

2020 STEMI DATA

presented by the

CARDIAC & STROKE CARE SUBCOMMITTEE

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Monthly STEMI Incident Counts

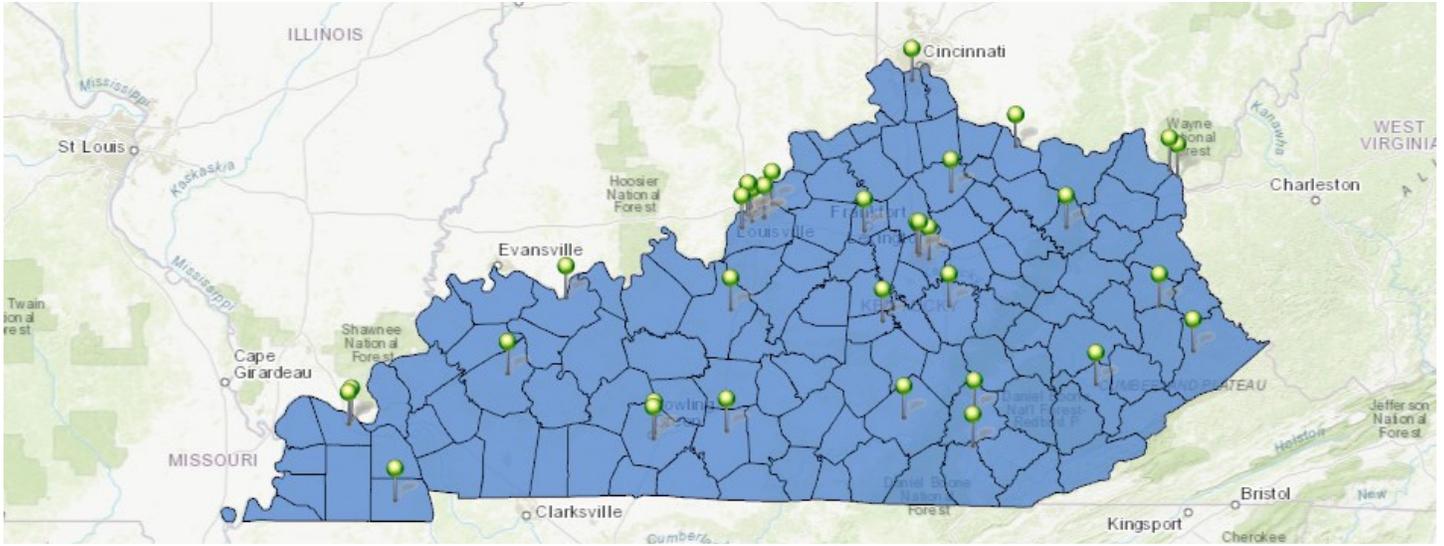
Incident Date 01/01/2019 - 12/31/2020
911 Scene Response

--- 2019 Average Monthly Incident Count
--- 2020 Average Monthly Incident Count



Incident Month	2019 n(%)	2020 n(%)	Percentage Change
January	124 (8.5%)	120 (8.7%)	↓ 3.2%
February	106 (7.3%)	91 (6.6%)	↓ 14.1%
March	96 (6.6%)	115 (8.3%)	↑ 19.7%
April	115 (7.9%)	77 (5.6%)	↓ 33%
May	126 (8.6%)	117 (8.5%)	↓ 7.1%
June	124 (8.5%)	122 (8.8%)	↓ 1.6%
July	131 (9.0%)	141 (10.2%)	↑ 7.6%
August	117 (8.0%)	114 (8.3%)	↓ 2.5%
September	132 (9.1%)	121 (8.8%)	↓ 8.3%
October	116 (8.0%)	131 (9.5%)	↑ 12.9%
November	138 (9.5%)	123 (8.9%)	↓ 10.8%
December	133 (9.1%)	107 (7.8%)	↓ 19.5%
Total	1,458	1,379	↓ 5.4%

Kentucky PCI Capable Hospitals



Facility	Location		
Baptist Health Paducah	Paducah	St. Claire Medical Center	Morehead
Lourdes Hospital	Paducah	King's Daughters' Medical Center	Ashland
Murray-Calloway County Hospital	Murray	Our Lady of Bellefonte Hospital, Inc.	Ashland
Baptist Health Madisonville	Madisonville	Highlands Regional Medical Center	Prestonsburg
Owensboro Medical Health System	Owensboro	Pikeville Medical Center	Pikeville
Greenview Regional Hospital	Bowling Green	ARH Regional Medical Center	Hazard
T.J. Samson Hospital	Glasgow	Baptist Health Corbin	Corbin
The Medical Center at Bowling Green	Bowling Green	Saint Joseph Hospital London	London
Hardin Memorial Hospital	Elizabethtown	Lake Cumberland Regional Hospital	Somerset
Baptist Health Louisville	Louisville	Baptist Health Lexington	Lexington
Jewish Hospital	Louisville	Baptist Health Richmond	Richmond
Norton Audubon Hospital	Louisville	Ephraim McDowell Regional Medical Center	Danville
Norton Brownsboro	Louisville	Frankfort Regional Medical Center	Frankfort
Norton Hospital/ Norton Children's Hospital/ Norton Healthcare Pavilion	Louisville	Harrison Memorial Hospital	Cynthiana
Norton Women's and Children's Hospital	Louisville	St. Joseph East	Lexington
St. Mary & Elizabeth Hospital	Louisville	St. Joseph Hospital	Lexington
University of Louisville Hospital	Louisville	UK HealthCare	Lexington
St. Elizabeth Edgewood	Edgewood	UK HealthCare Good Samaritan Hospital	Lexington
Meadowview Regional Medical Center	Maysville		

