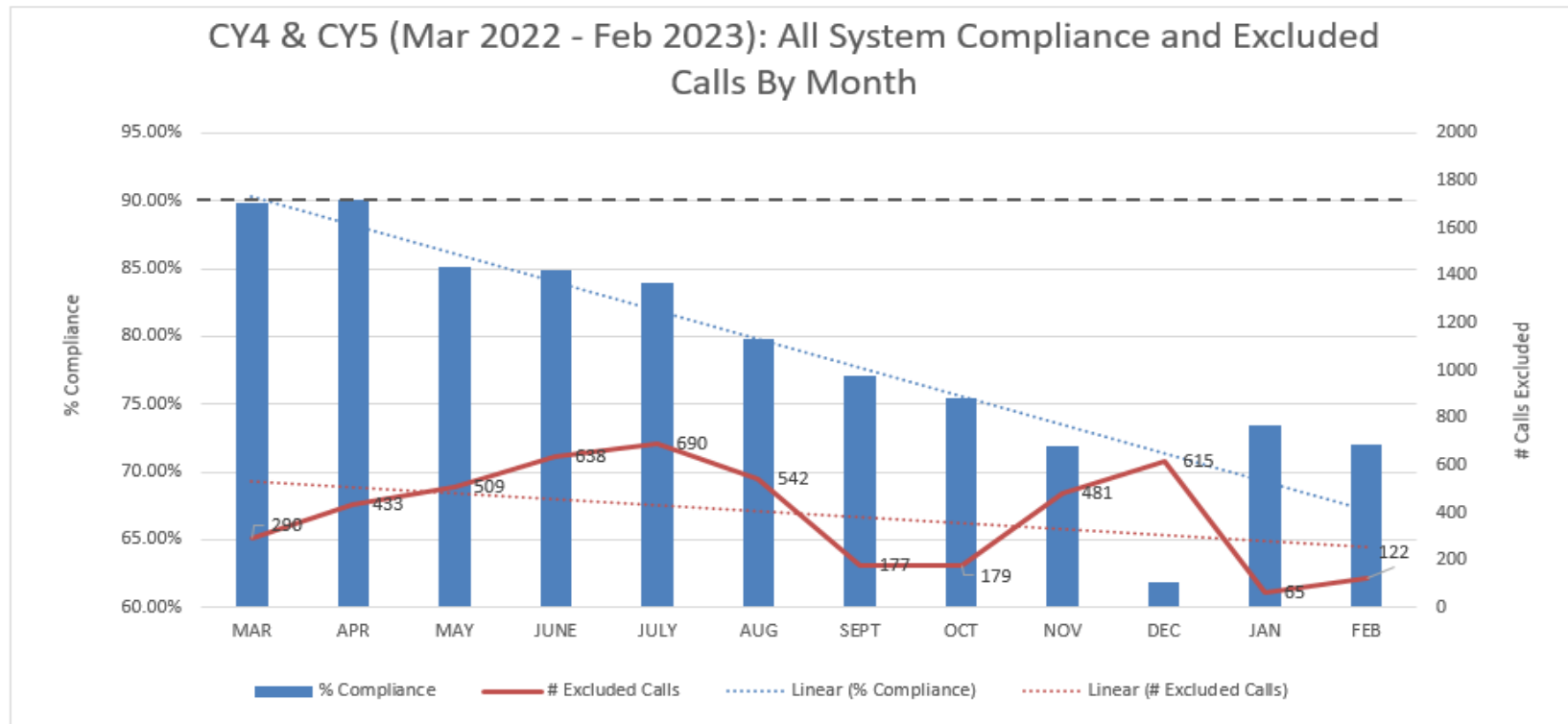
Multnomah County EMS

All System Compliance and Excluded Calls

Contract Year 4 & 5 (Mar 2022 - Feb 2023)

All locations, subzones and priorities

CY4 & CY5 Mar 2022 - Feb 2023	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
<u>All System Compliance</u>	89.84%	90.13%	85.17%	84.91%	83.92%	79.78%	77.05%	75.45%	71.89%	61.90%	73.44%	71.98%





