



Functional Consolidation Feasibility Study

Quincy Fire Department

Tri-Township Fire Protection District

Adams County Ambulance Service

Final Report

July 2019



Conducted by the Illinois Fire Chiefs Association



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Executive Summary

The purpose of this study is to determine how future changes would impact emergency services of the Quincy Fire Department (QFD), Tri-Township Fire Protection District (TTFPD), and the Adams County EMS(ACE). This project applied nationally accepted response and staffing standards in this study and evaluated the effectiveness of the following changes:

- Combining the Quincy Fire Department, the Tri-Township Fire Protection District, and the Adams County Ambulance EMS at a functional level of consolidation.
- Identify optimal fire station locations to best serve the entire response area
- Staffing/ Apparatus
 - Identifying optimal staffing levels, including personnel workloads
 - Apparatus deployment, vehicles (types), the workload of the companies.
- How the ambulance operations could be assimilated into fire operations.
- Sharing resources opportunities.

Findings / Recommendations:

The IFCA Team reviewed and analyzed the station locations of the Quincy Fire Department and the Tri-Township Fire Protection District Station locations. The IFCA Team reviewed the agencies 4 and 8 minute coverage times individually and then combined to determine the impact on response times to their Area of Responsibility (AOR).

Quincy Fire Department serves an area of approximately 16 square miles and is responding to 95% of the incidents within 4-minute drive time which exceeds the NFPA standard. In addition, Quincy responds to 99% of the total response area within 8 minutes which meets the NFPA standard.

Based on the number of incidents and area served, the current stations are in the optimal locations for emergency response. However, to best serve the community, the IFCA team recommends that all suppression/first responder units become ALS capable to improve the service delivery. If unable to obtain all of the stations as ALS first responders, the data supports an upgrade to the apparatus in Central Station and Station 4 due to their call volume as well as being able to provide assistance to other AOR. Station 5 should be maintained as ALS.



Tri-Township Fire Protection District serves an area of 108.4 square miles with one fire station. Tri-Township Fire Protection District responds to 8% of the incidents within 4-minute drive time and 30% of the incidents within 8-minute drive time which is well below NFPA standards.

The geographic area is very large and combined with its current resources and limited staffing, it presents unique challenges in providing service to comply with industry standards. The IFCA Team recommends a cooperation response agreement with the Quincy Fire Department to support performance and service level increases to the entire township area.

A cooperative response agreement must include the reorganization of each agency's AOR. By doing so, the predictive analysis illustrates a decrease in response times through-out the TTFPD by as much as one minute and fifty-eight seconds (1:58).

Adams County EMS: Adams County EMS serves 871 square miles with 4 ambulance facilities totaling 6 ambulances companies. 3 ambulances are located in their Central Station which is within the city limits of Quincy and Tri-Township.

Adams County Ambulance responds to 18% of the incidents within 4-minute drive time within Quincy/Tri-Township response area and responds to 84% of the incidents within 8-minute drive time.

Centralizing 3 ambulances in one ambulance station limits the distribution of ALS service capabilities within the Quincy/Tri-Township area of response.

By moving ambulance companies into identified Quincy Fire Stations would provide for better service and performance coverage to the Quincy/Tri-Township area in addition to the overall Adams County EMS response TRA. The recommended placement would be to move their ambulances into the Quincy Central Station, 3, and 4.

The Team believes there is an opportunity for cost-sharing and cost-savings for the agencies (i.e. facility costs, EMS billing/revenue generation) but further analysis would be needed. Additionally, the logistics (station layout, apparatus positioning, living quarters, the financial impact of remodeling and/or reconfiguration) should be included in the evaluation by agency leaders.



Joint Agency Performance & Service

If the agencies (QFD; TTPD & ACE) choose to functionally cooperate and respond as a Joint Agency, the information collected and analyzed finds that Functional Consolidation/Cooperation would provide an overall increase in the level of service and performance to the combined jurisdictions. This performance model aligns with NFPA indicating that All Incident Response times would meet the standard at the 90th percentile. Service delivery would increase from one (1) ALS first responder company to multiple first responders companies equipped as ALS with the potential of ALS treat/transport capabilities strategically located throughout the TRA.

The Joint Agency would be within 3% of meeting NFPA standards with 87% of incidents within 4 minutes of drive time. The Joint Agency would exceed the NFPA standard with 97% of the incidents within the 8 minute drive time which is used for the ERF.

After evaluating the ideal placement for the combined fire station location, the current stations' configuration has only a 4% difference in incidents covered from the ideal stations' location which means the current stations are located in ideal geographical locations for a joint agency cooperation.

Staffing and Apparatus

After the review of the analytics and the information provided, in order to provide the optimum service delivery, the IFCA Team recommends placement of apparatus in the following locations:

<u>Location</u>	<u>Apparatus and Staffing</u>	
Central Station	ALS Quint/Truck -3	ACE - ALS Ambulance
Station 3	ALS Engine - 3	ACE - ALS Ambulance
Station 4	ALS Engine - 3	ACE - ALS Ambulance
Station 5	*ALS Engine - 3	
Station 6	ALS Engine - 3	
Tri-Township 1	ALS Engine - 3	

*existing ALS company





Resource Sharing Opportunities

Analyzing the organizational/operational structure of the three jurisdictional entities, there are areas of cooperation and other potential cost-saving efforts that could be implemented. To fully capture the benefits of resource sharing capabilities and potential, the agencies should perform a SWOT analysis along with strategic and master plans. Resource sharing has the potential of allowing for efficient operations and response to the citizens and guests.

Areas of sharing potential are but not limited to:

- Organizational effectiveness
- Develop a regional training plan including standards focusing on consistency in equipment placement and joint response
- Apparatus and equipment purchases (consistency)
- Joint staffing and response
- Joint Dispatch capabilities
- Common standard operating procedures
- Cross-train ambulance crews with suppression companies

These items should be considered for future development and would require expansion of existing automatic aid and mutual aid agreements. Some additional items that should be considered:

- Emergency First Responder Service Fees
- Non-Transport Fees (ALS or BLS)
- EMS Contract Agreements
- Joint Agency EMS transport/cost recovery revenue sharing
- Sales Tax
- Fire Plan Reviews
- Fire Facility Rental

*Throughout the remainder of the report, the Central Fire Station will be referred to as "Station 1"





The IFCA Consulting Services Team team executed independent assessments of the agencies and evaluated each entity free from any influence or pressure from any governing or fire department official. Any report of this nature is only as good as the data and information provided to the consulting team. The consulting team made every effort to obtain accurate data and examined the issues from a non-prejudicial perspective. As a result of the team's assessment and evaluation, the recommendations made within this report are based on quantifiable data provided by the organizations through interviews, qualitative observations, and associated data as directly related to the scope of work, and from the experience of the consultants, who have spent years of service in the emergency services or related field.



Definitions





All Incidents: All incidents regardless of NFIRS group codes.

AOR: Area of Responsibility.

AW: Area workload is the percentage of a given time frame in which there is a demand for service within a station's AoR.

Catchment: A geographical area based on travel time.

Drive Time: The time measured from fire company en-route to fire company on scene.

EMS Incidents: Incidents in the NFIRS group codes 300's.

Fire Incidents: Incidents in the NFIRS group codes 100's.

Historical: Incidents that have happened in the past. Data that has been collected in the past.

Hotspot: A representation of an area with a statistical higher density than its surrounding area.

Other Incidents: Incidents in the NFIRS group codes 200's, and 400's through 900's.

Projected: The results that may happen in the future based on analysis.

Response Time: The time measured from fire company notification to fire company on scene.

Service Area: A geographical area where service is provided or demanded.

TRA: The complete geographical area in which a fire agency is responsible to provide service.





- Station Details Overview
- Jurisdiction Overview
- Jurisdiction Area
- Area of Responsibility (AoR) 1
- Station 1 Details
- Area of Responsibility (AoR) 3
- Station 3 Details
- Area of Responsibility (AoR) 4
- Station 4 Details
- Area of Responsibility (AoR) 5
- Station 5 Details
- Area of Responsibility (AoR) 6
- Station 6 Details










	RADIO NAME	STATUS	STAFFING MINIMUM	STAFFING MAXIMUM	MEDICAL CAPABILITIES
STATION 1					
SHIFT COMMANDER		Active	1	1	
QUINT	E2	Active	3	5	BLS
ENGINE	E7	Reserve	3	0	BLS
ENGINE	E8	Reserve	3	3	BLS
SQUAD	Rescue	Reserve	3	3	BLS
		Reserve			
STATION 3					
ENGINE	E3	Active	3	3	BLS
TRUCK	Aerial	Reserve	3	3	BLS
STATION 4					
ENGINE	E4	Active	3	3	BLS
STATION 5					
ENGINE	E5	Active	3	3	ALS
STATION 6					
ENGINE	E6	Active	3	3	BLS



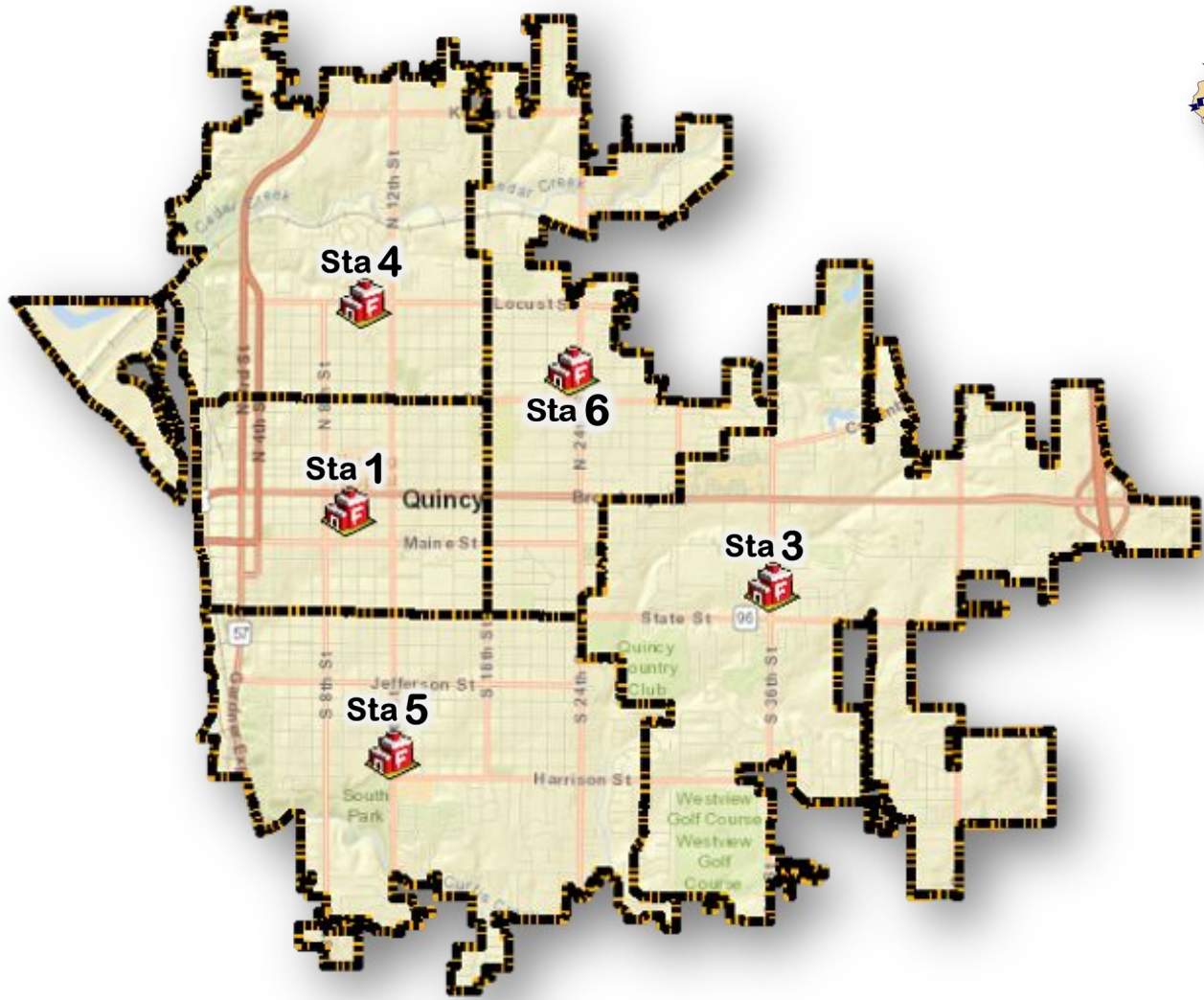


The following demographic data is provided using Esri’s demographic estimates for popular variables including: 2018 Total Population, 2018 Household Population, 2018 Median Age, 2018 Median Household Income, 2018 Per Capita Income, 2018 Diversity index and many more. Data is available from country, state, county, ZIP Code, tract, and block group level.

	 TOTAL POPULATION	 TOTAL HOUSEHOLDS	 > 65 YEARS OF AGE	 < 5 YEARS OF AGE	 MEDIAN INCOME
TRA	40,053	16,926	8,517	2,447	\$45,120
AOR 1	6,335	2,903	1,002	418	\$29,738
AOR 3	7,893	3,486	2,090	407	\$58,096
AOR 4	6,117	2,348	1,503	389	\$37,214
AOR 5	12,599	5,308	2,551	843	\$15,149
AOR 6	7,109	2,881	1,371	390	\$52,928

STATS ARE WITHIN PRIMARY SERVICE AREA





16.0

AREA IN SQUARE MILE



40,053

TOTAL POPULATION



16,926

TOTAL HOUSEHOLDS



8,517

OVER 64 YEARS OF AGE



2,447

UNDER 5 YEARS OF AGE



\$45,120

MEDIAN INCOME





1.8

AREA IN SQUARE MILE



6,335

TOTAL POPULATION



2,903

TOTAL HOUSEHOLDS



1,002

OVER 64 YEARS OF AGE



418

UNDER 5 YEARS OF AGE



\$29,738

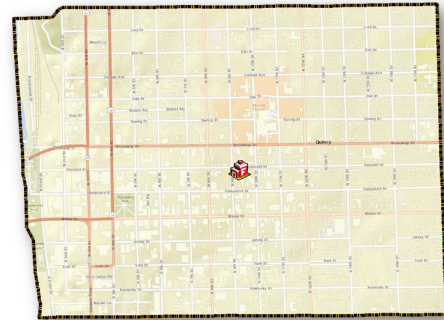
MEDIAN INCOME





Station 1

(Headquarters)
906 Vermont St.
Quincy, IL 62301



QUINT

E2

BLS

1 OFFICER

1 ENGINEER

3 FIREFIGHTER

STAFFING: MAX 5 MIN 3

FRONTLINE



FRONTLINE OTHER

IC



ENGINE

E7

BLS

1 OFFICER

1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 0 MIN 3

RESERVE



ENGINE

E8

BLS

1 OFFICER

1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 3 MIN 3

RESERVE



SQUAD

RESCUE

BLS

1 OFFICER

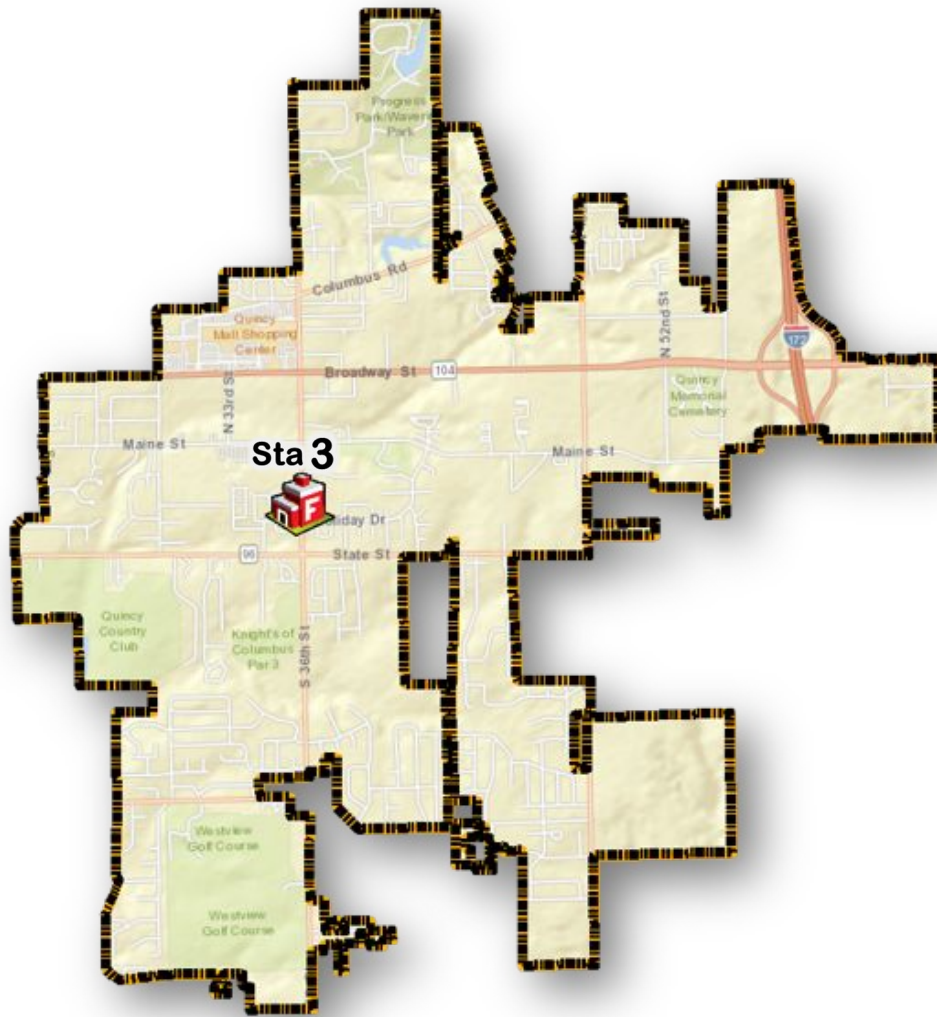
1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 3 MIN 3