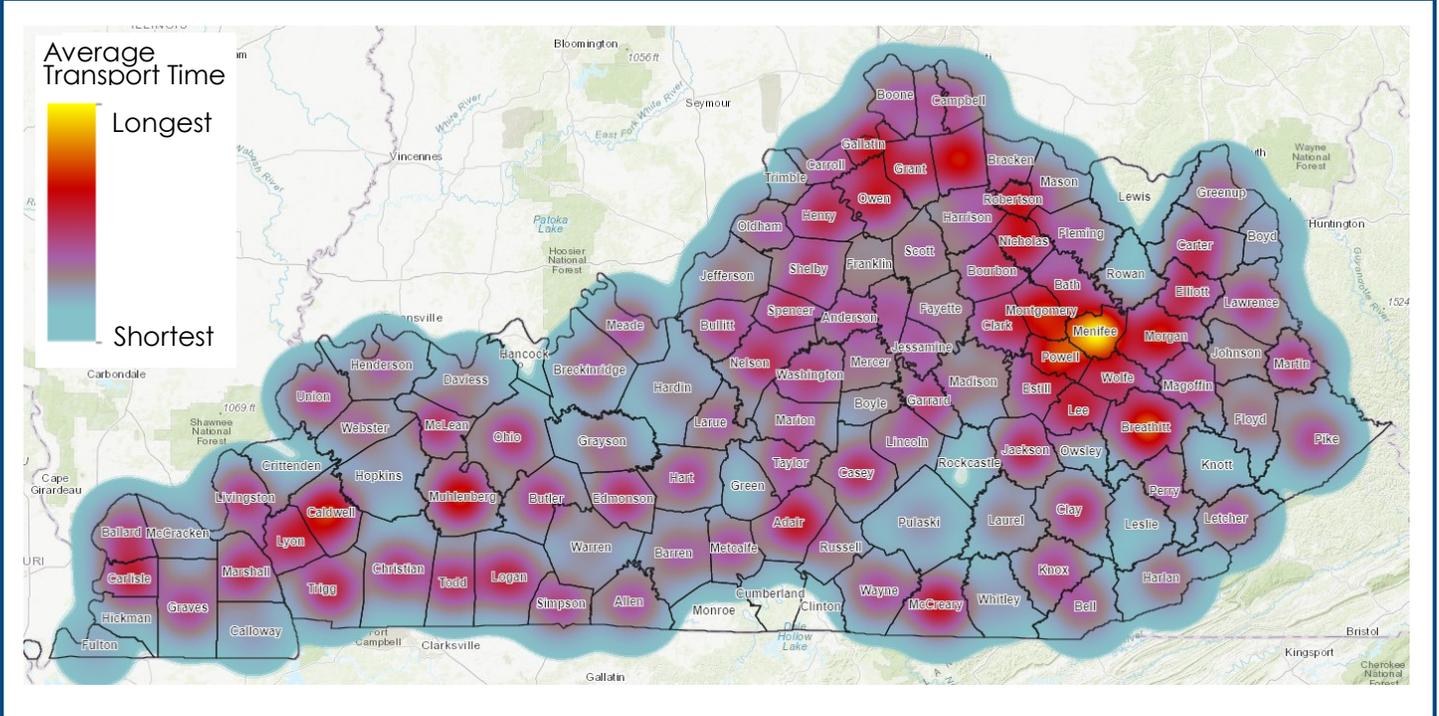
Retrieved from the 2018 Kentucky Administrative Claims Data Report - Cardiac Catheterization

Kentucky 911 STEMI Transport Times by Scene County

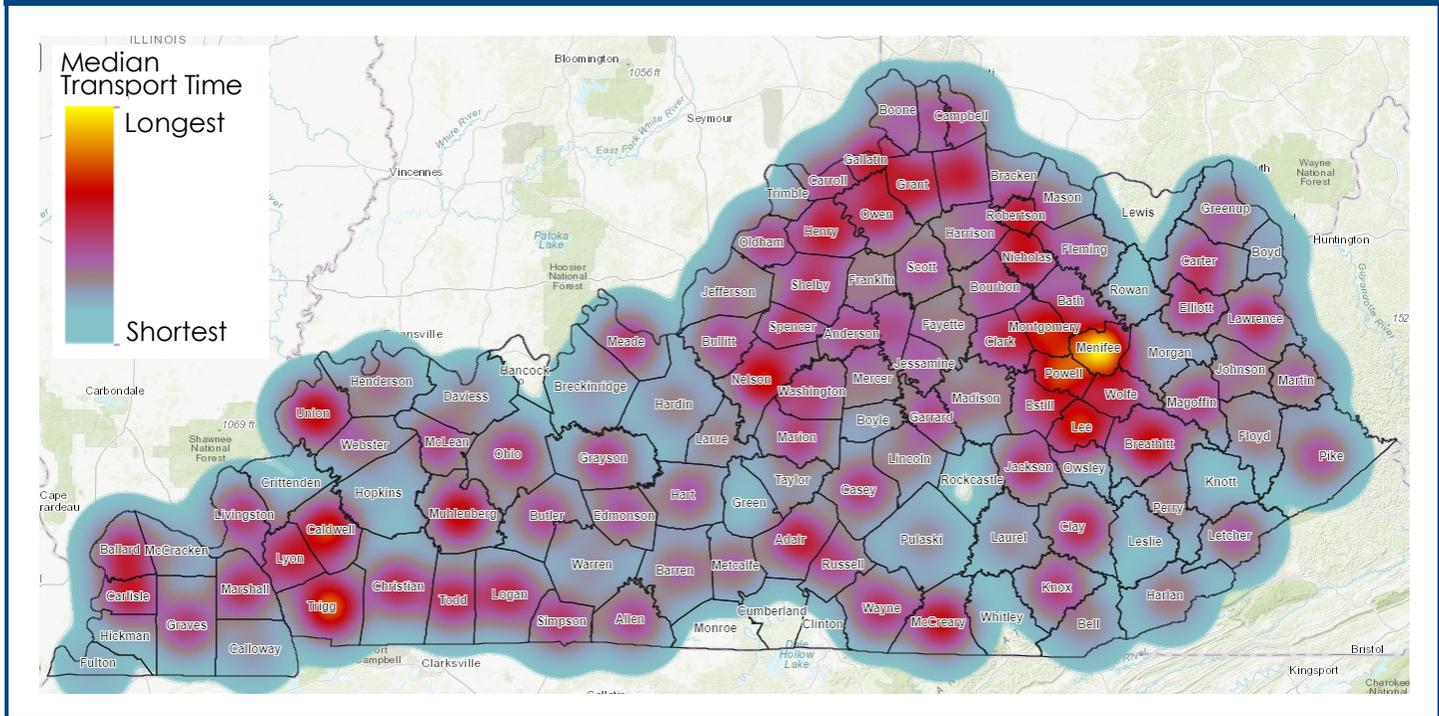
Metric: 'Unit Left Scene to Patient Arrived at Destination'
Incident Date 01/01/2020 - 12/31/2020
911 Scene Response