Response Time Standards



- Three (3) zones, four (4) subzones:
 - Zones = **Urban, Rural, Frontier**
 - Urban subzones = **North, South, West, East**
- All call priorities measured for compliance

Response Code	Compliance Standard	Urban	Rural	Frontier
Life threatening - Code 3	≥ 90.00 %	≤ 8.00 min	≤ 20.00 min	Best Effort
Non-immediate - Code 1	≥ 90.00 %	≤ 20.00 min	≤ 30.00 min	Best Effort
No response - Code 0	N/A	N/A	N/A	N/A

- Section K. Pages 18-19

Urban Responses



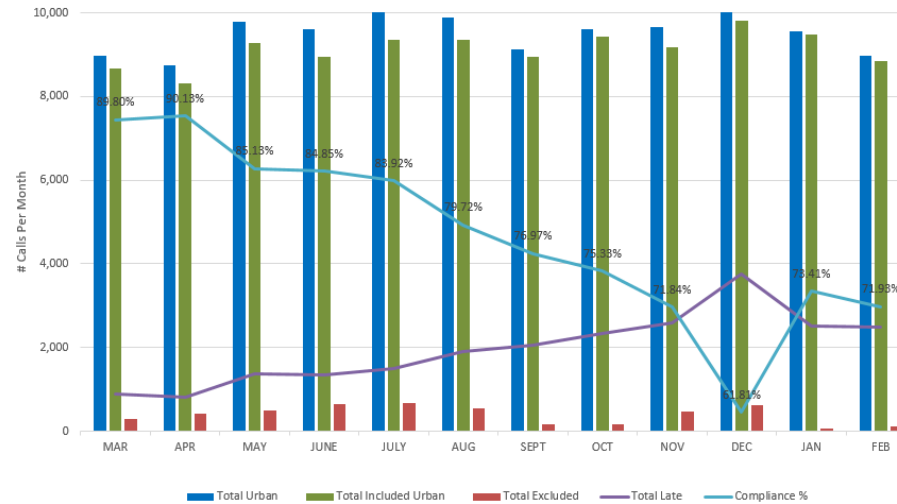
CY4 and CY5 All Urban Compliance By Month



Multnomah County EMS ALL URBAN CODE 1 and 3 Response Time Compliance Contract Year 4 & 5 (Mar 2022 - Feb 2023) *ALL URBAN CODE 1 and 3 PRIORITY CALLS*

CY4 & CY5 Mar 2022 - Feb 2023													
	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
Total Urban Calls	8,965	8,742	9,785	9,596	10,042	9,887	9,128	9,605	9,660	10,423	9,549	8,980	114,362
Total Included Urban	8,676	8,311	9,280	8,958	9,356	9,348	8,951	9,427	9,181	9,811	9,484	8,858	109,641
Total Excluded Urban	289	431	505	638	686	539	177	178	479	612	65	122	4,721
Total Late Urban	885	820	1,380	1,357	1,504	1,896	2,061	2,326	2,585	3,747	2,522	2,486	23,569
All Urban Compliance %	89.80%	90.13%	85.13%	84.85%	83.92%	79.72%	76.97%	75.33%	71.84%	61.81%	73.41%	71.93%	78.50%