RESERVE





5.3

AREA IN SQUARE MILE



7,893

TOTAL POPULATION



3,486

TOTAL HOUSEHOLDS



2,090

OVER 64 YEARS OF AGE



407

UNDER 5 YEARS OF AGE



\$58,096

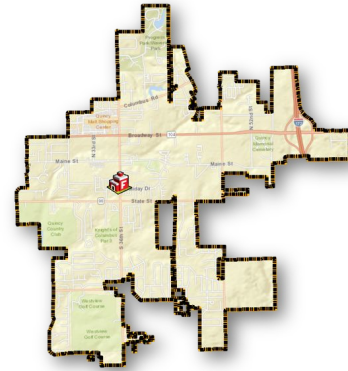
MEDIAN INCOME





Station 3

334 S 36th St.
Quincy, IL 62301



ENGINE

E3

BLS

1 OFFICER

1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 3 MIN 3

FRONTLINE



TRUCK

AERIAL

BLS

1 OFFICER

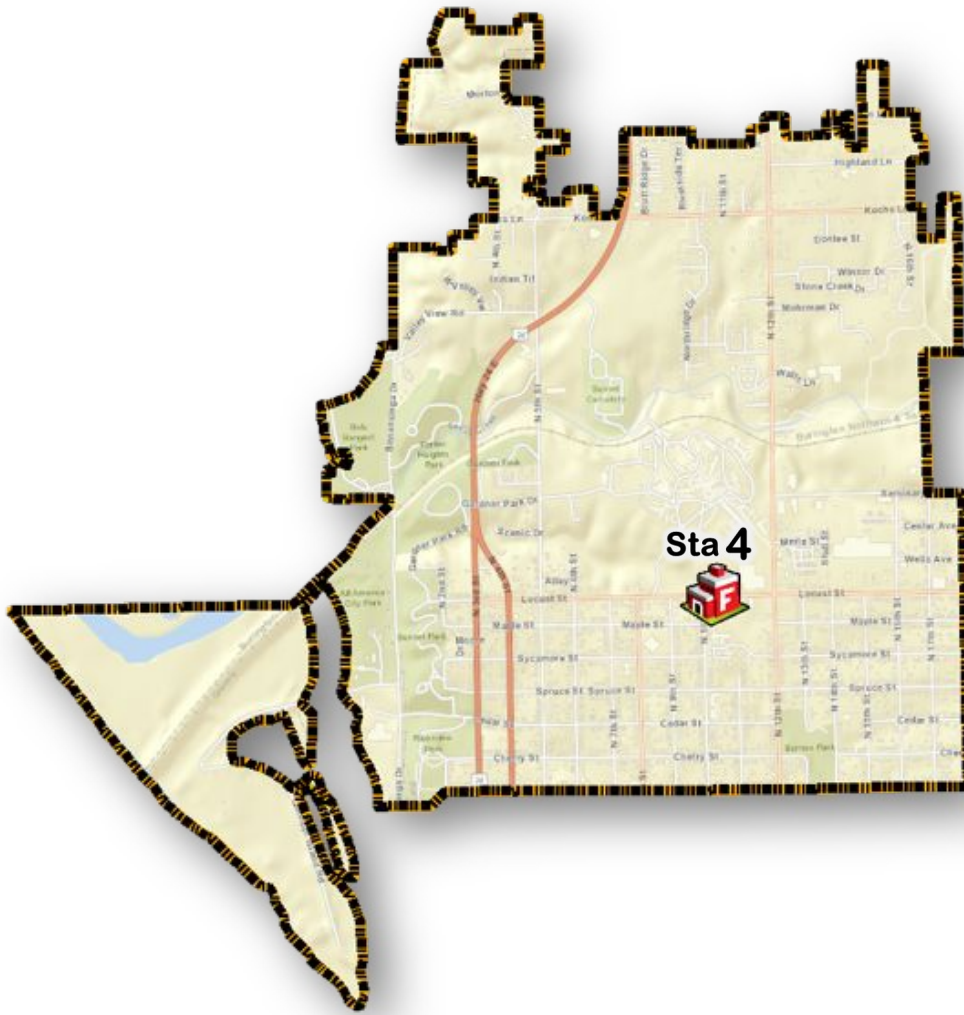
1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 3 MIN 3

RESERVE





3.1

AREA IN SQUARE MILE



6,117

TOTAL POPULATION



2,348

TOTAL HOUSEHOLDS



1,503

OVER 64 YEARS OF AGE



389

UNDER 5 YEARS OF AGE



\$37,214

MEDIAN INCOME





Station 4

1115 Locust St.
Quincy, IL 62301



ENGINE

E4

BLS

1 OFFICER

1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 3 MIN 3

FRONTLINE





Station 5

1130 Jackson St.
Quincy, IL 62301



ENGINE

E5

ALS

1 OFFICER

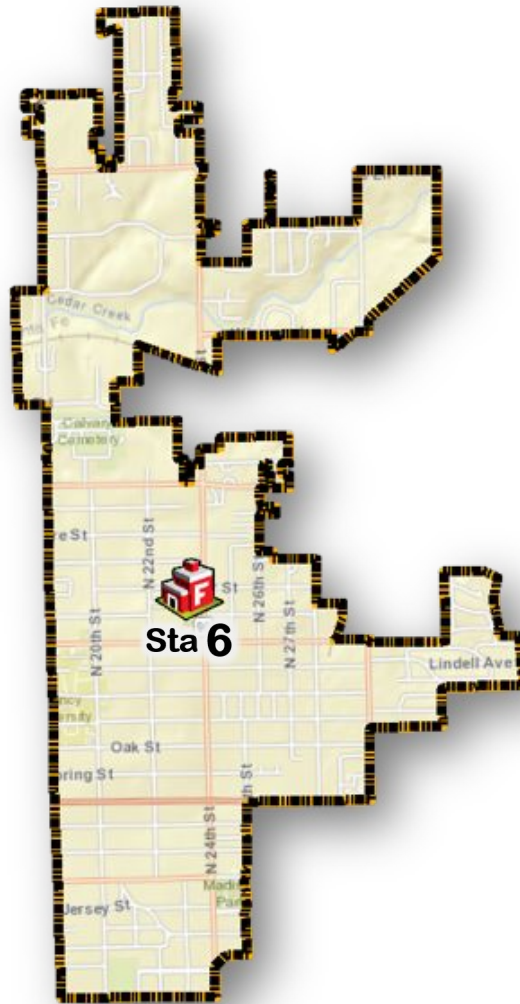
1 ENGINEER

1 FIREFIGHTER

STAFFING: MAX 3 MIN 3

FRONTLINE





2.4

AREA IN SQUARE MILE



7,109

TOTAL POPULATION



2,881

TOTAL HOUSEHOLDS



1,371

OVER 64 YEARS OF AGE



390

UNDER 5 YEARS OF AGE



\$52,928

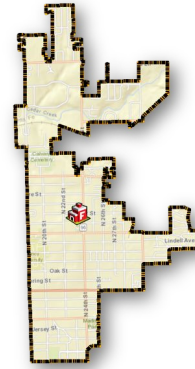
MEDIAN INCOME





Station 6

2340 Cedar
Quincy, IL 62301



ENGINE

E6

BLS

1 OFFICER

1 ENGINEER

1 FIREFIGHTER

**STAFFING: MAX 3 MIN 3
FRONTLINE**





- Service Area Overview
- Area Served by Drive Time
- Streets Covered by Drive Time
- Area and Streets by Time - AoR 1
 - TRA Coverage - Station 1
- Area and Streets by Time - AoR 3
 - TRA Coverage - Station 3
- Area and Streets by Time - AoR 4
 - TRA Coverage - Station 4
- Area and Streets by Time - AoR 5
 - TRA Coverage - Station 5
- Area and Streets by Time AoR 6
 - TRA Coverage - Station 6





AREA SERVED

4 MIN CATCHMENT:
AREA

STREETS SERVED

4 MIN CATCHMENT:
STREETS

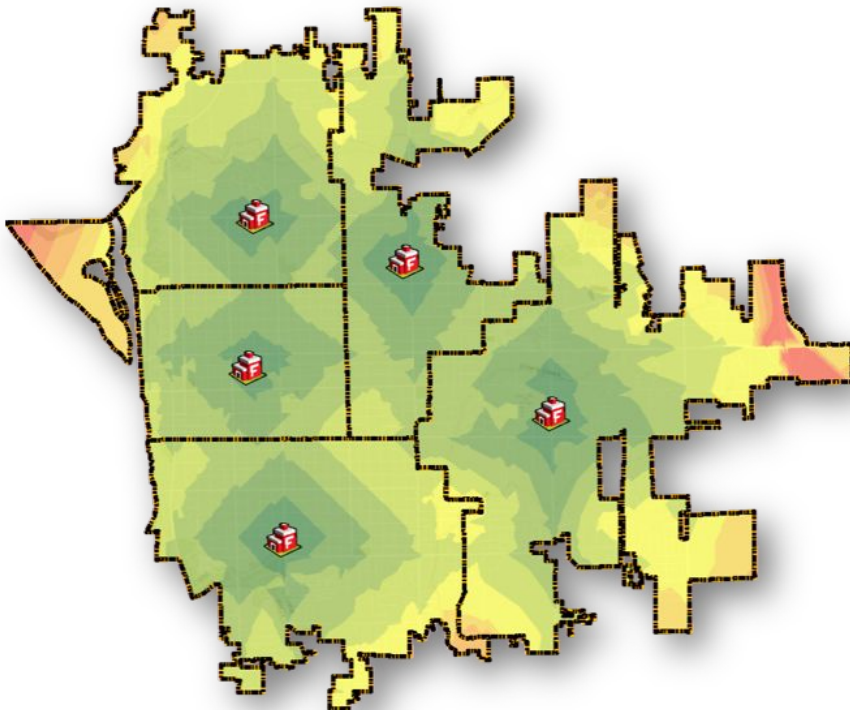
TRA	12.7	79%	204.6	82%
AOR 1	1.7	99%	40.5	100%
AOR 3	3.5	66%	38.5	67%
AOR 4	2.3	73%	35.0	85%
AOR 5	2.9	84%	57.4	83%
AOR 6	2.0	83%	35.1	85%

AREA IN SQUARE
MILES


STREETS IN MILES

STATS ARE WITHIN PRIMARY SERVICE AREA

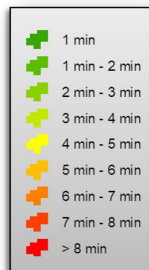




4 MINUTE COVERAGE
 **12.7**
 AREA IN SQUARE MILES

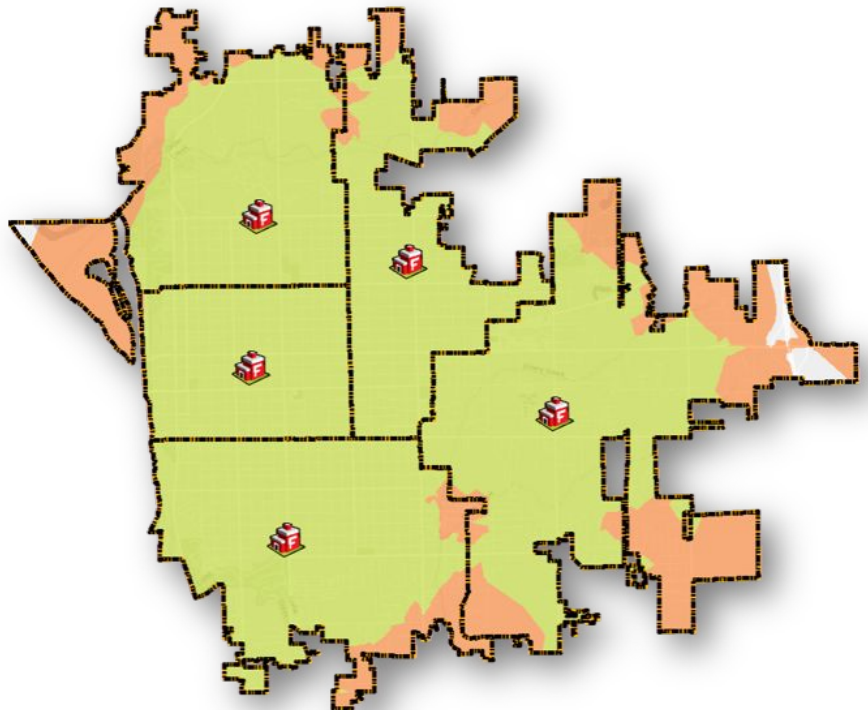
4 MINUTE COVERAGE
 **79%**
 PERCENTAGE OF TRA

One-minute catchment increments..



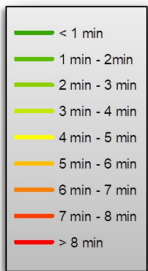
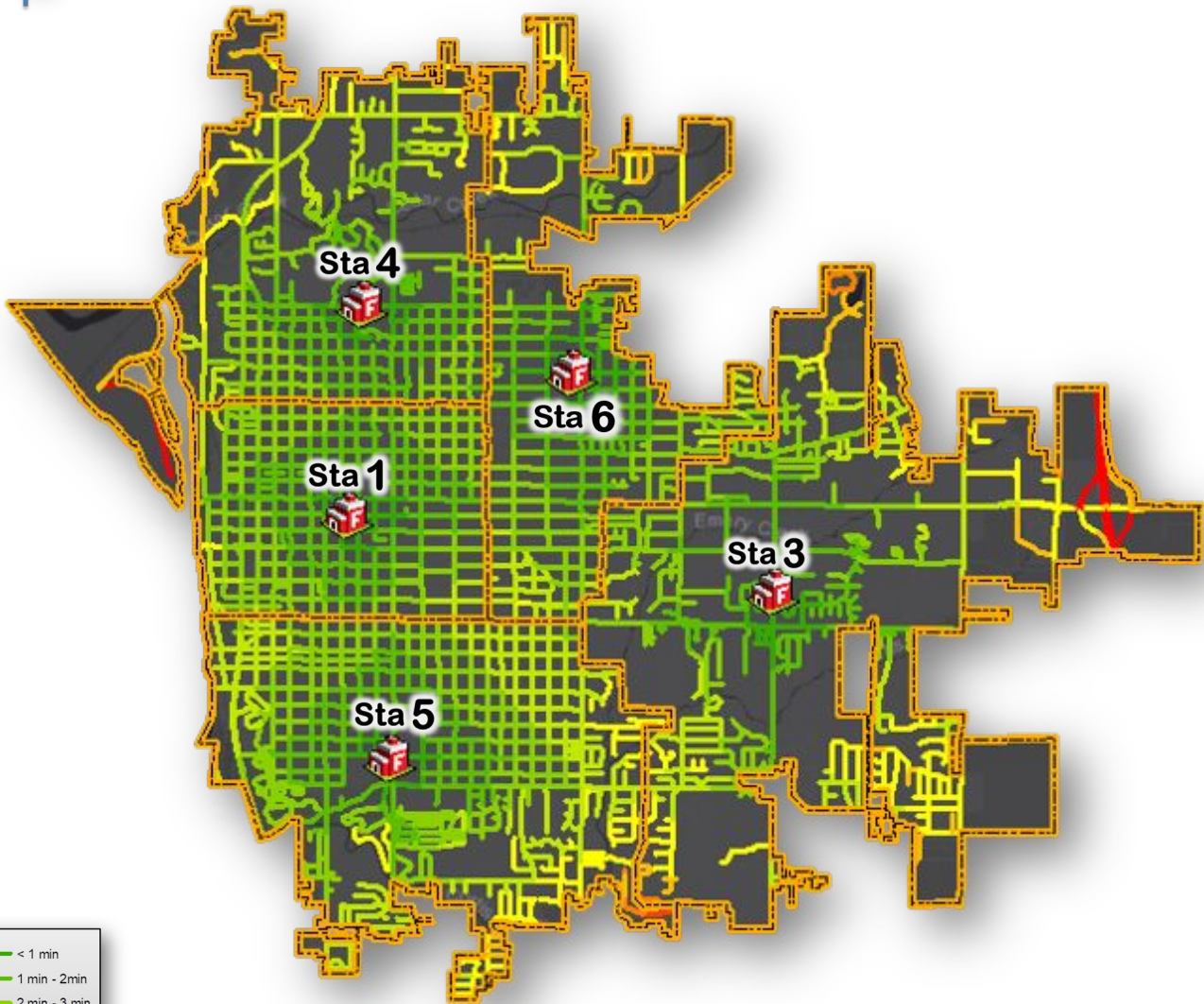
8 MINUTE COVERAGE
 **15.9**
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **99%**
 PERCENTAGE OF TRA




Four-minute and eight-minute catchments.