Average Transport Time



Median Transport Time



Kentucky 911 STEMI Transport Times

by Scene County

Metric: 'Unit Left Scene to Patient Arrived at Destination'
 Incident Date 01/01/2020 - 12/31/2020
 911 Scene Response

Top 15 Longest MEDIAN Transport Times

Top 15 Longest AVERAGE Transport Times

Scene Incident County Name (eScene.21)	Count of Incidents	Average Unit Left Scene to Patient Arrived at Destination <i>in Minutes</i>	Median Unit Left Scene to Patient Arrived at Destination <i>in Minutes</i>
Adair	5	36.25	33
Allen	4	21	24
Anderson	13	20.18	22
Ballard	4	23.31	30
Barren	8	17.23	16.27
Bath	3	17.06	15.18
Bell	8	16.83	10
Boone	126	15.50	13
Bourbon	7	23.96	19
Boyd	11	7	6
Boyle	8	6.61	5
Bracken	1	5	5
Breathitt	8	50.75	41
Breckinridge	5	18	7
Bullitt	35	23.74	22
Butler	4	27.33	24
Caldwell	1	44	44
Calloway	11	6.6	8
Campbell	51	16.22	18
Carlisle	1	33	33
Carroll	11	16.62	21.02
Carter	27	27.85	26
Casey	5	30	27
Christian	22	26.46	30.77
Clark	13	27.60	28
Clay	5	28.54	31
Daviess	28	10.78	10.32
Edmonson	3	28.81	21.25
Elliott	5	28.6	26
Estill	8	19	20
Fayette	62	10.07	9.87
Fleming	1	18	18
Floyd	8	14.87	13.35
Franklin	12	7.93	10.52
Fulton	3	4.5	4
Gallatin	4	35.43	32.82
Garrard	6	23.66	22

Kentucky 911 STEMI Transport Times by Scene County

Metric: 'Unit Left Scene to Patient Arrived at Destination'
Incident Date 01/01/2020 - 12/31/2020
911 Scene Response

Top 15 Longest MEDIAN Transport Times

Top 15 Longest AVERAGE Transport Times

Scene Incident County Name (eScene.21)	Count of Incidents	Average Unit Left Scene to Patient Arrived at Destination <i>in Minutes</i>	Median Unit Left Scene to Patient Arrived at Destination <i>in Minutes</i>
Grant	7	25.05	29.97
Graves	17	23.94	26
Grayson	16	15.21	26
Greenup	2	17.16	18
Hardin	33	10.64	11.28
Harlan	8	16.65	14.12
Harrison	3	14.5	14
Hart	10	23.3	20
Henderson	9	17.44	15.63
Henry	7	29.81	34
Hopkins	4	6.19	3.02
Jackson	5	32	30
Jefferson	234	12.69	13.03
Jessamine	23	16.55	15
Johnson	5	9	13
Kenton	40	11.18	11
Knott	1		
Knox	7	22.86	25
Larue	2	17.5	12
Laurel	13	11.66	10
Lawrence	4	26	30
Lee	5	33.2	43
Letcher	1	20	20
Lincoln	7	16.4	11
Livingston	9	27.16	27.57
Logan	12	32.3	31
Lyon	8	30.46	31
Madison	30	11.04	12.68
Magoffin	9	23.99	25
Marion	4	17.53	24.48
Marshall	4	29.75	30
Martin	2	27	18
Mason	15	8.55	8
McCracken	13	7.23	6.57
McCreary	13	38	39
McLean	3	28.33	25

Kentucky 911 STEMI Transport Times by Scene County

Metric: 'Unit Left Scene to Patient Arrived at Destination'
Incident Date 01/01/2020 - 12/31/2020
911 Scene Response