CY4 & CY5 (Mar 2022 - Feb 2023): Urban Calls and Compliance by Month



CY4 and CY5: Urban Code 3 Monthly Compliance

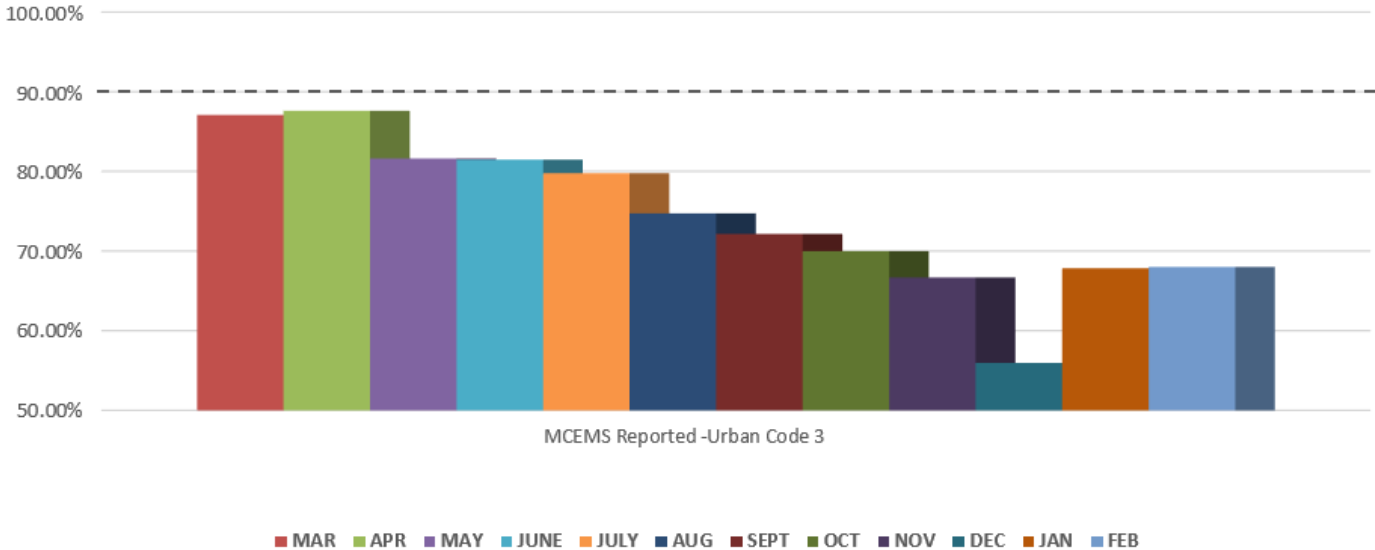


Multnomah County EMS
URBAN Code 3 Response Time Compliance
 Contract Year 4 & 5 (Mar 2022 - Feb 2023)
Code 3, Urban Calls Only



CY4 & CY5 Mar 2022 - Feb 2023	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
MCEMS Reported -Urban Code 3	87.08%	87.61%	81.62%	81.48%	79.76%	74.73%	72.16%	70.00%	66.67%	55.95%	67.83%	68.01%