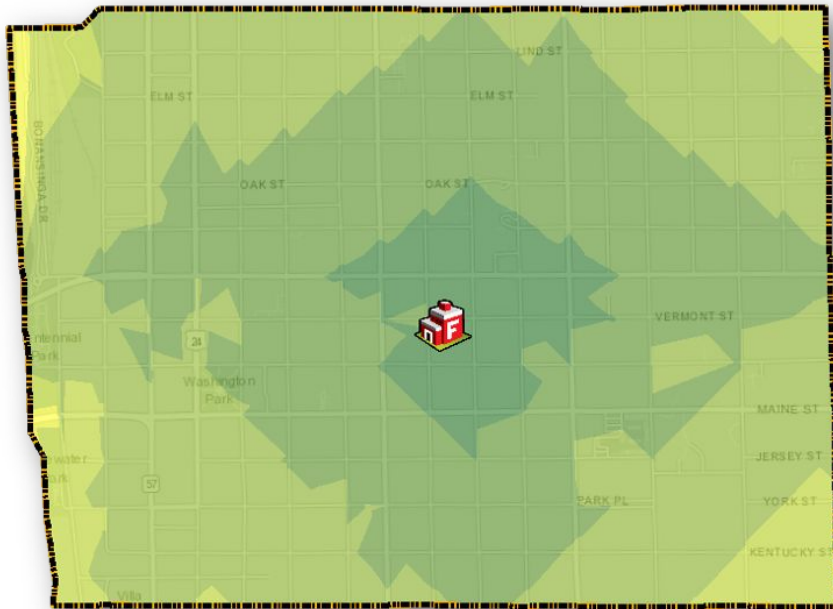


 **249.7**
ROAD MILES


4 MINUTE COVERAGE
 **204.6**
ROAD MILES










4 MINUTE COVERAGE
 **82%**
PERCENTAGE OF TRA














4 MINUTE COVERAGE
 **1.7**
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
 **99%**
 PERCENTAGE OF AOR

-  1 min
-  1 min - 2 min
-  2 min - 3 min
-  3 min - 4 min
-  4 min - 5 min
-  5 min - 6 min
-  6 min - 7 min
-  7 min - 8 min
-  > 8 min

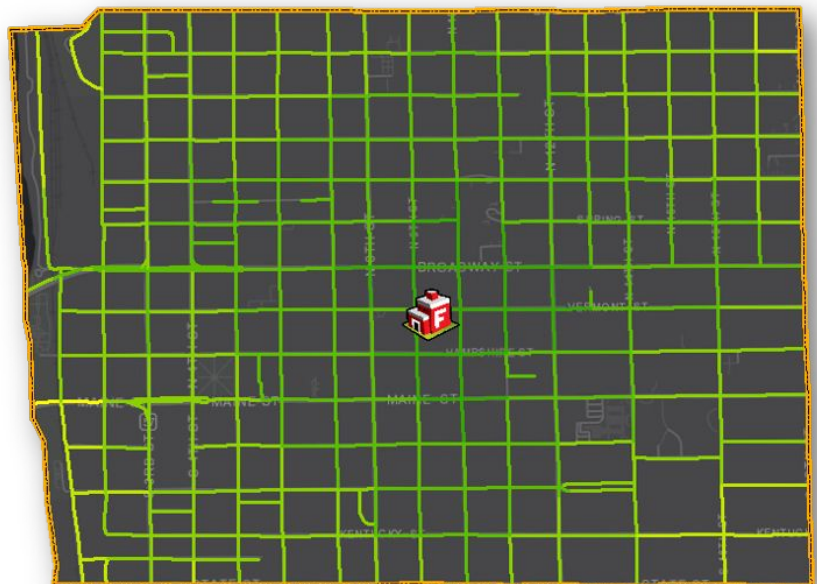


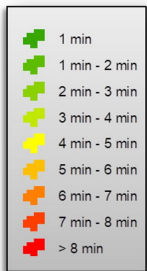
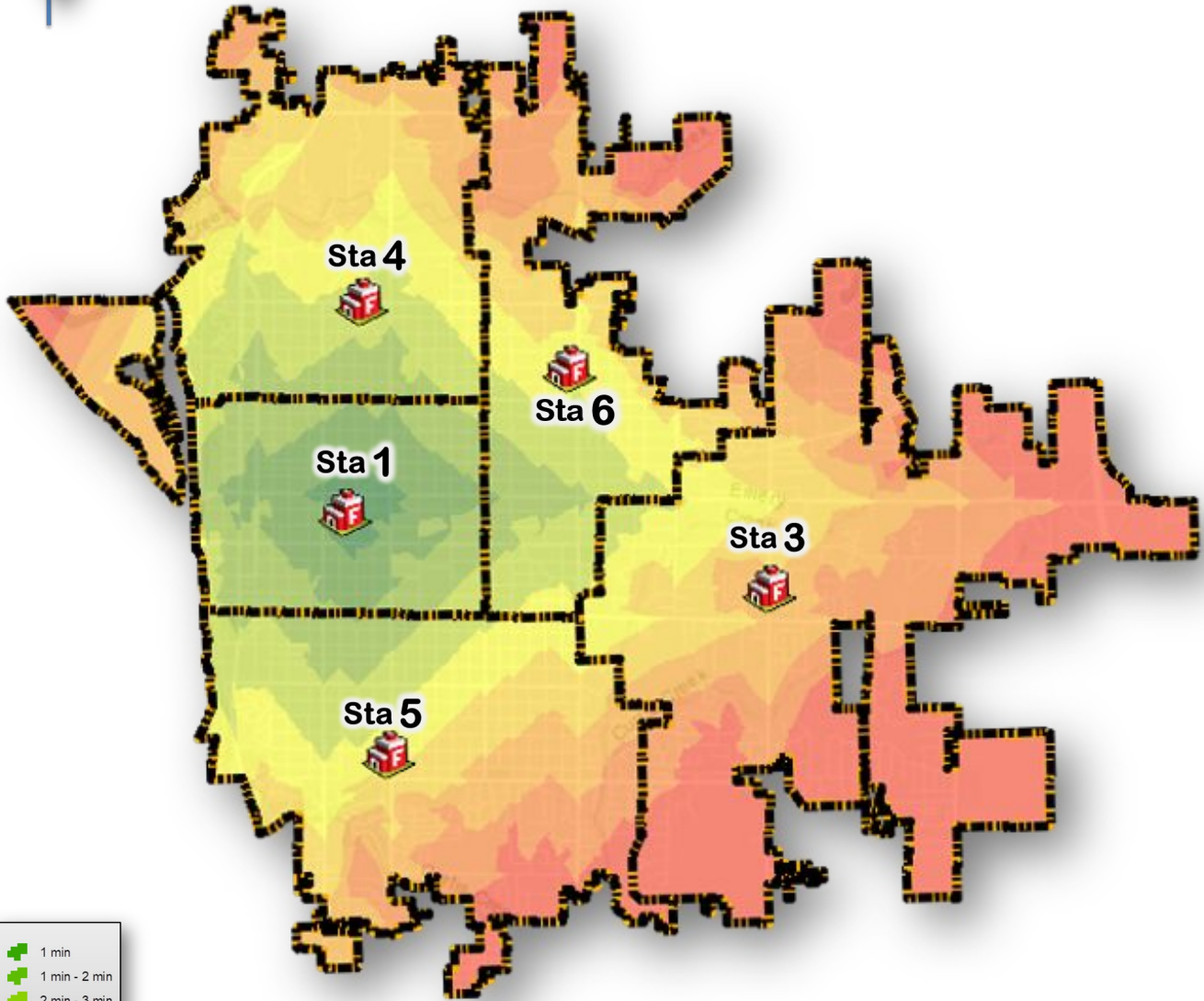
-  < 1 min
-  1 min - 2min
-  2 min - 3 min
-  3 min - 4 min
-  4 min - 5 min
-  5 min - 6 min
-  6 min - 7 min
-  7 min - 8 min
-  > 8 min

 **40.7**
 ROAD MILES


4 MINUTE COVERAGE
 **40.5**
 ROAD MILES

4 MINUTE COVERAGE
 **100%**
 PERCENTAGE OF AOR





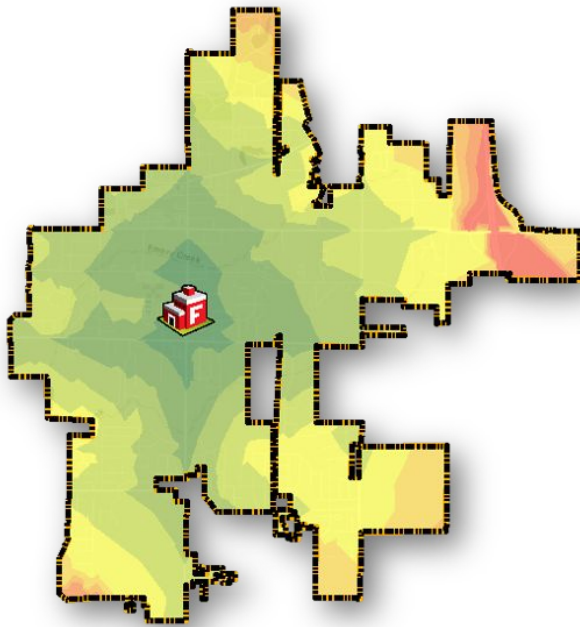
4 MINUTE COVERAGE
 **4.2**
AREA IN SQUARE MILES

4 MINUTE COVERAGE
 **26%**
PERCENTAGE OF TRA

8 MINUTE COVERAGE
 **13.0**
AREA IN SQUARE MILES


8 MINUTE COVERAGE
 **81%**
PERCENTAGE OF TRA

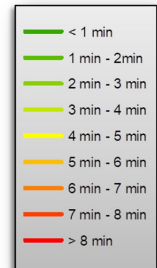
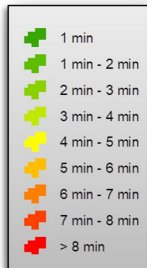




4 MINUTE COVERAGE

3.5
 AREA IN SQUARE MILES


4 MINUTE COVERAGE

66%
 PERCENTAGE OF AOR

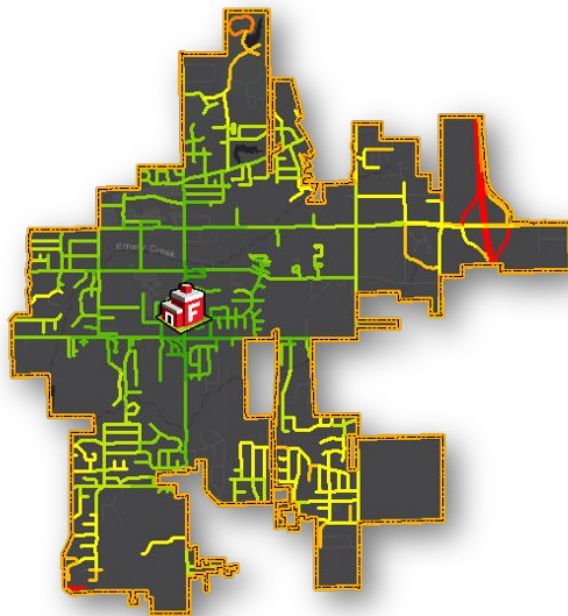


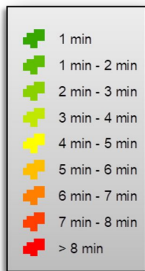
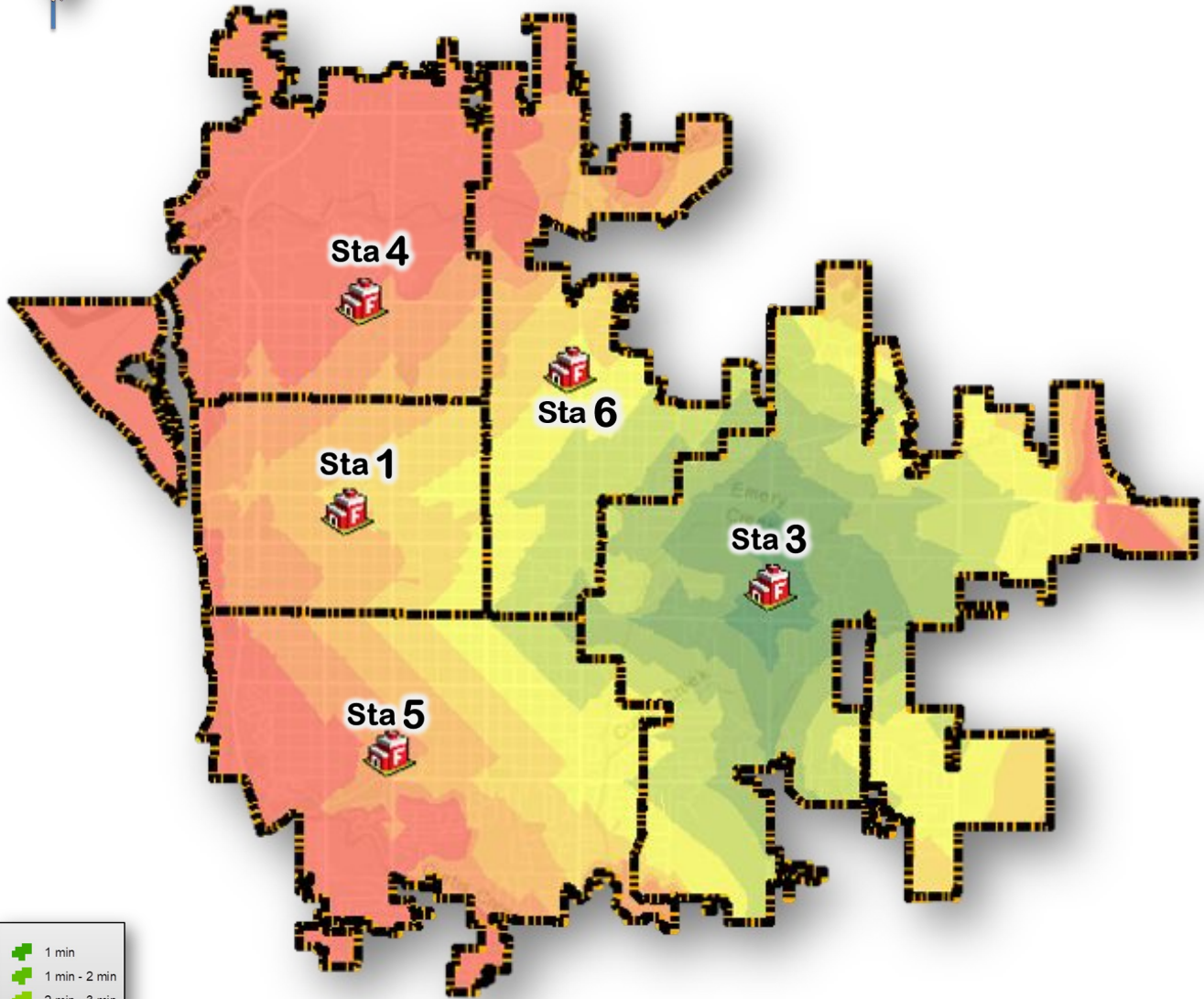

57.5
 ROAD MILES

4 MINUTE COVERAGE

38.5
 ROAD MILES

4 MINUTE COVERAGE

67%
 PERCENTAGE OF AOR





4 MINUTE COVERAGE

4.4
AREA IN SQUARE MILES

4 MINUTE COVERAGE

28%
PERCENTAGE OF TRA

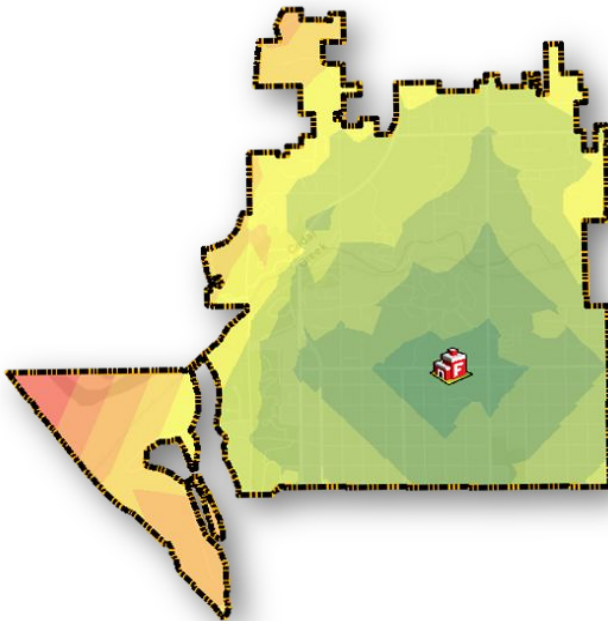
8 MINUTE COVERAGE

11.78
AREA IN SQUARE MILES


8 MINUTE COVERAGE

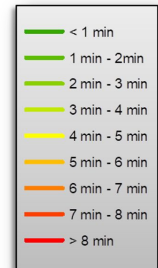
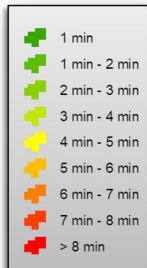
73%
PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **2.3**
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
 **73%**
 PERCENTAGE OF AOR

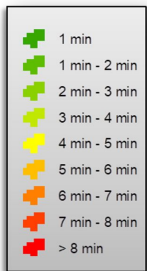
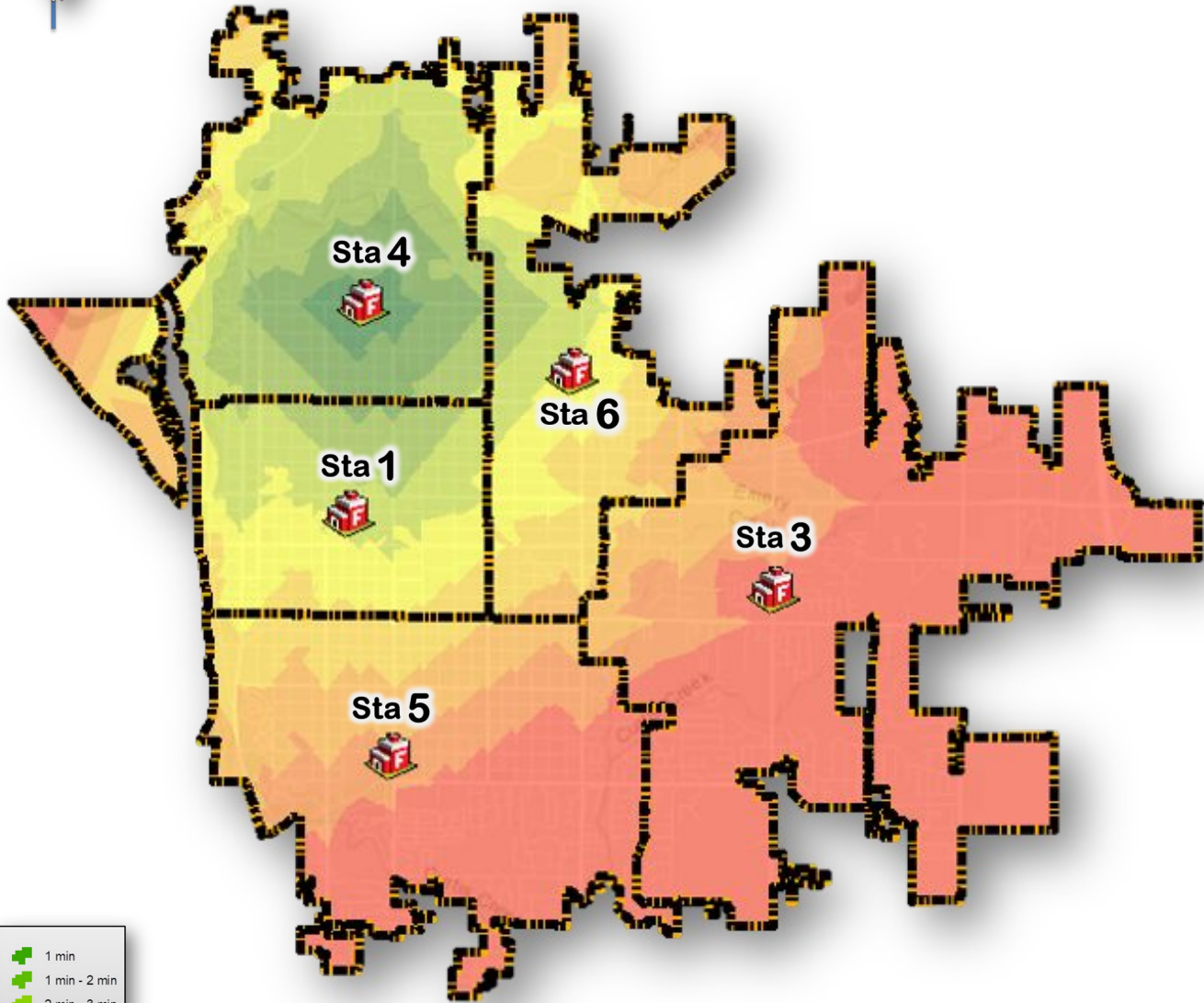