Top 15 Longest MEDIAN Transport Times

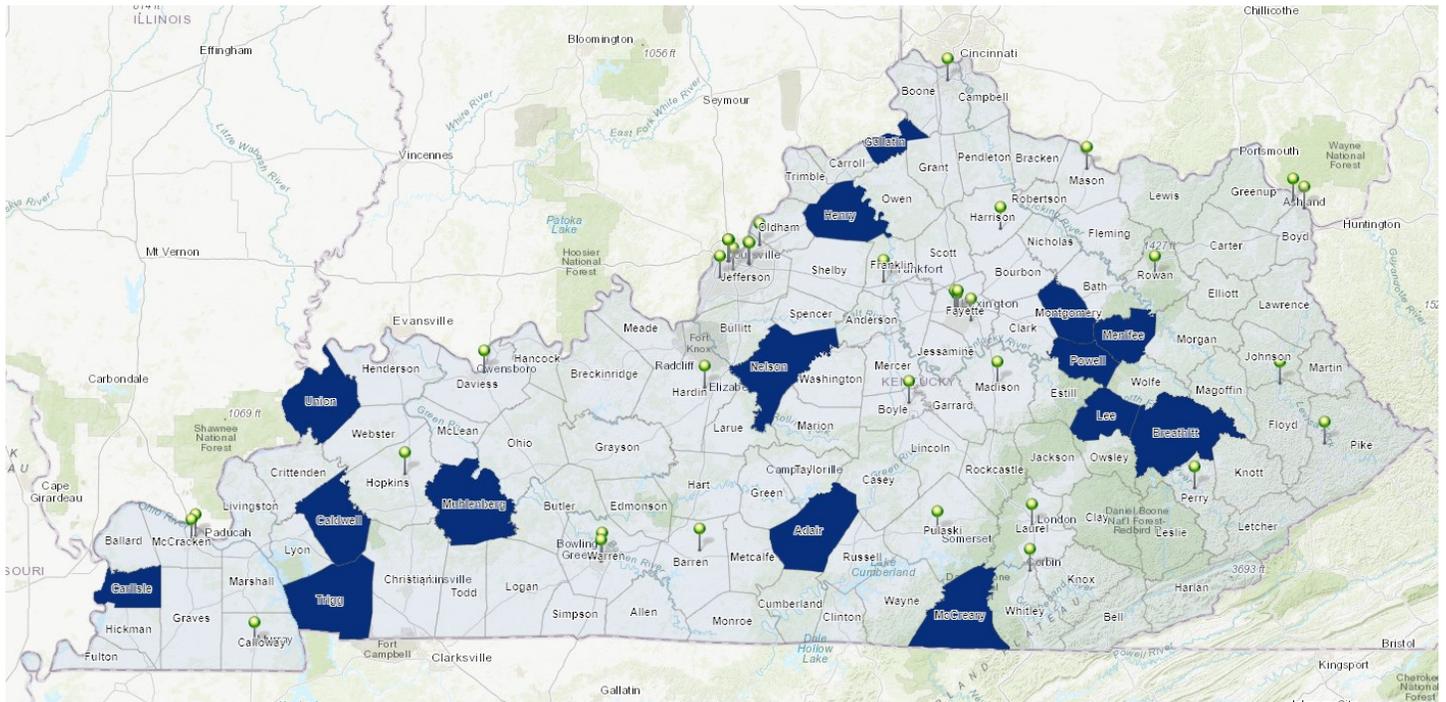
Top 15 Longest AVERAGE Transport Times

Scene Incident County Name (eScene.21)	Count of Incidents	Average Unit Left Scene to Patient Arrived at Destination in Minutes	Median Unit Left Scene to Patient Arrived at Destination in Minutes
Meade	12	20.90	28
Menifee	1	63.58	63.58
Mercer	3	11.66	11
Metcalfe	4	21.21	16.22
Montgomery	8	36.88	36.98
Morgan	2	42.5	3
Muhlenberg	10	45	43
Nelson	6	28.22	42
Nicholas	1	32	32
Ohio	6	27.5	28
Oldham	2	18.03	25.07
Owen	7	33.09	30.02
Pendleton	3	41	31
Perry	2	19.46	12.35
Pike	5	22.47	21.57
Powell	7	38.62	40
Pulaski	12	7.88	10
Robertson	1	32	32
Russell	2	12.01	21
Scott	26	16.88	21
Shelby	27	24.09	26.55
Simpson	16	23.16	27
Spencer	7	26.68	26.02
Taylor	6	21.12	7
Todd	4	27.75	31
Trigg	3	32	52
Union	3	23.33	42
Warren	39	9.14	7.75
Washington	3	23.61	22
Wayne	8	22.40	29
Webster	1	15.23	15.23
Whitley	2	6	0
Wolfe	2	25.5	26
Woodford	12	16.25	18

Top 15 Scene Incident Counties with the Longest Median STEMI Transport Times

Metric: 'Unit Left Scene to Patient Arrived at Destination'
Incident Date 01/01/2020 - 12/31/2020

 PCI Capable Hospitals



Top 15 Scene Incident Counties	Median Transport Time <i>in Minutes</i>
1. Menifee Co.	63.58
2. Trigg Co.	52
3. Caldwell Co.	44
4. Muhlenberg Co.	43
5. Lee Co.	43
6. Nelson Co.	42
7. Union Co.	42
8. Breathitt Co.	41
9. Powell Co.	40
10. McCreary Co.	39
11. Montgomery Co.	36.98
12. Henry Co.	34
13. Adair Co.	33
14. Carlisle Co.	33
15. Gallatin Co.	32.82

Where are they transporting to?