CY4 & CY5 (Mar 2022 - Feb 2023): Urban Code 3 Compliance By Month



CY4 and CY5: Urban Code 1 Monthly Compliance

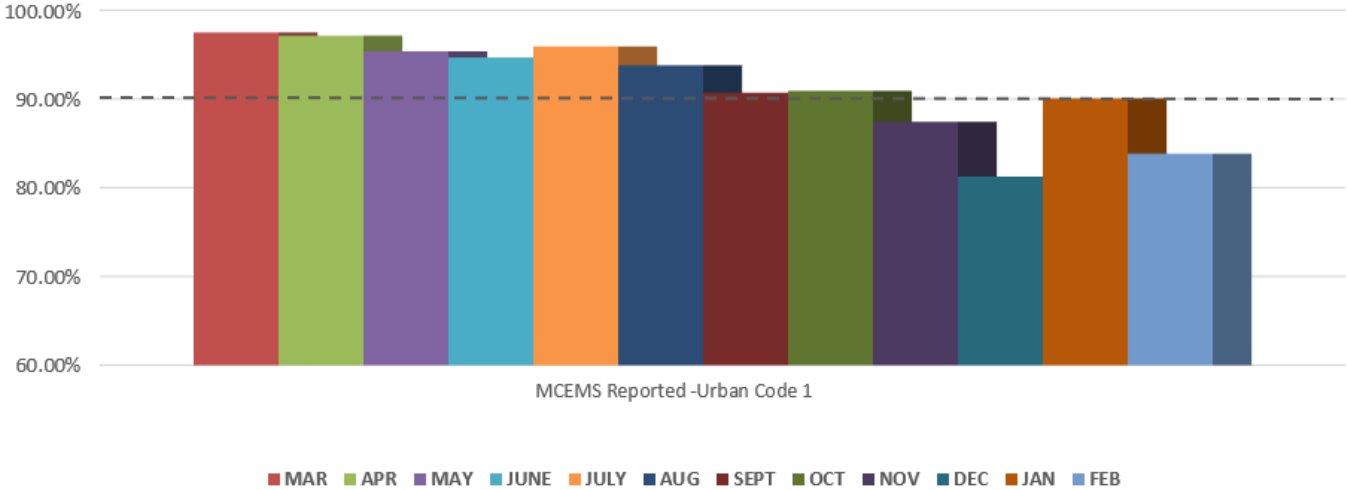


Multnomah County EMS
URBAN Code 1 Response Time Compliance
 Contract Year 4 & 5 (Mar 2022 - Feb 2023)
Code 1, Urban Calls Only



CY4 & CY5 Mar 2022 - Feb 2023	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
<u>MCEMS Reported</u> -Urban Code 1	97.49%	97.14%	95.36%	94.67%	95.91%	93.79%	90.71%	90.92%	87.42%	81.25%	90.08%	83.83%

CY4 & CY5 (Mar 2022 - Feb 2023): Urban Code 1 Compliance By Month





CY4 & CY5: Urban Calls by Subzone



Urban Response Time Compliance by SUBZONE

Contract Year 4 & 5 (Mar 2022 - Feb 2023)

STANDARD = 80% MONTHLY

ALL SUBZONES					
	NORTH	SOUTH	WEST	EAST	Total
Total system calls	37,869	32,499	23,826	20,168	114,362
Total included calls	36,392	31,104	22,979	19,166	109,641
Non-compliant	7,461	6,688	4,465	4,955	23,569
Compliance %	79.50%	78.50%	80.57%	74.15%	78.50%

SUBZONES BY MONTH													
NORTH	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
Total calls	2,912	2,914	3,148	3,128	3,273	3,311	3,032	3,250	3,203	3,491	3,203	3,004	37,869
Total included	2,823	2,796	3,000	2,944	3,081	3,130	2,970	3,200	3,030	3,278	3,177	2,963	36,392
Late	254	246	390	418	484	611	634	739	807	1,238	797	843	7,461
Compliance %	91.00%	91.20%	87.00%	85.80%	84.29%	80.48%	78.65%	76.91%	73.37%	62.23%	74.91%	71.55%	79.50%
SOUTH	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
Total calls	2,584	2,530	2,846	2,784	2,933	2,831	2,629	2,755	2,775	2,858	2,567	2,407	32,499
Total included	2,503	2,397	2,692	2,593	2,708	2,673	2,581	2,696	2,641	2,695	2,552	2,373	31,104
Late	260	228	415	412	470	544	562	680	753	1,015	716	633	6,688
Compliance %	89.61%	90.49%	84.58%	84.11%	82.64%	79.65%	78.23%	74.78%	71.49%	62.34%	71.94%	73.32%	78.50%
WEST	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
Total calls	1,840	1,730	2,003	2,007	2,098	1,989	1,901	2,006	1,930	2,218	2,133	1,971	23,826
Total included	1,795	1,632	1,910	1,875	1,975	1,904	1,864	1,974	1,862	2,122	2,122	1,944	22,979
Late	197	177	262	239	267	362	398	433	467	667	485	511	4,465
Compliance %	89.03%	89.15%	86.28%	87.25%	86.48%	80.99%	78.65%	78.06%	74.92%	68.57%	77.14%	73.71%	80.57%
EAST	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
Total calls	1,629	1,568	1,788	1,677	1,738	1,756	1,566	1,594	1,752	1,856	1,646	1,598	20,168
Total included	1,555	1,486	1,678	1,546	1,592	1,641	1,536	1,557	1,648	1,716	1,633	1,578	19,166
Late	174	169	313	288	283	379	467	474	558	827	524	499	4,955
Compliance %	88.81%	88.63%	81.35%	81.37%	82.22%	76.90%	69.60%	69.56%	66.14%	51.81%	67.91%	68.38%	74.15%
ALL ZONES	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
Total calls	8,965	8,742	9,785	9,596	10,042	9,887	9,128	9,605	9,660	10,423	9,549	8,980	114,362
Total included	8,676	8,311	9,280	8,958	9,356	9,348	8,951	9,427	9,181	9,811	9,484	8,858	109,641
Late	885	820	1,380	1,357	1,504	1,896	2,061	2,326	2,585	3,747	2,522	2,486	23,569
Compliance %	89.80%	90.13%	85.13%	84.85%	83.92%	79.72%	76.97%	75.33%	71.84%	61.81%	73.41%	71.93%	78.50%