 **41.4**
 ROAD MILES

4 MINUTE COVERAGE
 **35.0**
 ROAD MILES

4 MINUTE COVERAGE
 **85%**
 PERCENTAGE OF AOR






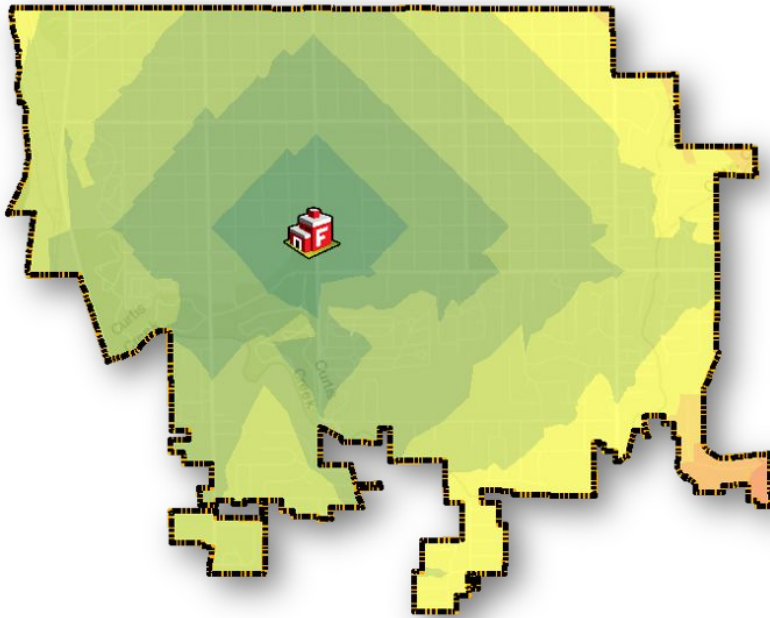
4 MINUTE COVERAGE
 **3.6**
AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **10.1**
AREA IN SQUARE MILES


4 MINUTE COVERAGE
 **22%**
PERCENTAGE OF TRA

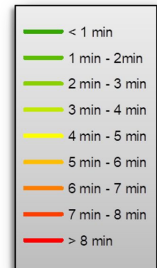
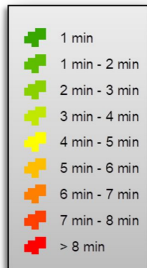
8 MINUTE COVERAGE
 **63%**
PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **2.9**
 AREA IN SQUARE MILES

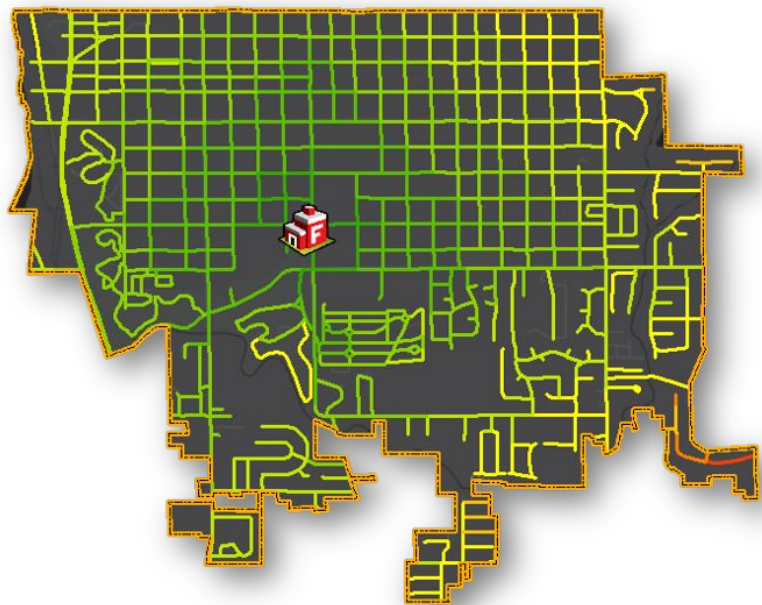
4 MINUTE COVERAGE
 **84%**
 PERCENTAGE OF AOR

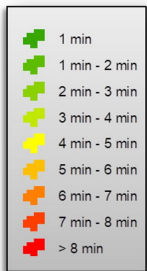
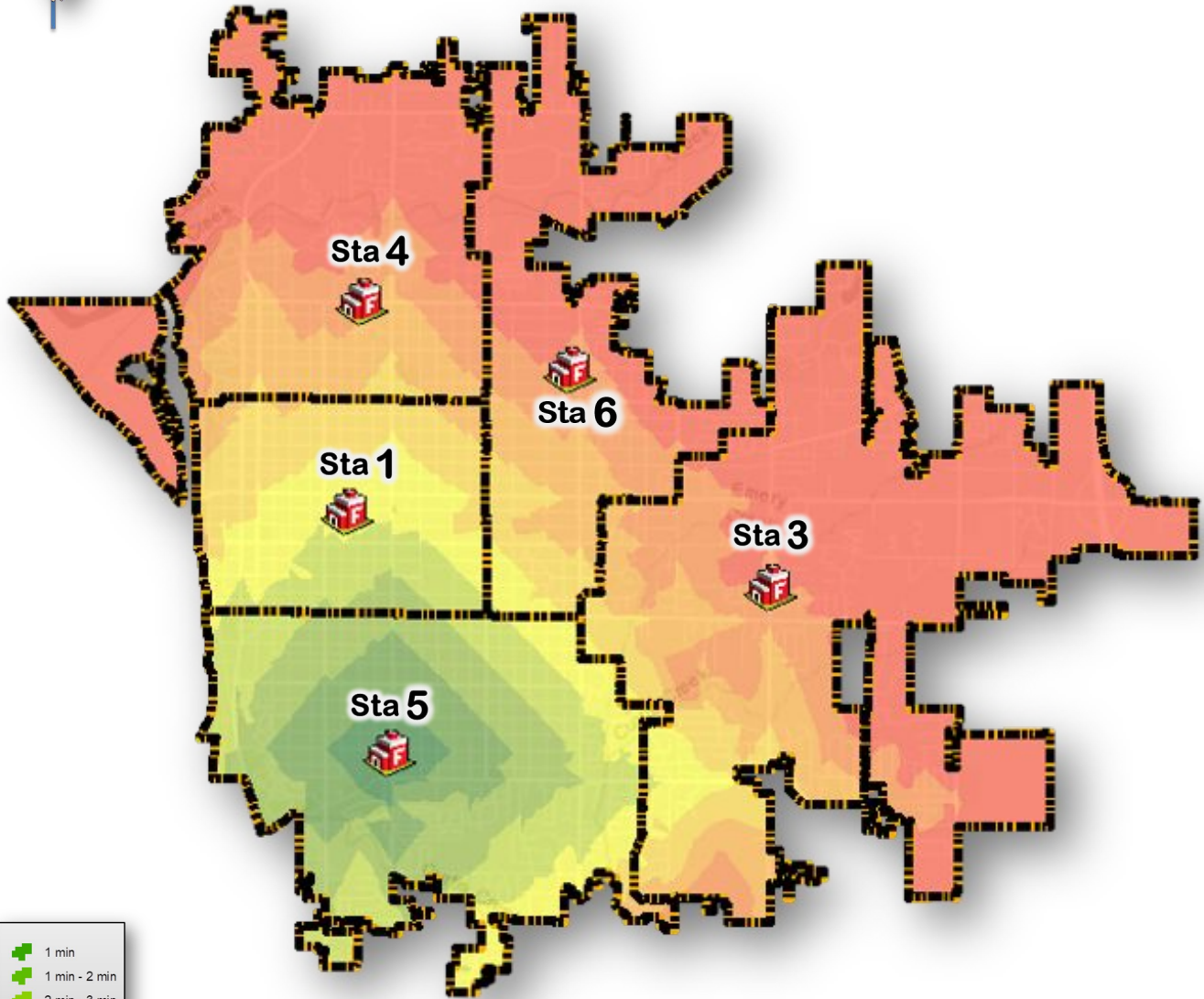



 **68.7**
 ROAD MILES


4 MINUTE COVERAGE
 **57.4**
 ROAD MILES

4 MINUTE COVERAGE
 **83%**
 PERCENTAGE OF AOR





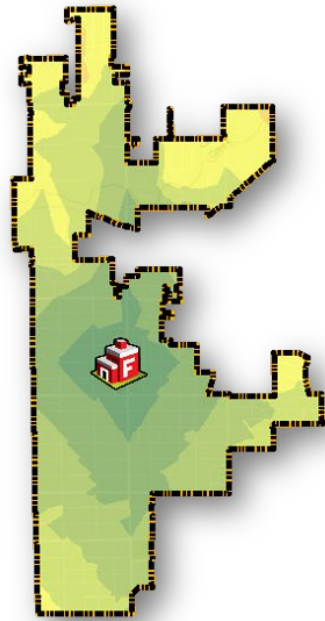
4 MINUTE COVERAGE
 **3.3**
AREA IN SQUARE MILES


4 MINUTE COVERAGE
 **21%**
PERCENTAGE OF TRA


8 MINUTE COVERAGE
 **9.7**
AREA IN SQUARE MILES

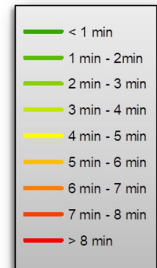
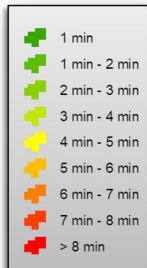
8 MINUTE COVERAGE
 **61%**
PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **2.0**
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
 **83%**
 PERCENTAGE OF AOR

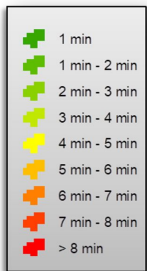
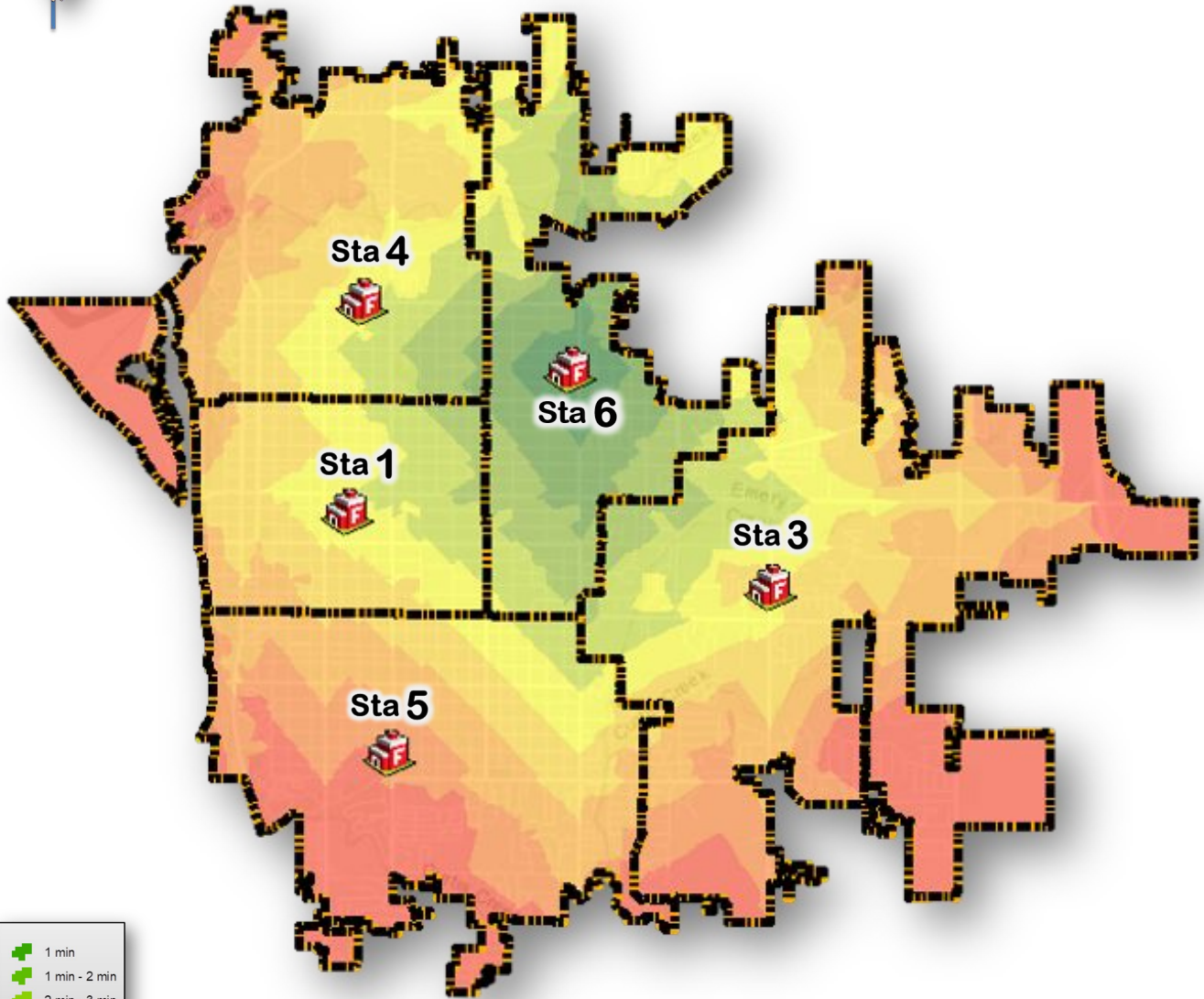


 **41.5**
 ROAD MILES

4 MINUTE COVERAGE
 **35.1**
 ROAD MILES

4 MINUTE COVERAGE
 **85%**
 PERCENTAGE OF AOR





4 MINUTE COVERAGE

3.7
AREA IN SQUARE MILES

4 MINUTE COVERAGE

23%
PERCENTAGE OF TRA

8 MINUTE COVERAGE

13.3
AREA IN SQUARE MILES

8 MINUTE COVERAGE

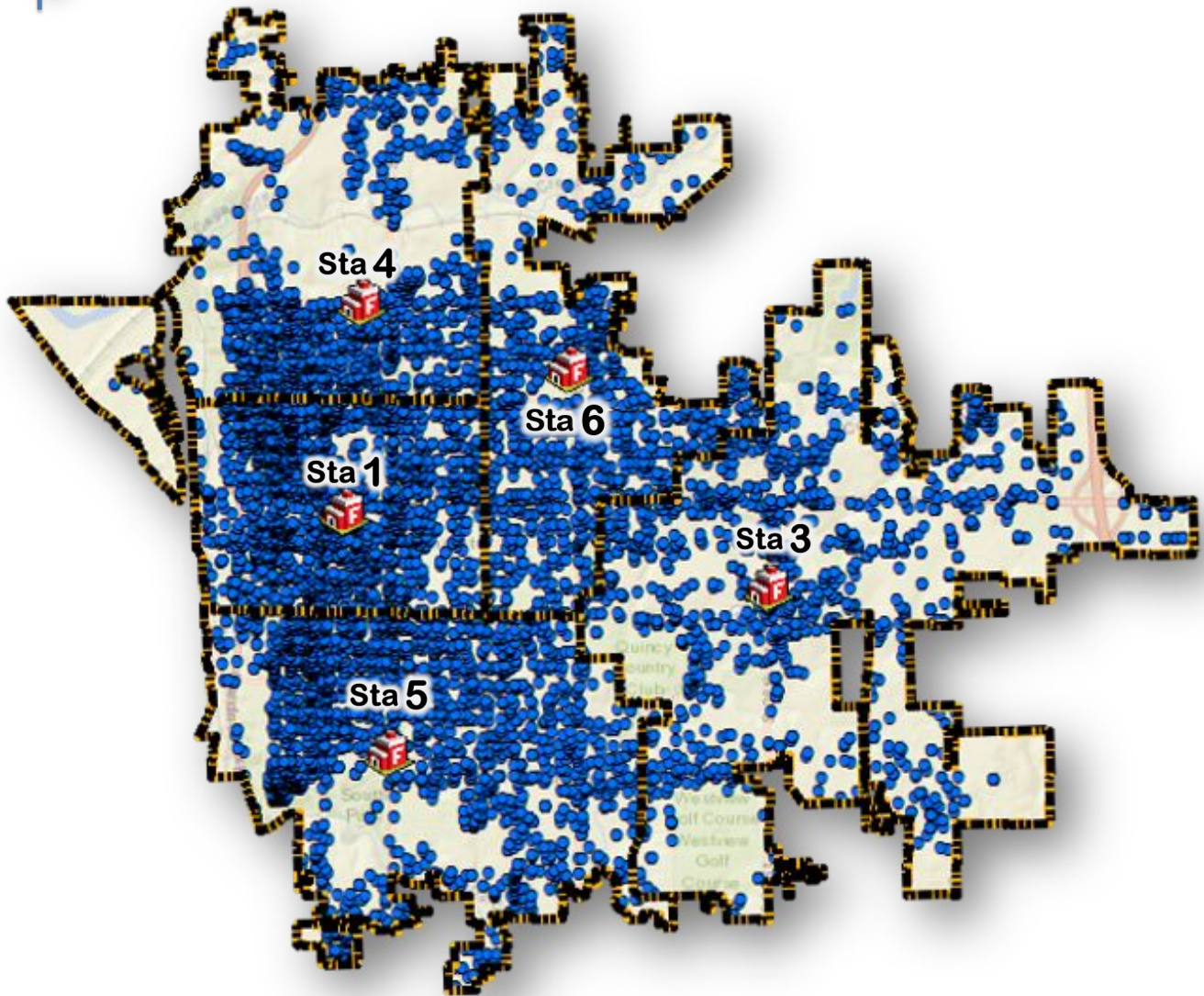
83%
PERCENTAGE OF TRA





- All Incidents
- Incidents by Year
- NFIRS Group 100
- NFIRS Group 200
- NFIRS Group 300
- NFIRS Group 400
- NFIRS Group 500
- NFIRS Group 600
- NFIRS Group 700
- NFIRS Group 800
- NFIRS Group 900