Top 15 Scene Counties with the Longest Median STEMI Transport Times

Scene Incident County	Responding Service	Destination Location	% of Transports	Mileage= EMS Station-> Destination	Driving Time
1. Menifee County	Montgomery Co. Ambulance Service	St. Joseph Mount Sterling	100%	2 Miles	6 min
2. Trigg County	Trigg County Hospital Ambulance Service	*Mercy Health Lourdes	54%	58 Miles	58 min
		*Murray-Calloway County Hospital	1%	36 Miles	42 min
		*AirEvac	45%	N/A	N/A
3. Caldwell County	Caldwell County EMS	*Lourdes Hospital	100%	46 Miles	47 min
4. Muhlenberg County	Owensboro Health Muhlenberg Community Hospital	*Baptist Health Madisonville	6%	29 Miles	33 min
		*Owensboro Health Regional	94%	42 Miles	53 min
5. Lee County	Citizens of Lee County Ambulance Service	*Baptist Health Richmond	26%	42 Miles	1 hr 4 min
		Kentucky River Medical Center	40%	25 Miles	36 min
		Marcum Wallace Hospital	20%	23 Miles	38 min
		*Happy Top LZ	7%	N/A	N/A
	Breathitt-Wolfe EMS Inc.	Marcum Wallace Hospital	7%	58 Miles	1 hr 4 min
6. Nelson County	Nelson County EMS	*Baptist Health Louisville	22%	43 miles	49 min
		*Jewish Hospital	49%	41 miles	44 min
		Flaget Memorial Hospital	13%	6 miles	11 min
	*Air Methods-Kentucky	*Jewish Hospital	15%	NA	NA
7. Union County	Deaconess EMS, LLC.	*Deaconess Gateway Hospital	57%	43 Miles	56 min
		Deaconess Hospital Union County	29%	<1 Mile	1 min
		*Lifelight Crew	14%	NA	NA
8. Breathitt County	Breathitt-Wolfe EMS INC.	*Hazard ARH Regional Medical Center	40%	29 Miles	37 min
		Kentucky River Medical Center	11%	2 Miles	6 min
		*Pikeville Medical Center	34%	80 Miles	1 hour 35 min
		*University of Kentucky Hospital	3%	85 Miles	1 hr 30 min
	Watts-Caney Fire and Rescue	*Hazard ARH Regional Medical Center	11%	17 Miles	21 min

*PCI Capable Hospital

*Landing Zone

* Out of State Facility

Where are they transporting to?

Top 15 Scene Counties with the Longest Median STEMI Transport Times

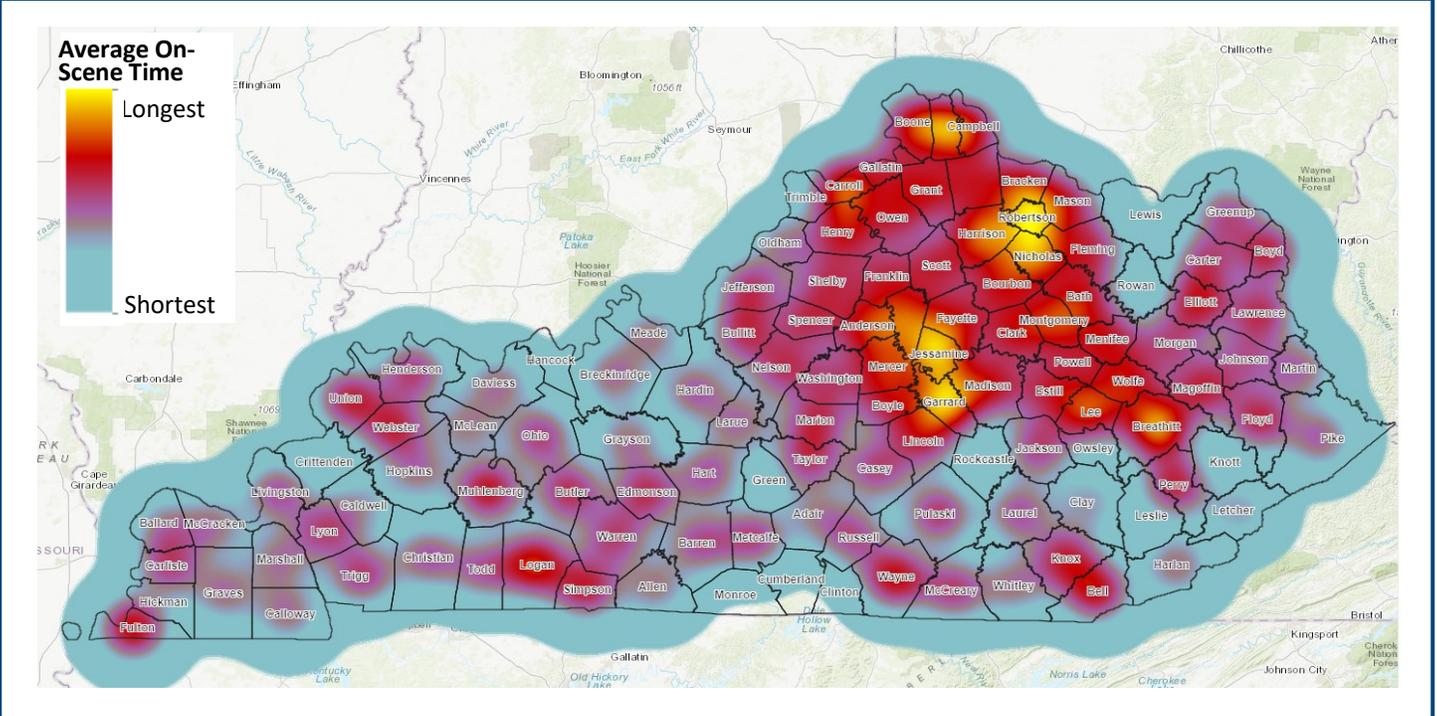
9. Powell County	Powell County Ambulance Service	*St. Joseph Hospital	19%	47 Miles	54 min
		Clark Regional Medical Center	9%	27 Miles	30 min
		*University of Kentucky Hospital	5%	47 Miles	55 min
		*Central Baptist Hospital	67%	47 Miles	58 min
10. McCreary County	McCreary Co. Ambulance Service	*Central Baptist Hospital	8%	107 Miles	1 hr 58 min
		*Lake Cumberland Regional Hospital	92%	29 Miles	37 min
11. Montgomery County	Montgomery County Ambulance Service	*University of Kentucky Hospital	55%	35 Miles	45 min
		*St. Joseph East	9%	33 Miles	38 min
		*St. Joseph Hospital	36%	35 Miles	46 min
12. Henry County	Henry County EMS	*Baptist Health Louisville	2%	37 Miles	43 min
		Baptist Health La Grange	2%	15 Miles	21 min
		*Norton Brownsboro	87%	29 Miles	35 min
	Trimble County EMS	*Norton Brownsboro	8%	28 Miles	30 min
13. Adair County	Adair County Ambulance Service	*TJ Samson Hospital	100%	37 Miles	37 min
14. Carlisle County	Carlisle County Ambulance Service	*Lourdes Hospital	100%	28 Miles	35 min
15. Gallatin County	Gallatin County EMS	*St. Elizabeth Edgewood	47%	35 Miles	42 min
		St. Elizabeth Florence	6%	30 Miles	35 min
	Verona Fire/EMS Fire Protection District	*St. Elizabeth Edgewood	47%	17 Miles	18 min