CY4 and CY5: Urban Calls by Subzone and Priority



SUBZONES CODE 1					
	NORTH	SOUTH	WEST	EAST	Total
Total system calls	9,311	7,950	6,220	4,919	28,400
Total included calls	9,168	7,787	6,169	4,786	27,910
Non-compliant	649	638	406	661	2,354
Compliance %	92.92%	91.81%	93.42%	86.19%	91.57%

SUBZONES CODE 3					
	NORTH	SOUTH	WEST	EAST	Total
Total system calls	28,558	24,549	17,606	15,249	85,962
Total included calls	27,224	23,317	16,810	14,380	81,731
Non-compliant	6,812	6,050	4,059	4,294	21,215
Compliance %	74.98%	74.05%	75.85%	70.14%	74.04%

Urban Response Time Compliance % by SUBZONE and PRIORITY Contract Year 4 & 5 (Mar 2022 - Feb 2023) *STANDARD = 80% MONTHLY*

SUBZONES BY MONTH														
Subzone	Priority	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	Total
NORTH	Code 1	97.19%	97.09%	97.22%	95.94%	95.86%	94.53%	92.94%	92.52%	88.92%	85.07%	91.87%	85.11%	92.92%
	Code 3	88.92%	89.02%	83.56%	82.25%	80.09%	75.61%	74.07%	71.57%	68.18%	55.46%	68.98%	67.47%	74.98%
SOUTH	Code 1	98.20%	97.60%	94.81%	94.58%	95.36%	94.27%	90.88%	89.93%	89.19%	80.65%	90.00%	85.08%	91.81%
	Code 3	86.84%	87.99%	81.17%	80.64%	78.31%	74.48%	73.50%	69.52%	66.06%	56.92%	66.02%	69.50%	74.05%
WEST	Code 1	97.98%	97.99%	96.40%	95.50%	97.48%	95.45%	93.59%	92.35%	88.33%	86.51%	91.86%	88.04%	93.42%
	Code 3	85.12%	85.81%	82.42%	84.34%	82.17%	75.75%	73.19%	73.26%	70.04%	62.43%	72.27%	68.28%	75.85%
EAST	Code 1	96.24%	95.45%	91.55%	91.30%	92.38%	89.70%	82.79%	87.53%	80.92%	66.67%	84.13%	74.05%	86.19%
	Code 3	86.25%	86.33%	78.01%	78.01%	78.73%	72.26%	64.93%	63.49%	61.18%	47.78%	62.70%	66.50%	70.14%
ALL ZONES	ALL Priorities	89.80%	90.13%	85.13%	84.85%	83.92%	79.72%	76.97%	75.33%	71.84%	61.81%	73.41%	71.93%	78.50%

Rural Responses



AMR Performance: Rural Calls CY4 and CY5 March 2022 – Feb 2023



ALL Rural Calls:

- Semi-annual Requirement ($\geq 90\%$)
- All Rural Calls (All Priorities) = 694
 - 674 Included in Compliance
 - 105 Late
- Semi-annual Compliance (All Priorities)
 - 1st six months (Mar – Aug CY4) = **87.40%** (47 late of 373 included)
 - 2nd six months (Sept – Feb CY5) = **80.73%** (58 late of 301 included)