QUINCY FIRE DEPT

SOURCE OF INCIDENT DATA



JAN 2015 - DEC 2018

INCIDENT TIME PERIOD

16,456

TOTAL INCIDENTS



16,249

TRA INCIDENTS











All Incident

	2015	2016	2017	2,018
In TRA	4,115	4,226	4,331	3,577
Outside TRA	45	52	67	43

Incident by Class In District

	2015	2016	2017	2,018
 Fire	208	163	172	168
 EMS	2,413	2,533	2,680	2,302
 Other	1,494	1,530	1,479	1,107

Incident by Class Outside District

	2015	2016	2017	2,018
 Fire	9	10	14	13
 EMS	12	14	6	7
 Other	24	28	47	23

Incident Classes:

Fire: All NFIRS group 100

EMS: All NFIRS group 300

Other: All NFIRS groups excluding groups 100 and 300





Fire

Brush or brush-and-grass mixture fire	74
Building fire	173
Camper or recreational vehicle (RV) fire	3
Chimney or flue fire, confined to chimney or flue	1
Construction or demolition landfill fire	4
Cooking fire, confined to container	55
Cultivated vegetation, crop fire, other	3
Dumpster or other outside trash receptacle fire	31
Fire in mobile home used as fixed residence	7
Fire in motorhome, camper, recreational vehicle	1
Fires in structure other than in a building	10
Forest, woods or wildland fire	9
Fuel burner/boiler malfunction, fire confined	2
Grass fire	19
Natural vegetation fire, other	40
Off-road vehicle or heavy equipment fire	3
Outside equipment fire	12
Outside gas or vapor combustion explosion	1
Outside rubbish fire, other	1
Outside rubbish, trash or waste fire	149
Outside storage fire	2
Passenger vehicle fire	77
Road freight or transport vehicle fire	5
Special outside fire, other	9
Trash or rubbish fire, contained	20

711





Overpressure Rupture Explosion Overheat No Fire

Excessive heat, scorch burns with no ignition	31
Fireworks explosion (no fire)	1
Overpressure rupture of steam boiler	1
Overpressure rupture of steam pipe or pipeline	2
Overpressure rupture, explosion, overheat other	1

36





Rescue EMS

EMS call, excluding vehicle accident with injury	94
Extrication of victim(s) from building/structure	4
Extrication of victim(s) from machinery	4
Extrication of victim(s) from vehicle	20
Extrication, rescue, other	7
High-angle rescue	2
Ice rescue	1
Lock-in (if lock out , use 511)	19
Medical assist, assist EMS crew	9,111
Motor vehicle accident with injuries	410
Motor vehicle accident with no injuries.	181
Motor vehicle/pedestrian accident (MV Ped)	57
Removal of victim(s) from stalled elevator	12
Rescue, EMS incident, other	1
Search for person in water	1
Swimming/recreational water areas rescue	1
Water & ice-related rescue, other	1
Watercraft rescue	2

9,928





Hazardous Condition No Fire

Accident, potential accident, other	1
Arcing, shorted electrical equipment	133
Attempt to burn	4
Attempted burning, illegal action, other	2
Biological hazard, confirmed or suspected	3
Breakdown of light ballast	16
Building or structure weakened or collapsed	8
Carbon monoxide incident	78
Chemical hazard (no spill or leak)	2
Chemical spill or leak	5
Electrical wiring/equipment problem, other	183
Gas leak (natural gas or LPG)	168
Gasoline or other flammable liquid spill	25
Hazardous condition, other	2
Heat from short circuit (wiring), defective/worn	23
Oil or other combustible liquid spill	7
Overheated motor	33
Power line down	174
Radiation leak, radioactive material	1
Refrigeration leak	3
Toxic condition, other	1
Vehicle accident, general cleanup	33

905





Service Call

Animal rescue	2
Assist invalid	1,128
Assist police or other governmental agency	35
Defective elevator, no occupants	7
Lock-out	15
Person in distress, other	3
Police matter	2
Public service	45
Public service assistance, other	2
Service Call, other	1
Smoke or odor removal	39
Unauthorized burning	166
Water evacuation	1
Water or steam leak	15
Water problem, other	6
	1,467





Canceled Good Intent

Authorized controlled burning	166
Dispatched & canceled en route	364
EMS call, party transported by non-fire agency	13
Good intent call, other	21
HazMat release investigation w/no HazMat	234
No incident found on arrival at dispatch address	135
Smoke from barbecue, tar kettle	13
Smoke scare, odor of smoke	210
Steam, vapor, fog or dust thought to be smoke	36
Vicinity alarm (incident in other location)	1
Wrong location	6
	1,199





False Alarm False Call

Alarm system activation, no fire - unintentional	325
Alarm system sounded due to malfunction	191
Bomb scare - no bomb	2
Carbon monoxide detector activation, no CO	25
Central station, malicious false alarm	85
CO detector activation due to malfunction	142
Detector activation, no fire - unintentional	59
Extinguishing system activation	1
False alarm or false call, other	8
Heat detector activation due to malfunction	10
Local alarm system, malicious false alarm	14
Malicious, mischievous false call, other	10
Municipal alarm system, malicious false alarm	2
Smoke detector activation due to malfunction	334
Smoke detector activation, no fire - unintentional	650
Sprinkler activation due to malfunction	40
Sprinkler activation, no fire - unintentional	42
System malfunction, other	3
Telephone, malicious false alarm	5
Unintentional transmission of alarm, other	9

1,957





Severe Weather and Natural Disaster

Lightning strike (no fire)	1
Wind storm, tornado/hurricane assessment	1
<hr/>	
	2





Special Incident Type

Citizen complaint	13
Special type of incident, other	31
	<hr/>
	44





TRA

AoR 1

AoR 3

AoR 4

AoR 5

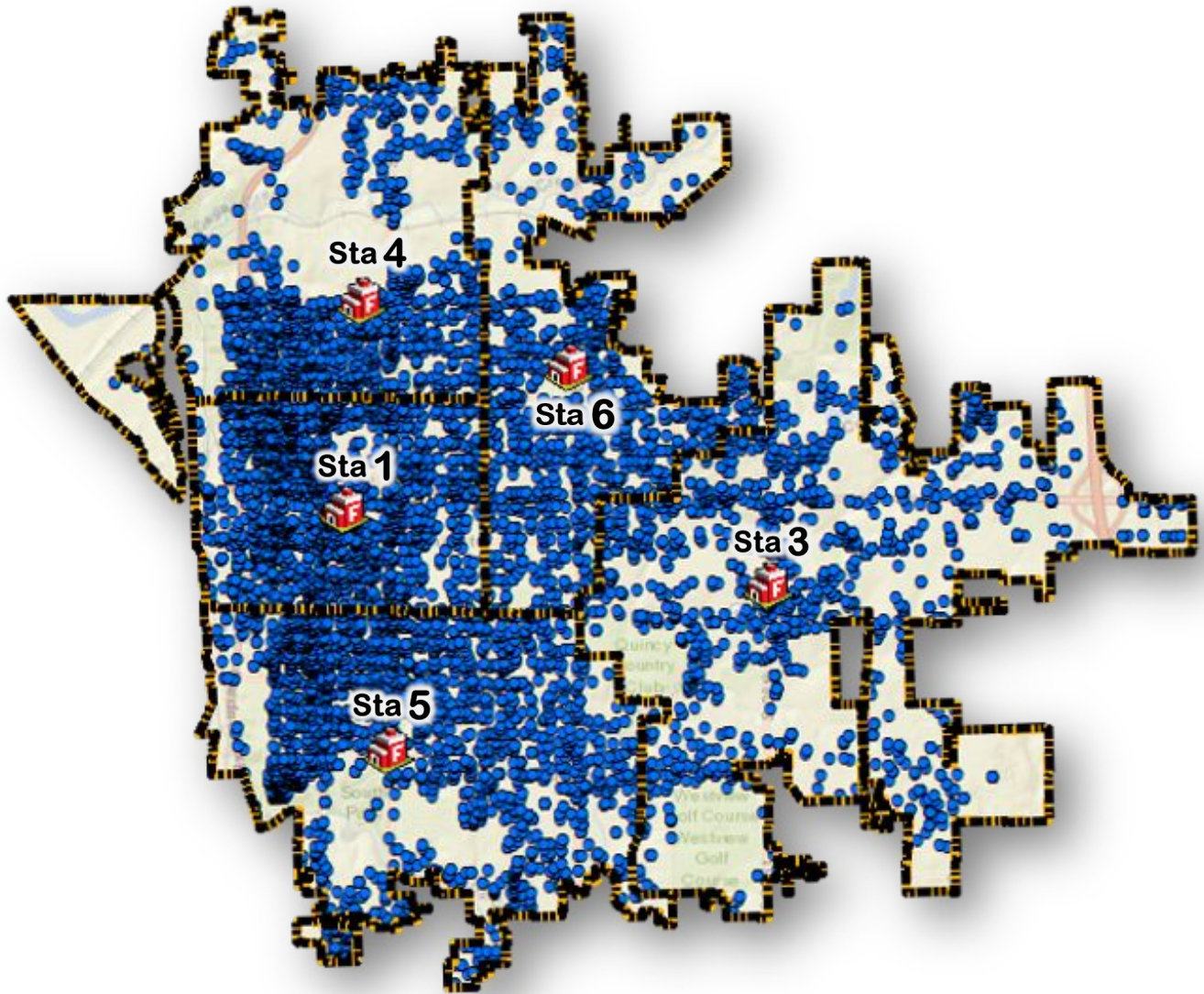
AoR 6





16,249

AOR INCIDENTS



NFIRS Groups: Counts and Percentages

100	200	300	400	500	600	700	800	900
711	36	9,928	905	1,467	1,199	1,957	2	44
4.4%	0.2%	61.1%	5.6%	9.0%	7.4%	12.0%	0.0%	0.3%





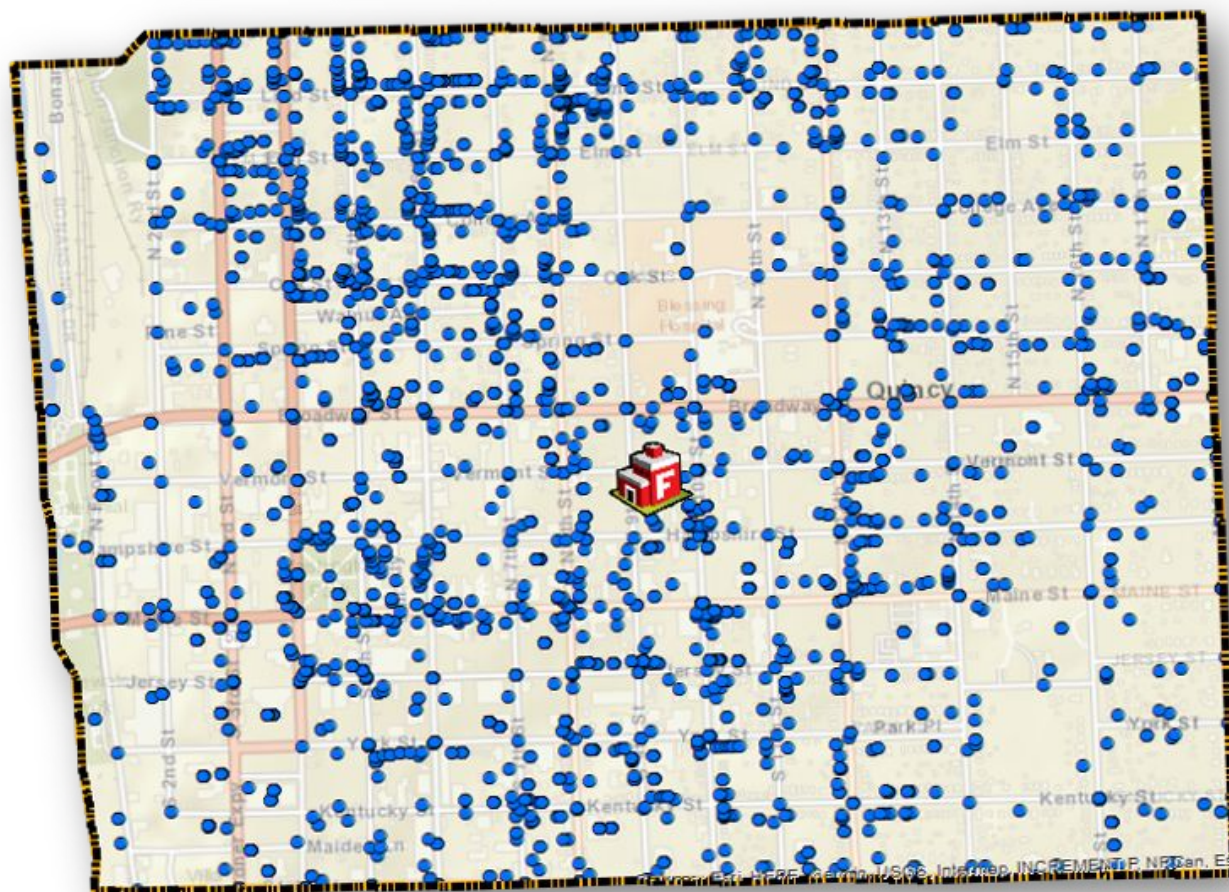
5,221

AOR INCIDENTS



32%

PERCENT OF TRA



NFIRS Groups: Counts and Percentages

100	200	300	400	500	600	700	800	900
211	11	3,346	244	441	420	529	1	18
4.0%	0.2%	64.1%	4.7%	8.4%	8.0%	10.1%	0.0%	0.3%





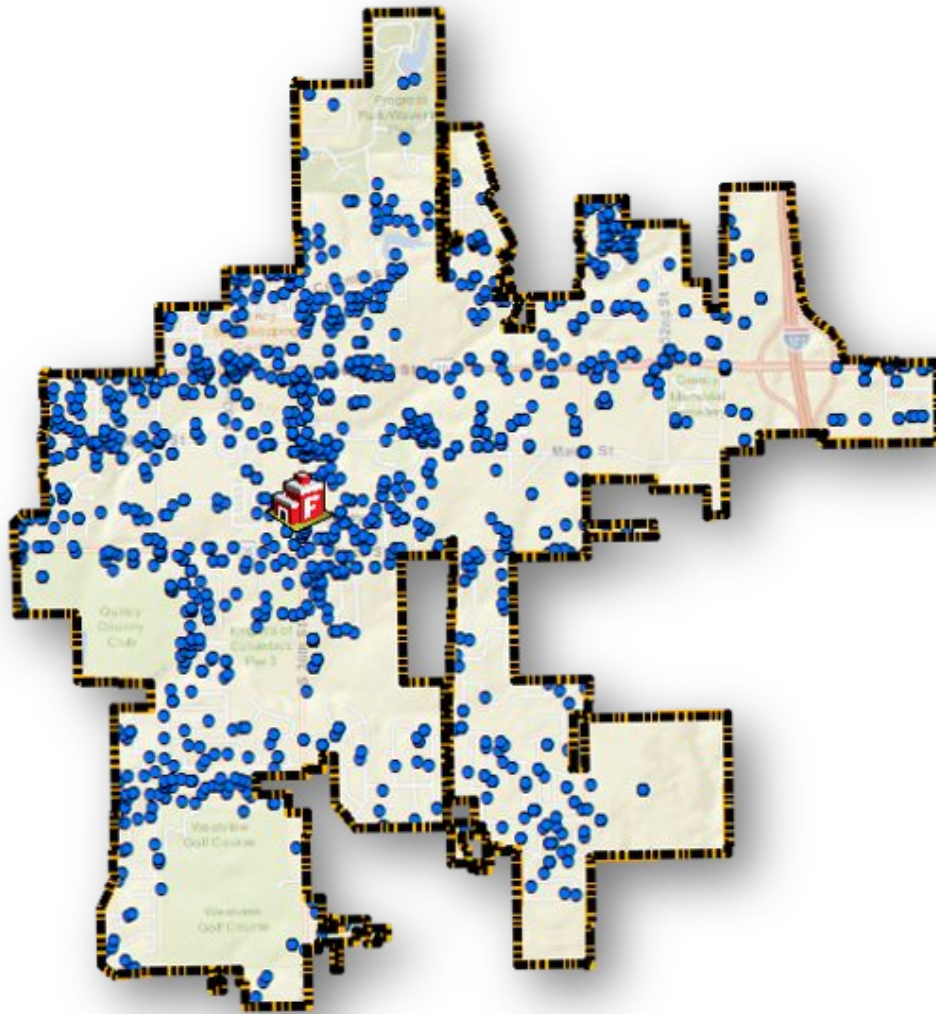
3,296

AOR INCIDENTS



20%

PERCENT OF TRA



NFIRS Groups: Counts and Percentages


100	200	300	400	500	600	700	800
106	6	1,993	135	339	195	519	1
3.2%	0.2%	60.5%	4.1%	10.3%	5.9%	15.7%	0.0%