Kentucky 911 STEMI On-Scene Times by Scene County

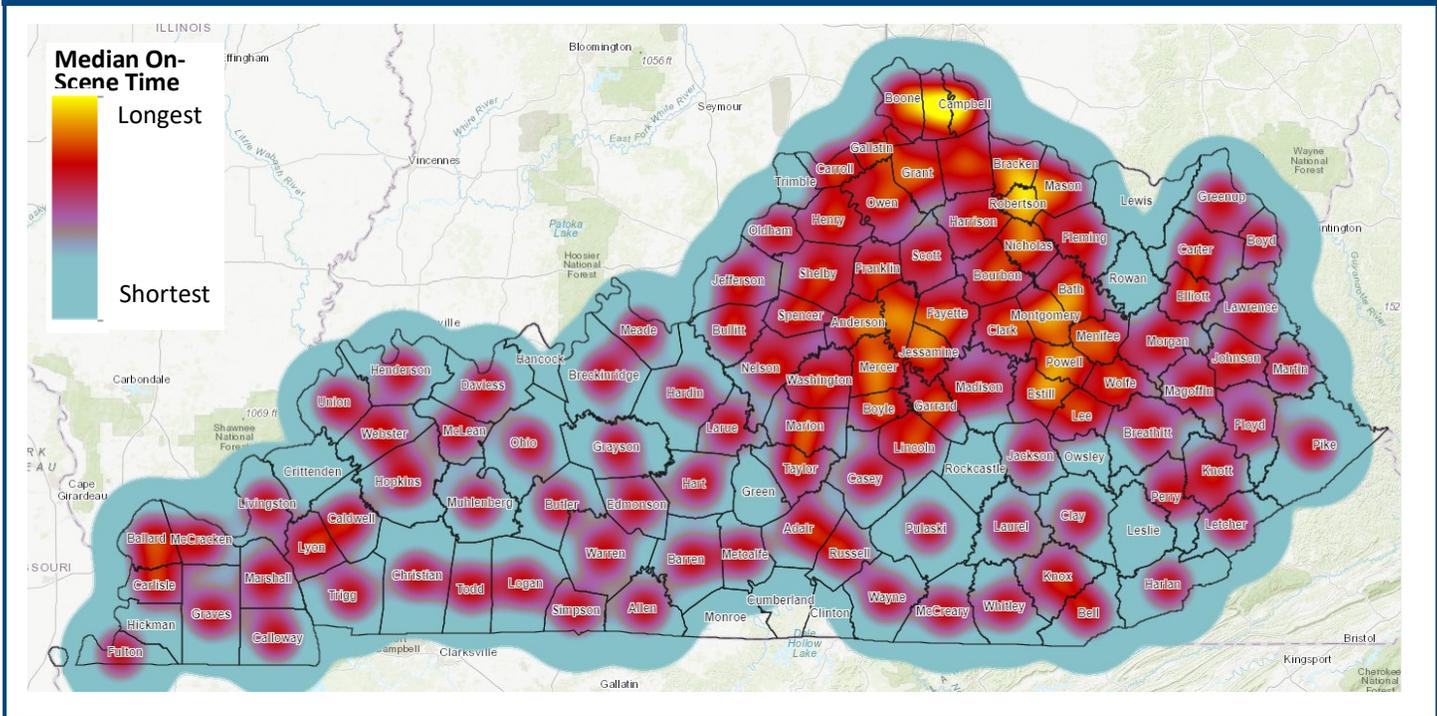
Metric: 'Unit Arrived on Scene to Unit Left Scene'
Incident Date 01/01/2020 - 12/31/2020
911 Scene Response