**NOTE:
Call volume
impacts
compliance.**

Rural Compliance by Response Priority:

- Code 3 Rural Calls: **83.24%**
- Code 1 Rural Calls: **88.59%**

AMR Performance: CY4 and CY5 All Rural Calls

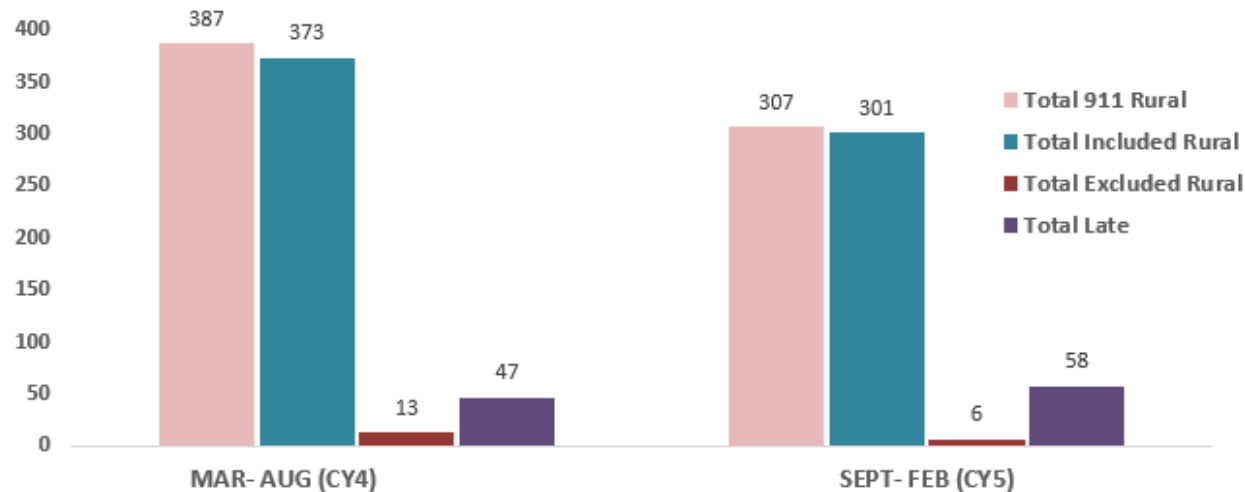


Multnomah County EMS
RURAL Response Time Compliance
 CY4 (Mar 2022 - Aug 2022) and CY5 (Sept 2022 - Feb 2023)



	MAR- AUG (CY4)	SEPT- FEB (CY5)	TOTALS
Total 911 Rural	387	307	694
Total Included Rural	373	301	674
Total Excluded Rural	13	6	19
Total Late	47	58	105
Compliance %	87.40%	80.73%	84.42%

CY4 and CY5: Semi-Annual Rural Calls and Compliance



Frontier Responses



AMR Performance: Frontier Calls

First 6 Months CY5 (Sept 1, 2022 – Feb 28, 2023)



Frontier

- Best effort requirement
- All Frontier Calls (All Priorities) = 47
 - Code 3 = 40
 - Code 1 = 7

Health Equity and Cultural Competence

Health Equity and Cultural Competence Goals (1 of 2)



- Contractual Goals:
 - Maintain a diverse EMS workforce
 - Assure high quality, culturally and linguistically responsive EMS care
 - Improve access to, and outcomes of, the EMS system
- Section R. Page 29-31



AMR Performance: Health Equity and Cultural Competence (2 of 2)



- CY5 Update:
 - Community Education and Diversity Recruitment has returned to in person.
 - Diversity Scholarships:
 - 3 Diversity Scholars in school and on track.
 - 4 New Diversity Scholars selected.
 - 4 Diversity Scholars dismissed due to GPA and course failure.
 - New health occupation advisor and tutoring added as part of the program.
 - Language Line:
 - Expanded education, crew outreach and use of Language Line project is ongoing.



Discussion