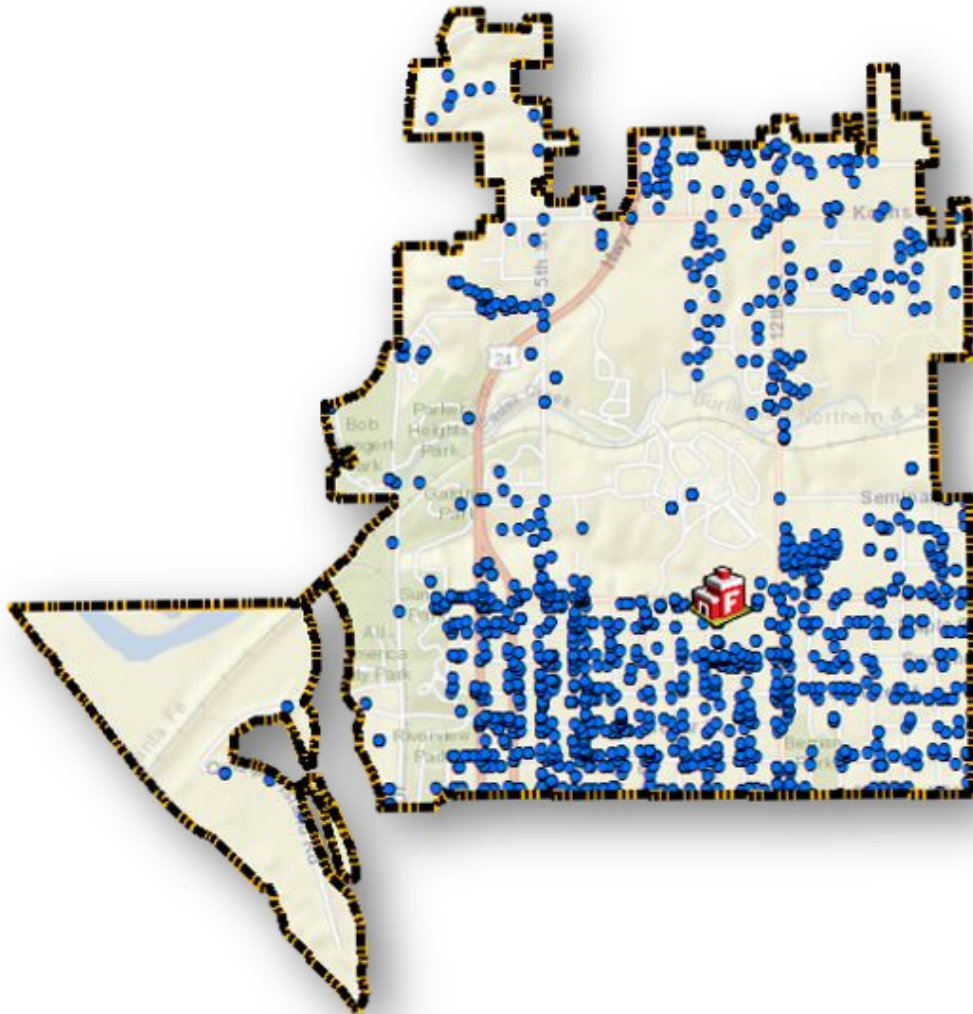




 **2,511**
AOR INCIDENTS



 **16%**
PERCENT OF TRA



NFIRS Groups: Counts and Percentages

100	200	300	400	500	600	700	900
126	5	1,467	131	266	200	315	1
5.0%	0.2%	58.4%	5.2%	10.6%	8.0%	12.5%	0.0%





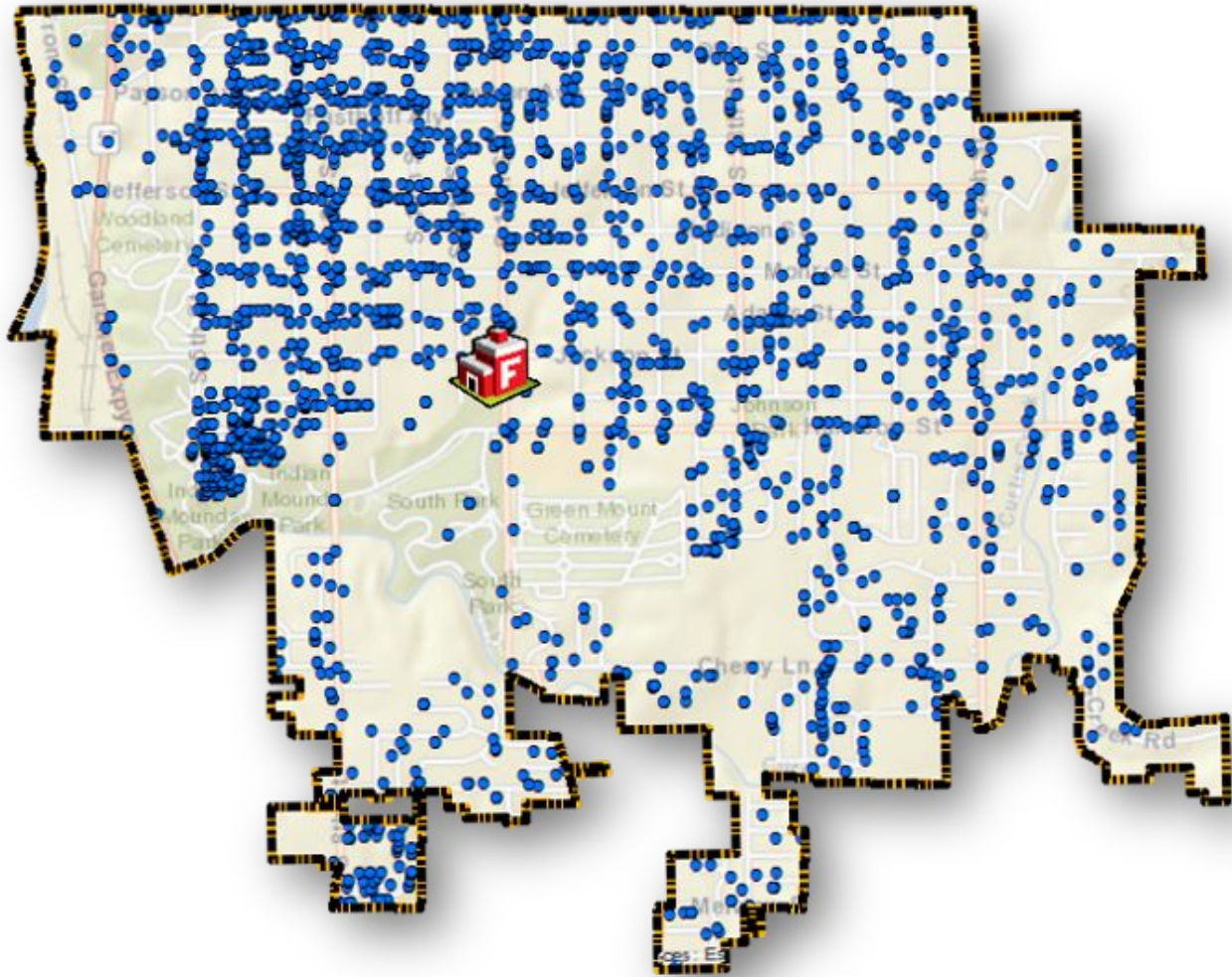
3,525

AOR INCIDENTS



22%

PERCENT OF TRA



NFIRS Groups: Counts and Percentages

100	200	300	400	500	600	700	900
169	13	2,163	263	306	250	344	17
4.8%	0.4%	61.4%	7.5%	8.7%	7.1%	9.8%	0.5%





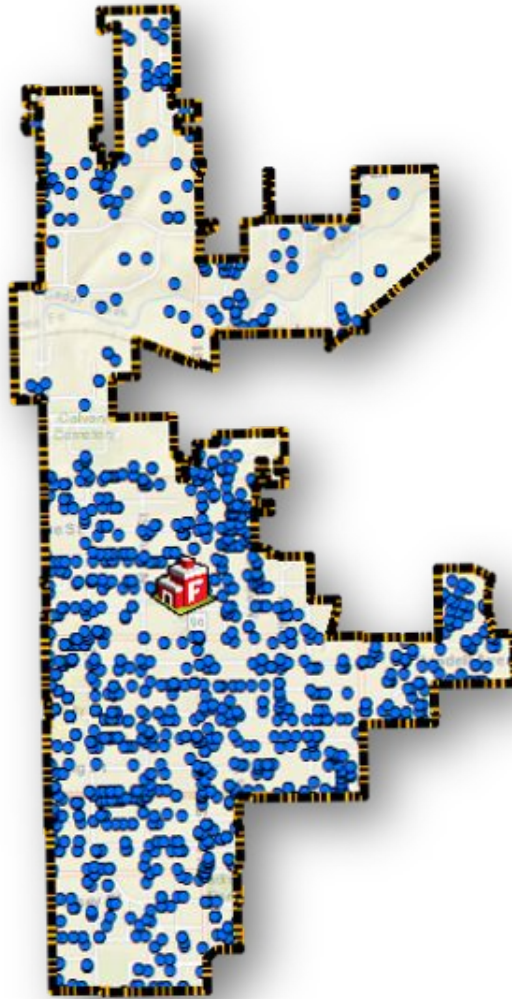
1,696

AOR INCIDENTS



10%

PERCENT OF TRA



NFIRS Groups: Counts and Percentages

100	200	300	400	500	600	700	900
99	1	959	132	115	134	250	6
5.8%	0.1%	56.5%	7.8%	6.8%	7.9%	14.7%	0.4%





All Incidents

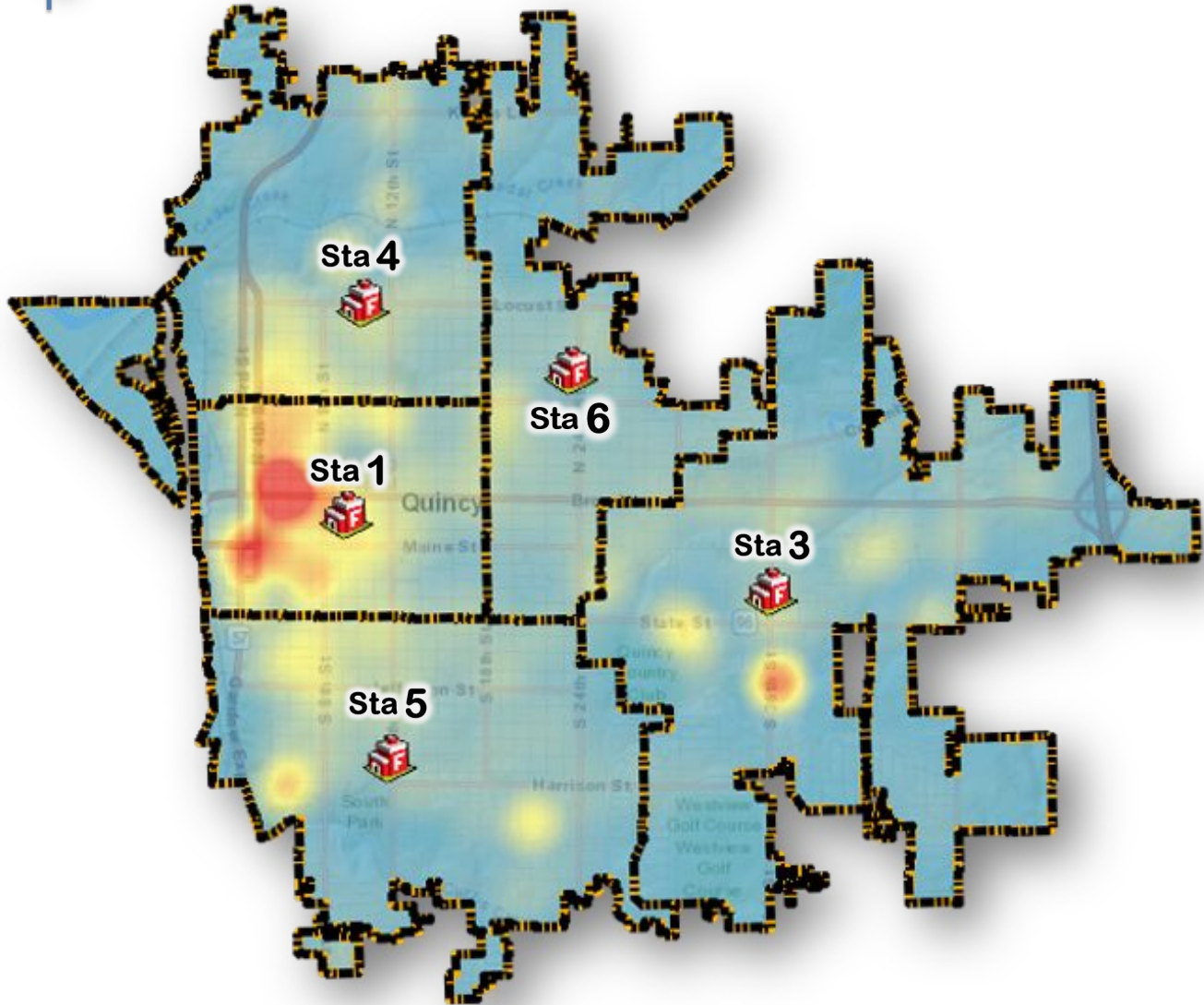
- NFIRS Group 100
- NFIRS Group 200
- NFIRS Group 300
- NFIRS Group 400
- NFIRS Group 500
- NFIRS Group 600
- NFIRS Group 700
- NFIRS Group 800
- NFIRS Group 900