Average On-Scene Time



Median On-Scene Time



Kentucky 911 STEMI On-Scene Times

Metric: 'Unit Arrived on Scene to Unit Left Scene'
 Incident Date 01/01/2020 - 12/31/2020
 911 Scene Response

Top 15 Longest MEDIAN Transport Times

Top 15 Longest AVERAGE Transport Times

Scene Incident County Name (scene.21)	Count of Incidents	Average Unit arrived on scene to left scene <i>in Minutes</i>	Median Unit Arrived on Scene to Unit Left Scene <i>in Minutes</i>
Adair	5	9.50	13.00
Allen	4	12.33	11.00
Anderson	13	18.78	19.00
Ballard	4	10.50	10.00
Barren	8	15.75	10.53
Bath	3	15.81	13.57
Bell	8	21.77	19.07
Boone	126	18.58	17.00
Bourbon	7	17.28	22.00
Boyd	11	19.88	18.00
Boyle	8	14.72	13.33
Bracken	1	17.00	17.00
Breathitt	8	29.50	25.00
Breckinridge	5	13.80	10.00
Bullitt	35	16.85	17.00
Butler	4	19.25	18.00
Caldwell	1	9.00	9.00
Calloway	11	13.30	11.00
Campbell	51	15.46	15.00
Carlisle	1	16.00	16.00
Carroll	11	23.88	23.72
Carter	27	14.41	12.00
Casey	5	16.50	31.00
Christian	22	15.25	15.68
Clark	13	17.02	16.80
Clay	5	9.97	14.00
Daviess	31	12.89	10.03
Edmonson	3	18.17	15.35
Elliott	5	19.40	15.00
Estill	8	14.17	14.00
Fayette	62	15.37	12.73
Fleming	1	17.00	17.00
Floyd	8	19.68	17.00
Franklin	12	15.31	14.70
Fulton	3	24.50	28.00
Gallatin	4	12.86	13.47
Garrard	6	27.40	24.00
Grant	7	16.91	18.15

Kentucky 911 STEMI On-Scene Times

Metric: 'Unit Arrived on Scene to Unit Left Scene'
 Incident Date 01/01/2020 - 12/31/2020
 911 Scene Response

Top 15 Longest MEDIAN Transport Times

Top 15 Longest AVERAGE Transport Times

Scene Incident County Name (scene.21)	Count of Incidents	Average Unit arrived on scene to left scene <i>in Minutes</i>	Median Unit Arrived on Scene to Unit Left Scene <i>in Minutes</i>
Graves	17	13.28	12.00
Grayson	16	12.91	8.00
Greenup	2	15.04	12.40
Hardin	33	14.80	14.05
Harlan	8	14.06	19.43
Harrison	3	24.00	13.00
Hart	10	15.49	15.00
Henderson	6	17.77	22.50
Henry	7	18.05	11.38
Hopkins	4	12.27	12.97
Jackson	5	17.00	15.00
Jefferson	234	17.07	15.38
Jessamine	23	24.67	20.40
Johnson	5	12.20	11.00
Kenton	40	18.00	15.00
Knott	1		
Knox	7	18.78	15.00
Larue	2	13.00	12.00
Laurel	13	15.75	14.00
Lawrence	4	18.00	14.00
Lee	5	22.80	15.00
Letcher	1	9.93	9.93
Lincoln	7	16.17	16.00
Livingston	9	15.87	19.00
Logan	12	24.75	23.00
Lyon	8	15.48	13.32
Madison	30	18.92	18.32
Magoffin	9	18.39	15.17
Marion	4	15.64	13.97
Marshall	4	12.00	12.00
Martin	2	14.00	11.00
Mason	15	15.40	16.00
McCracken	13	12.35	11.27
McCreary	13	17.33	18.00
McLean	3	11.67	6.00
Meade	12	12.60	11.00

Kentucky 911 STEMI On-Scene Times

Metric: 'Unit Arrived on Scene to Unit Left Scene'
 Incident Date 01/01/2020 - 12/31/2020
 911 Scene Response