16,249

AOR INCIDENTS



Percentage of TRA Incidents



32%

STATION 1



20%

STATION 3



16%

STATION 4



22%

STATION 5



10%

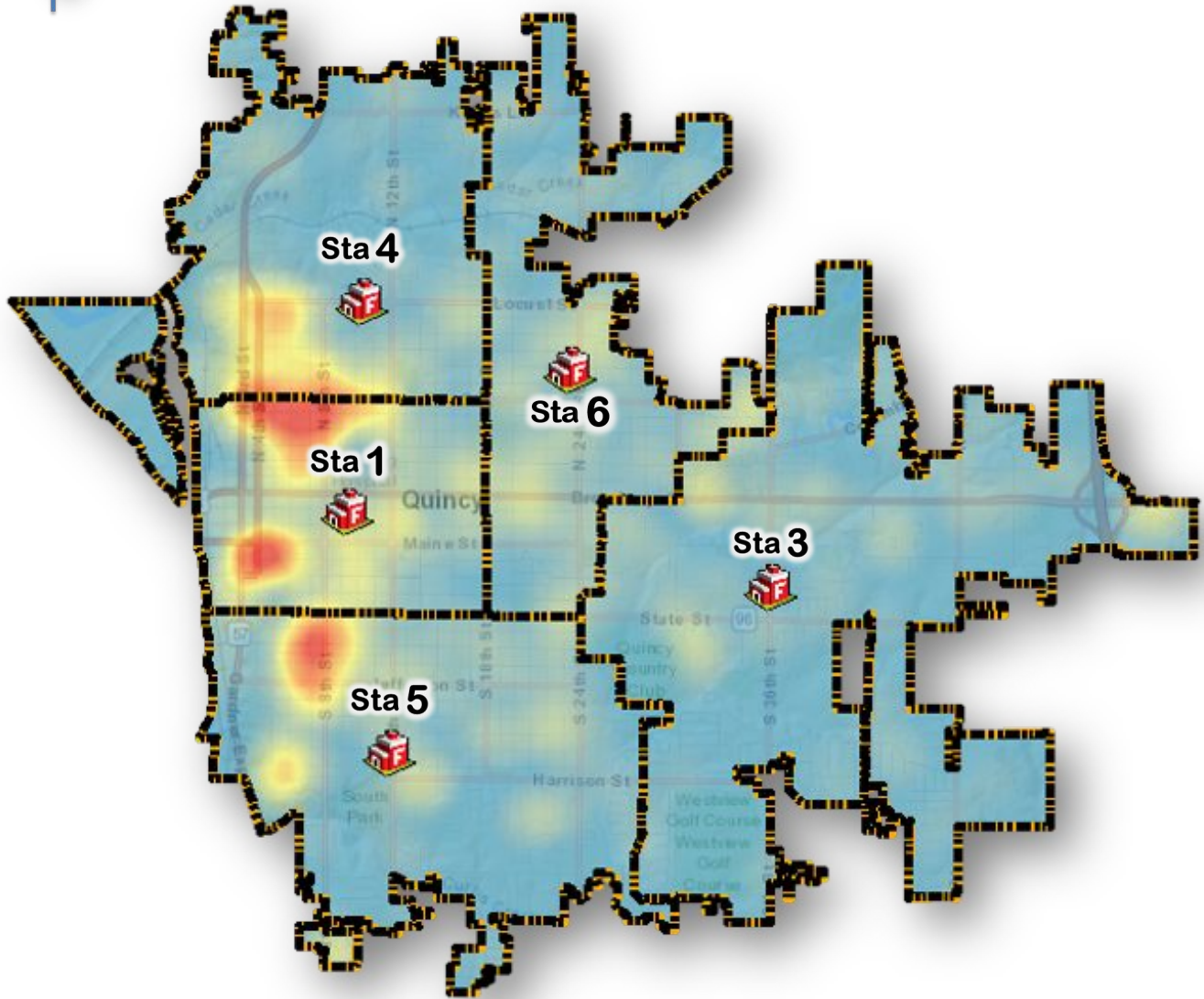
STATION 6





711

AOR INCIDENTS



NFIRS 100: Fire

Percentage of TRA Incidents



29%

STATION 1



15%

STATION 3



18%

STATION 4



24%

STATION 5



14%

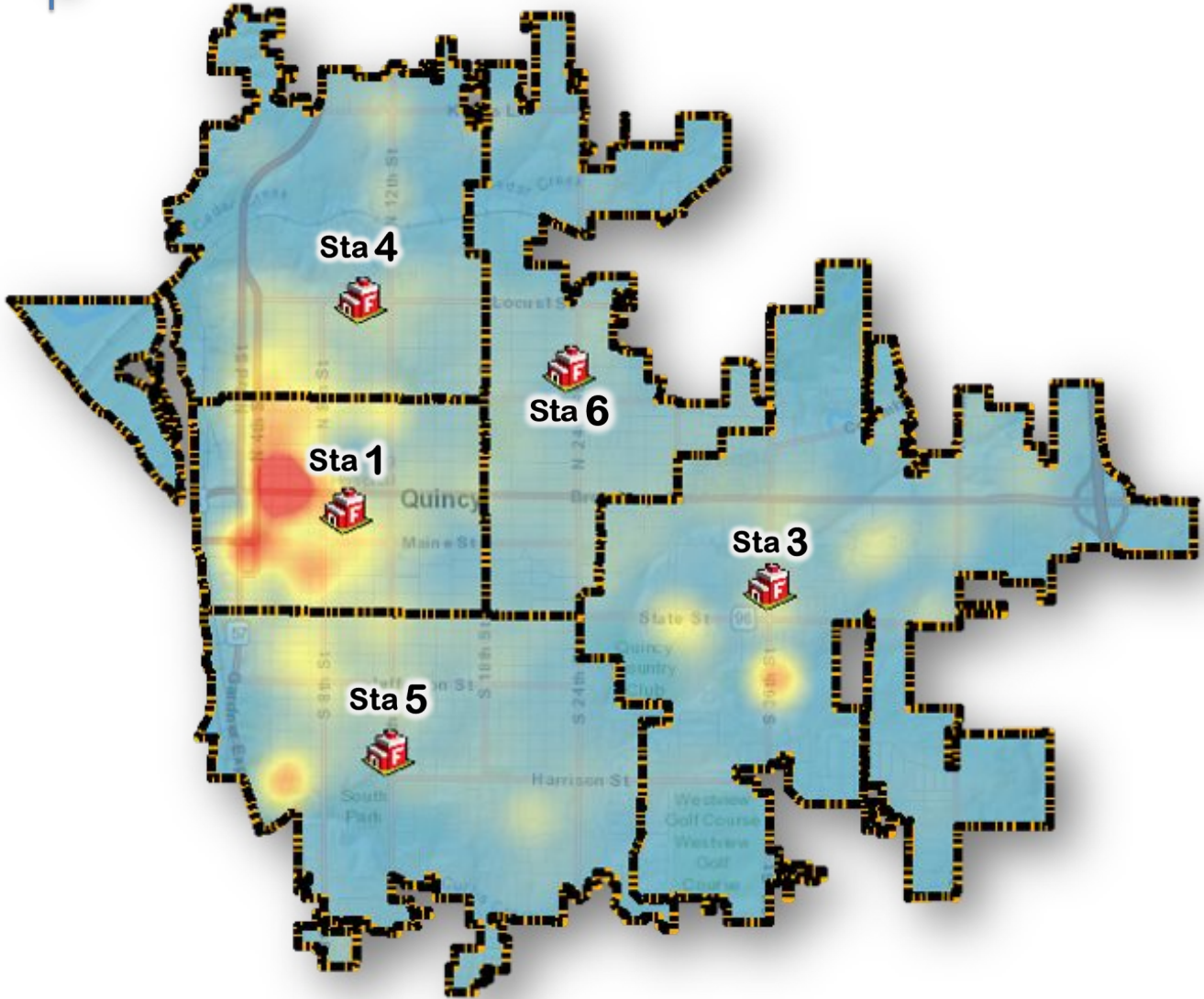
STATION 6





9,928

AOR INCIDENTS



NFIRS 300: Rescue EMS

Percentage of TRA Incidents



34%

STATION 1



20%

STATION 3



15%

STATION 4



21%

STATION 5



10%

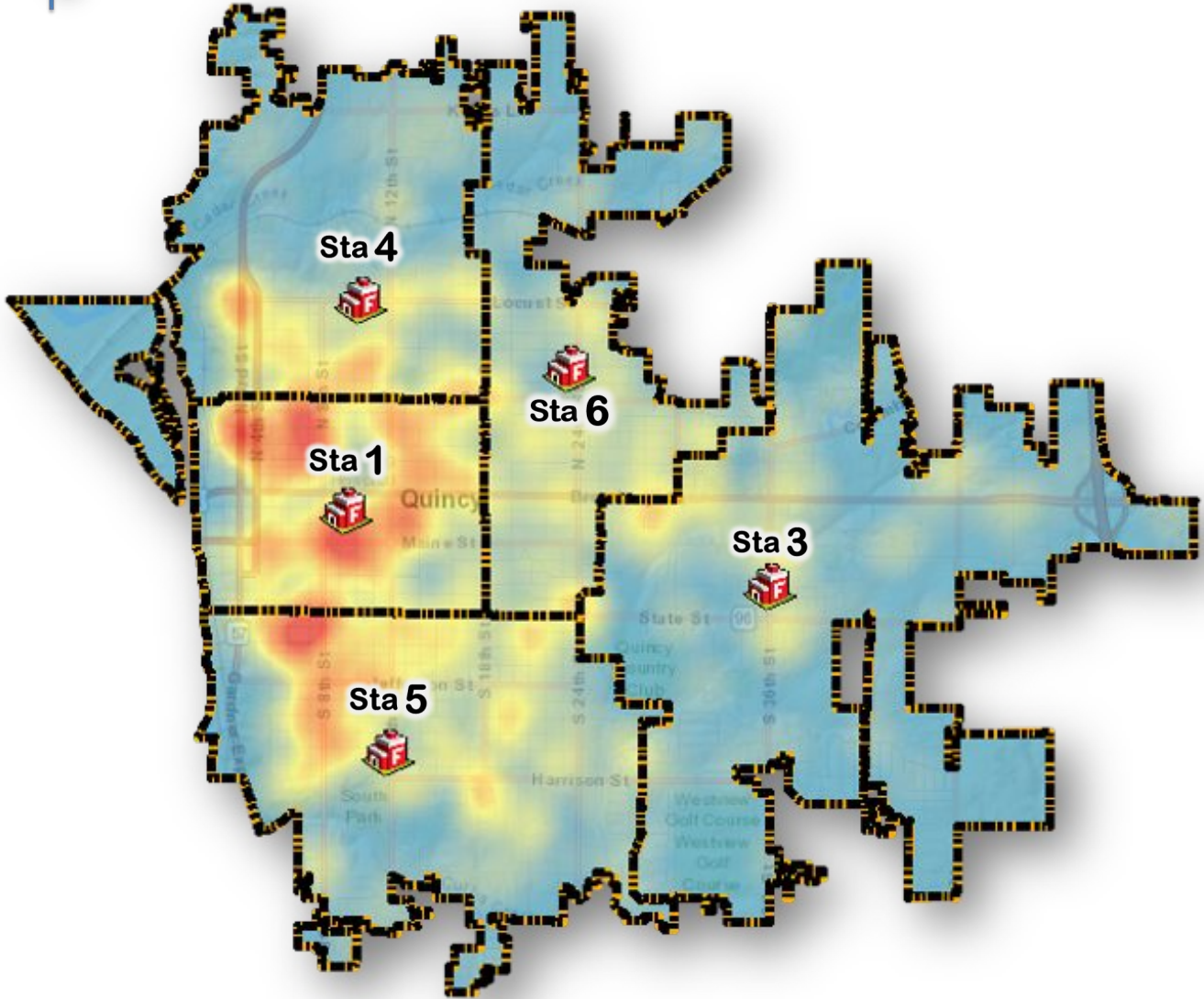
STATION 6





905

AOR INCIDENTS



NFIRS 400: Hazardous Condition No Fire

Percentage of TRA Incidents



27%

STATION 1



15%

STATION 3



14%

STATION 4



29%

STATION 5



15

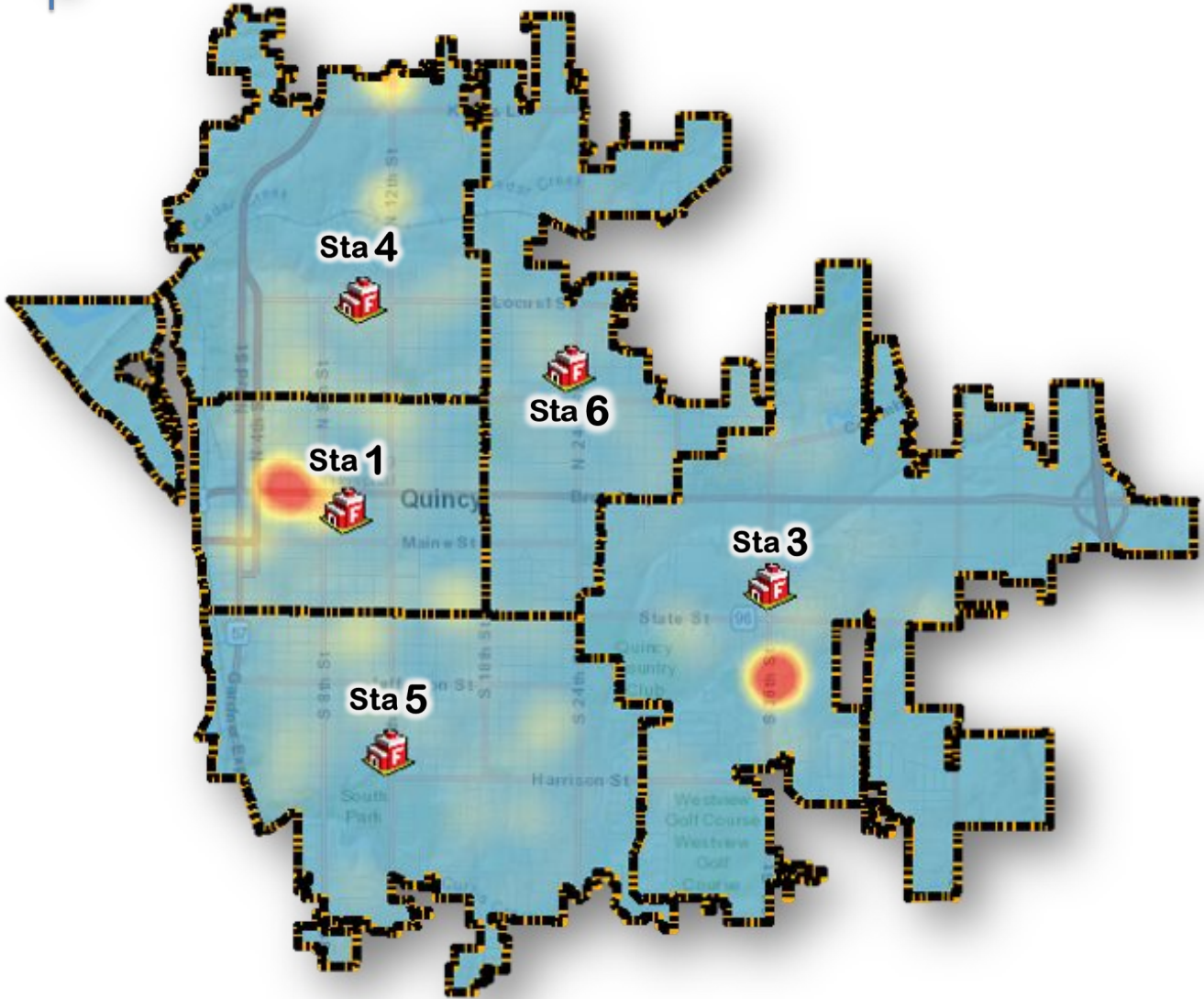
STATION 6





500

AOR INCIDENTS



NFIRS 500: Service Call

Percentage of TRA Incidents



31%

STATION 1



23%

STATION 3



21%

STATION 4



18%

STATION 5



7%

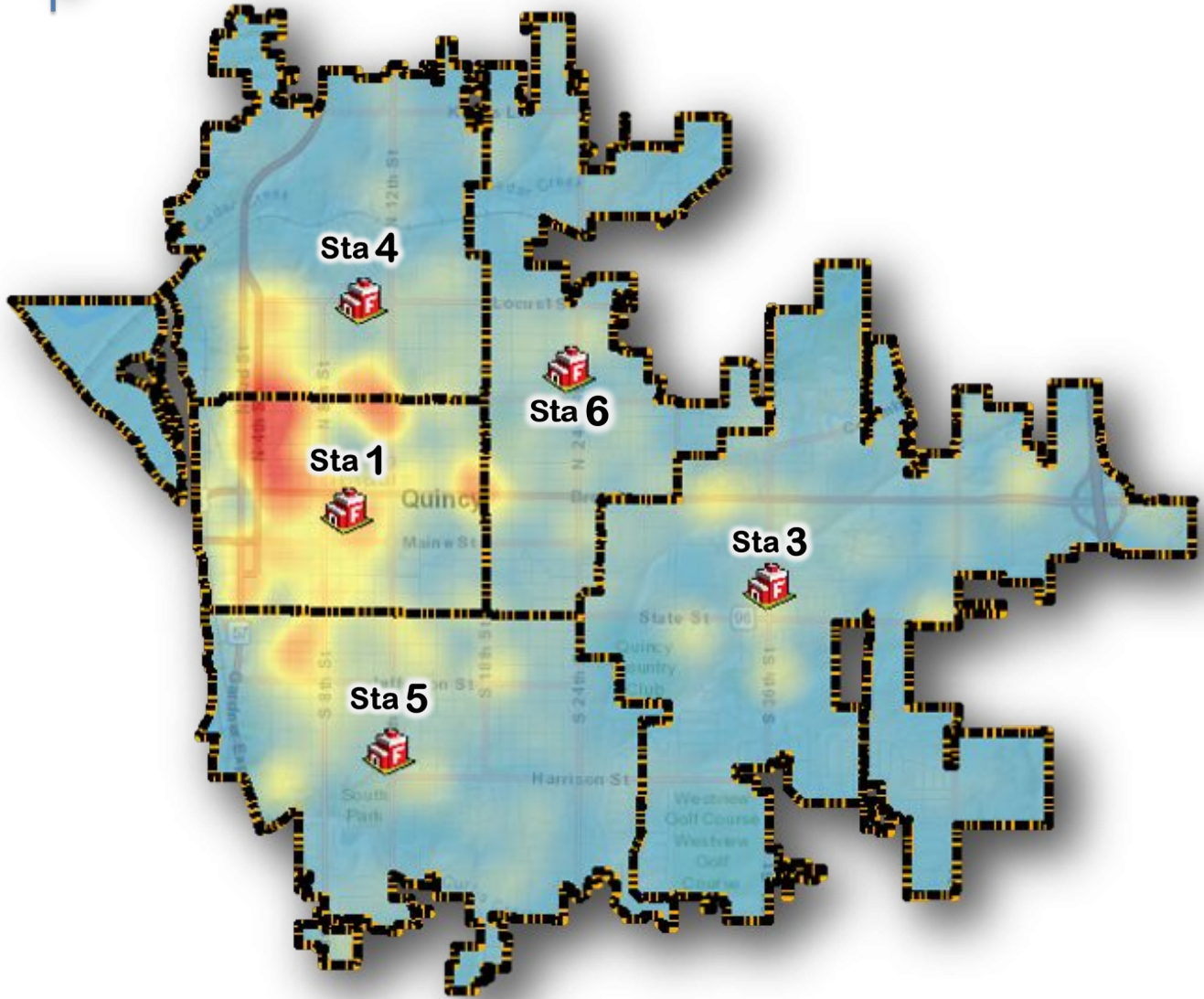
STATION 6





1,199

AOR INCIDENTS



NFIRS 600: Canceled Good Intent

Percentage of TRA Incidents



35%

STATION 1



16%

STATION 3



17%

STATION 4



21%

STATION 5



11%

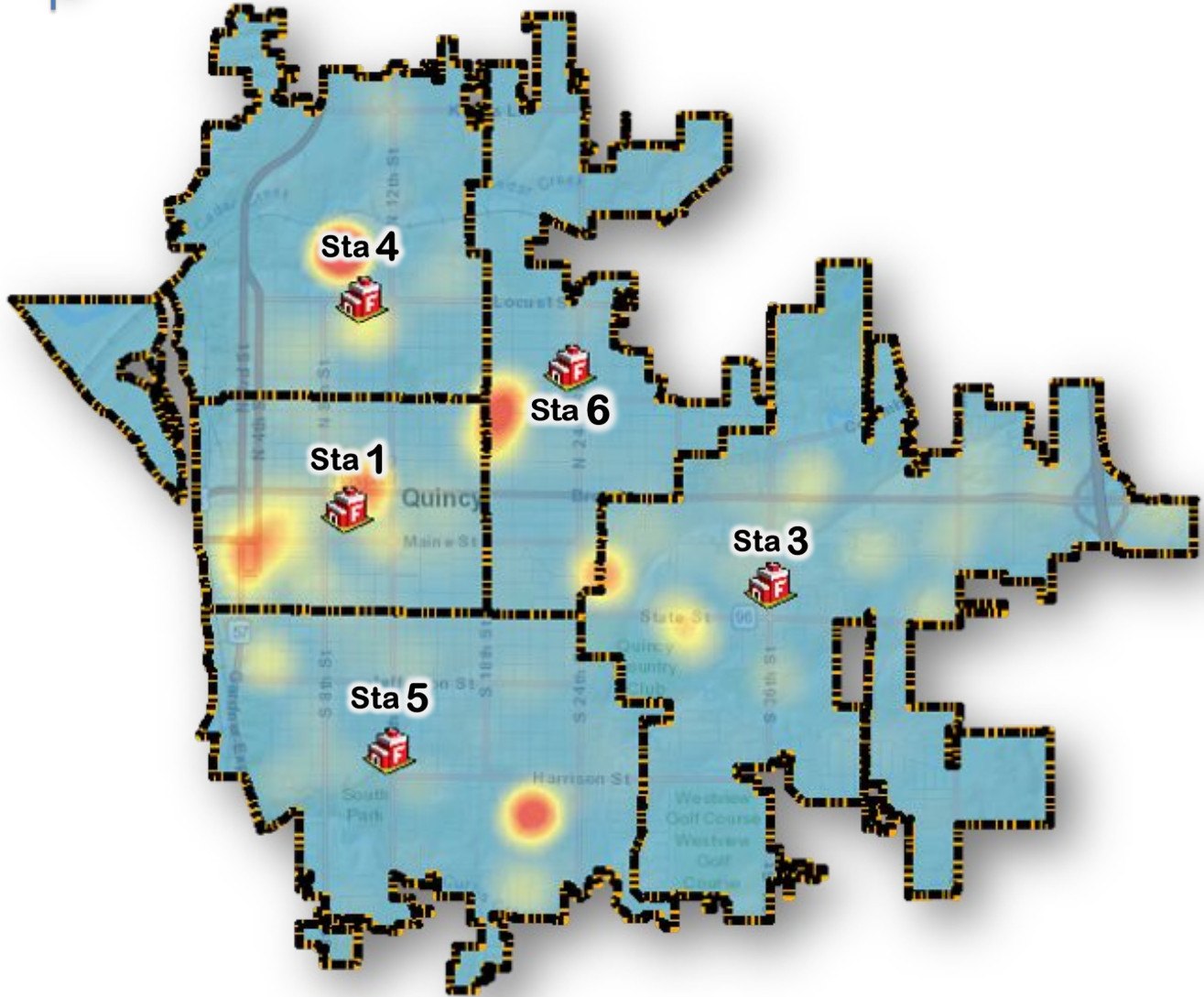
STATION 6





1,957

AOR INCIDENTS



NFIRS 700: False Alarm False Call

Percentage of TRA Incidents



27%

STATION 1



27%

STATION 3



16%

STATION 4



17%

STATION 5



13%

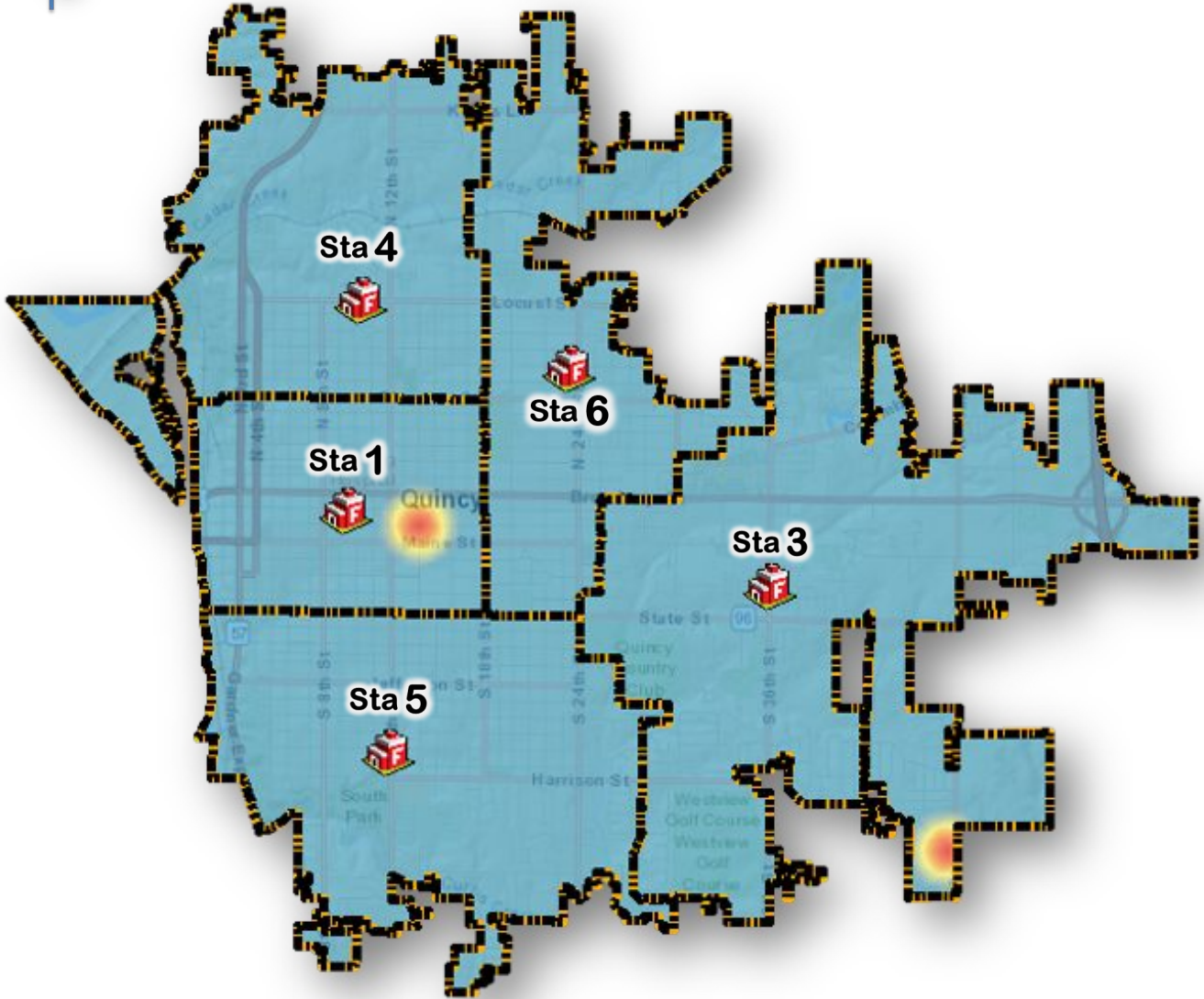
STATION 6





2

AOR INCIDENTS



NFIRS 800: Severe Weather and natural Disaster

Percentage of TRA Incidents



50%

STATION 1



50%

STATION 3



0%

STATION 4



0%

STATION 5



0%

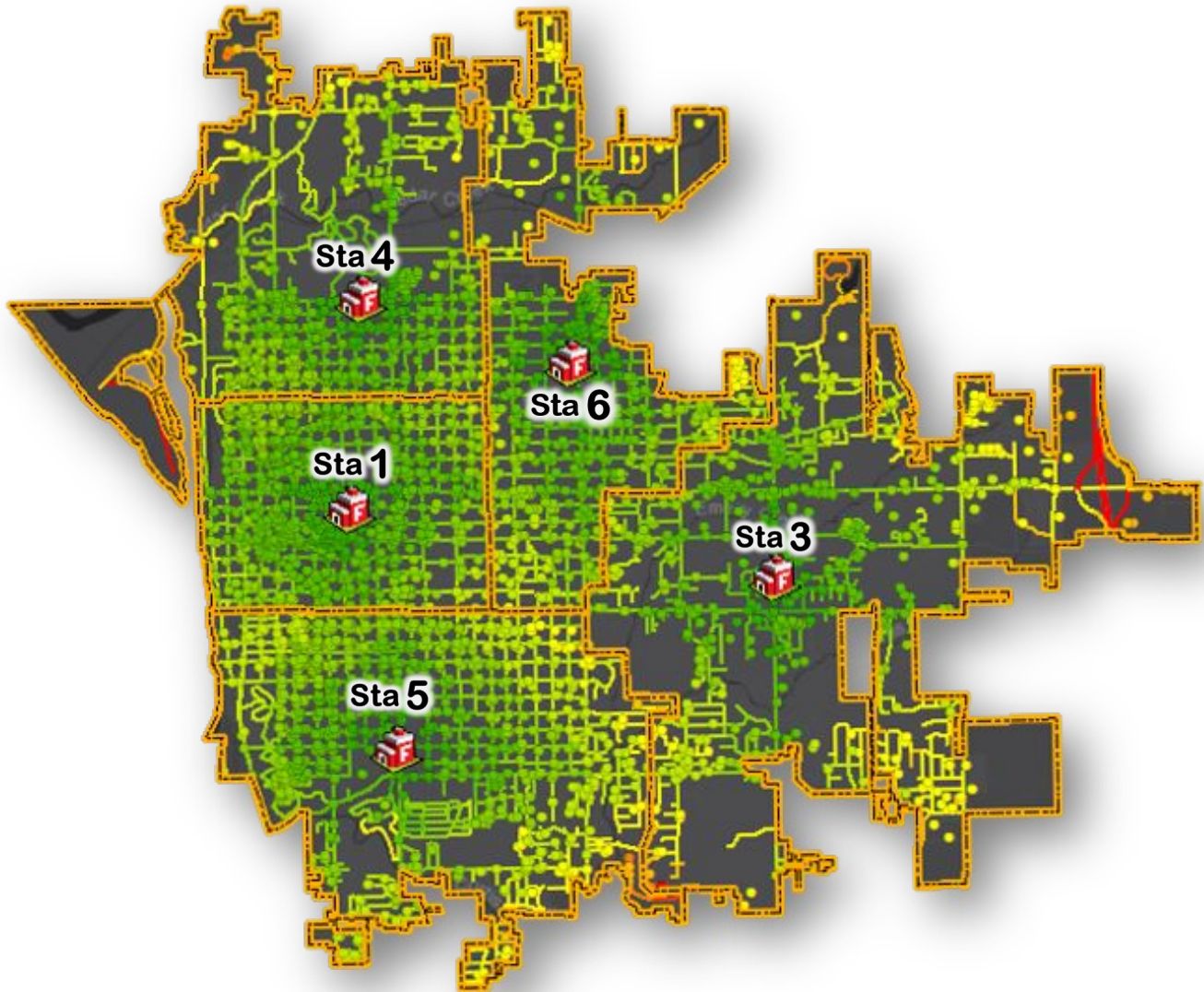
STATION 6



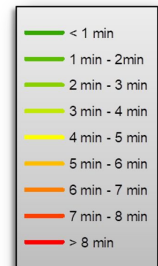
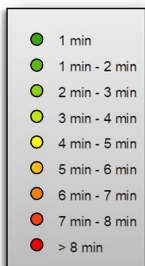