Top 15 Longest MEDIAN Transport Times

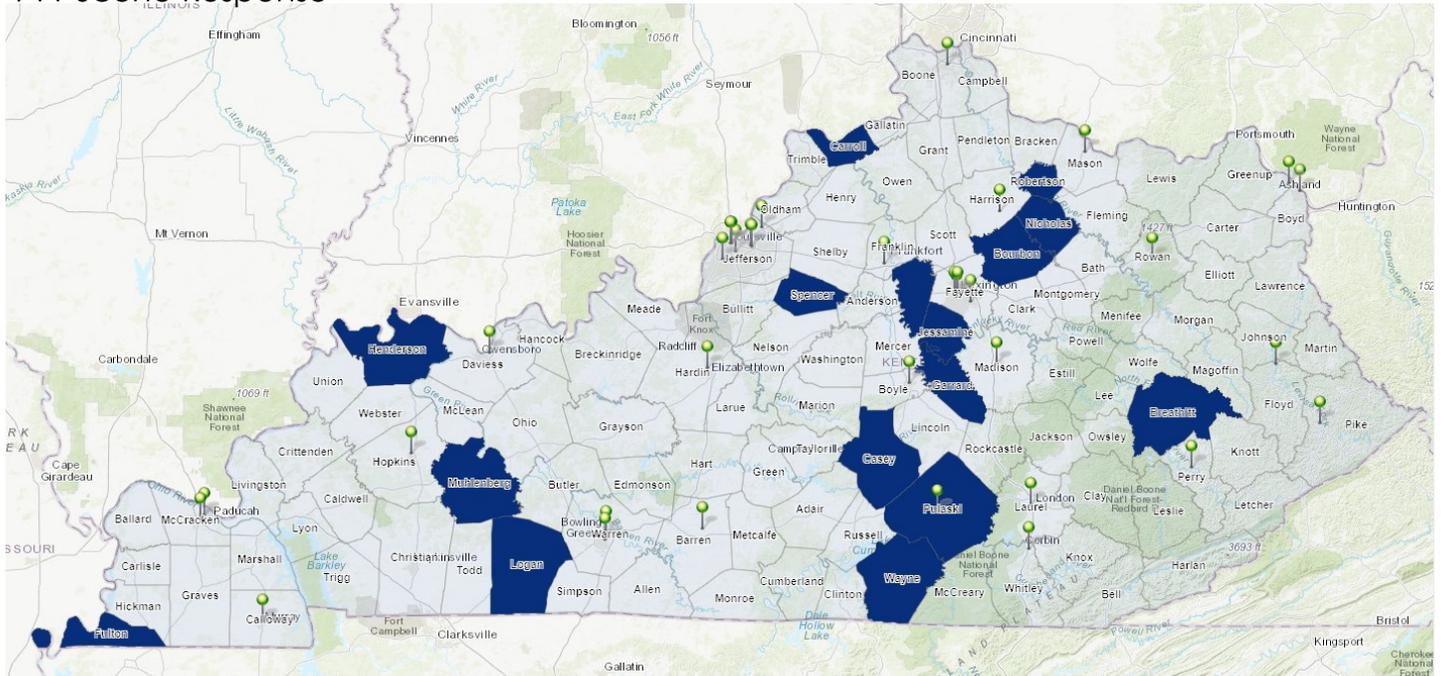
Top 15 Longest AVERAGE Transport Times

Scene Incident County Name (scene.21)	Count of Incidents	Average Unit arrived on scene to left scene <i>in Minutes</i>	Median Unit Arrived on Scene to Unit Left Scene <i>in Minutes</i>
Menifee	1	17.20	17.20
Mercer	3	16.67	10.00
Metcalfe	4	16.94	11.70
Montgomery	8	17.90	16.52
Morgan	2	14.00	5.00
Muhlenberg	10	22.60	26.00
Nelson	6	16.20	16.00
Nicholas	1	22.00	22.00
Ohio	6	17.33	14.00
Oldham	2	11.81	19.62
Owen	7	15.77	13.95
Pendleton	3	14.67	10.00
Perry	2	20.47	15.52
Pike	5	14.74	11.75
Powell	7	9.84	10.08
Pulaski	12	18.60	20.00
Robertson	1	21.00	21.00
Russell	2	15.00	15.00
Scott	26	17.01	15.00
Shelby	27	14.46	15.00
Simpson	16	20.10	18.00
Spencer	7	15.80	20.03
Taylor	6	15.96	15.00
Todd	4	14.00	13.00
Trigg	3	17.67	15.00
Union	2	20.00	12.00
Warren	39	16.42	14.32
Washington	3	12.52	18.00
Wayne	8	23.12	20.00
Webster	1	18.85	18.85
Whitley	2	12.50	11.00
Wolfe	2	18.00	18.00
Woodford	12	18.11	20.00

Top 15 Scene Incident Counties with the Longest Median STEMI On-Scene Times

Metric: 'Unit Arrived on Scene to Unit Left Scene'
 Incident Date 01/01/2020 - 12/31/2020
 911 Scene Response

 PCI Capable Hospitals



Top 15 Scene Incident Counties	Median On-Scene Times in Minutes
1. Casey County	31
2. Fulton County	28
3. Muhlenberg County	26
4. Breathitt County	25
5. Garrard County	24
6. Carroll County	23.72
7. Logan County	23
8. Henderson County	22.50
9. Nicholas County	22
10. Bourbon County	22
11. Robertson County	21
12. Jessamine County	20.40
13. Spencer County	20.03
14. Wayne County	20
15. Pulaski County	20
16. Woodford County	20

Appendix

The Cardiac & Stroke Care Subcommittee's STEMI Workgroup created the below inclusion criteria to determine STEMI Incidents submitted to KSTARS.

Inclusion Criteria
Incident Date is Between 01/01/2020 - 12/31/2020
AND
Patient Age is Greater Than 18
AND
Response Type of Service Requested is Equal To 911 Response (Scene)
AND
Scene Incident State Name Contains Any <ul style="list-style-type: none"> • Kentucky, KY
AND
Incident Complaint Reported by Dispatch Contains Any <ul style="list-style-type: none"> • Heart, Overdose, Psychiatric Problem/Abnormal Behavior, Sick Person, Chest Pain, Cardiac Arrest, Breathing Problem, Unknown Problem, Unconscious, Healthcare Professional/Admission, Headache, Falls
AND
Situation Provider Primary Impression Has One of More Which is in <ul style="list-style-type: none"> • ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery • ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall • ST elevation (STEMI) myocardial infarction of anterior wall • ST elevation (STEMI) myocardial infarction of inferior wall • ST elevation (STEMI) myocardial infarction of other sites • ST elevation (STEMI) myocardial infarction of unspecified site
OR
Vitals Cardiac Rhythm ECG Findings Contains Any <ul style="list-style-type: none"> • STEMI, Left Bundle Block