Incidents & Streets by Drive Time - TRA
TRA Incidents
Response Times - TRA
Incidents & Streets by Drive Time - AoR 1
AoR 1 Incidents
Response Times - AoR 1
Incidents & Streets by Drive Time - AoR 3
AoR 3 Incidents
Response Times - AoR 3
Incidents & Streets by Drive Time - AoR 4
AoR 4 Incidents
Response Times - AoR 4
Incidents & Streets by Drive Time - AoR 5
AoR 5 Incidents
Response Times - AoR 5
Incidents & Streets by Drive Time - AoR 6
AoR 6 Incidents
Response Times - AoR 6



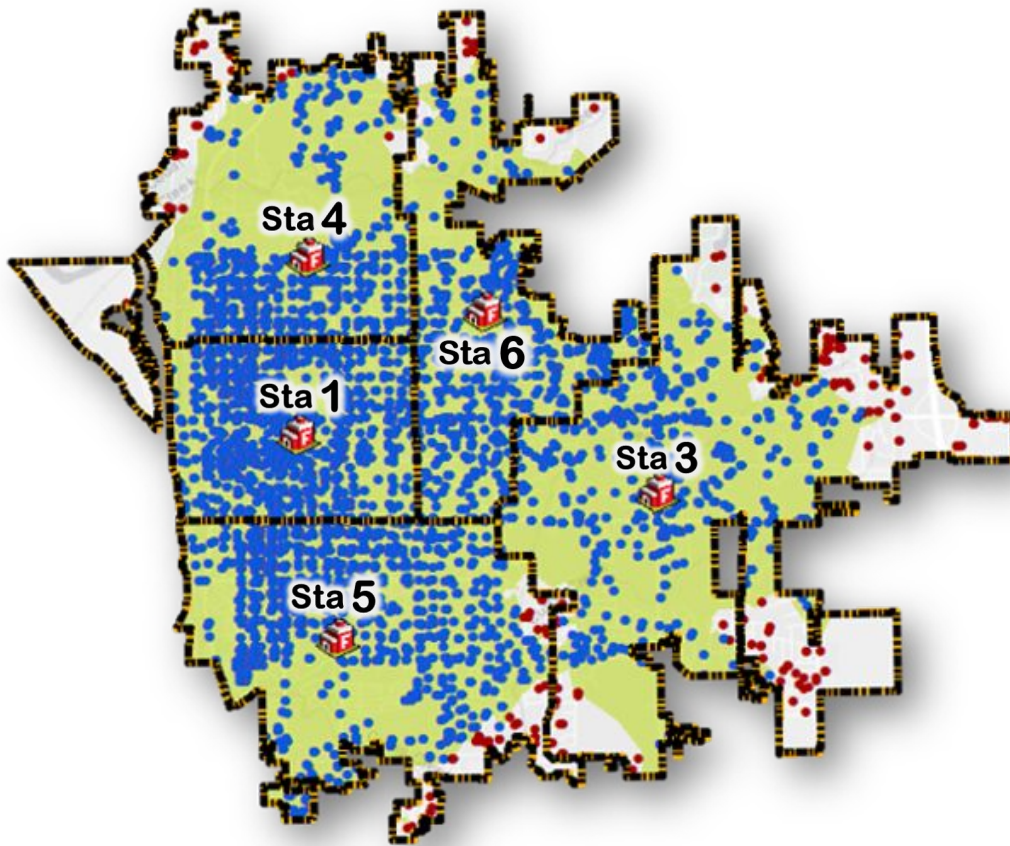


Incidents and streets are displayed based on travel time from the closest fire station.





INC TRAVEL TIME
95%
 WITHIN 4 MINUTES



100%
 INCIDENTS WITH
 MULTI-STATION COVERAGE

8 MINUTE ERF
59%
 5 STATION COVERAGE

8 MINUTE ERF
23%
 4 STATION COVERAGE

8 MINUTE ERF
15%
 3 STATION COVERAGE

8 MINUTE ERF
3%
 2 STATION COVERAGE

4 Minute Catchment
 Incidents Inside Catchment
 Incidents Outside Catchment

INC RESPONSE TIME
91%
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
91%
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
88%
 COMPLETE TRA

INC RESPONSE TIME
89%
 COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:05:21	0:04:22	0:03:53	0:03:31	0:03:13
Fire	0:04:34	0:03:54	0:03:27	0:03:10	0:02:52
EMS	0:04:35	0:04:00	0:03:37	0:03:19	0:03:03



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:36	0:03:18	0:03:08	0:02:54	0:02:41
Historic	0:05:21	0:04:22	0:03:53	0:03:31	0:03:13



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:44	0:03:29	0:03:11	0:03:01	0:02:51
Historic	0:04:34	0:03:54	0:03:27	0:03:10	0:02:52



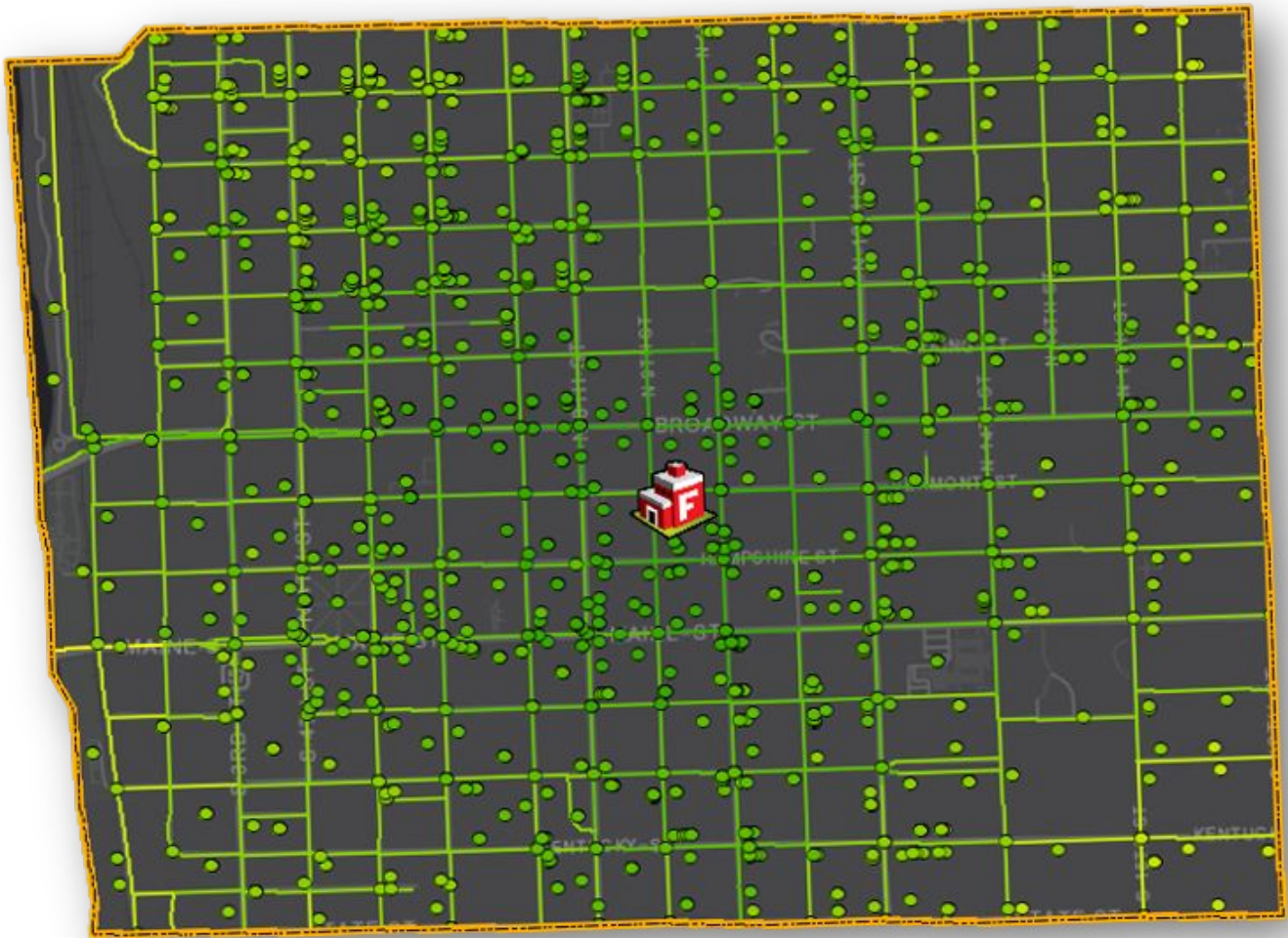
EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:37	0:03:18	0:03:10	0:02:54	0:02:42
Historic	0:04:35	0:04:00	0:03:37	0:03:19	0:03:03

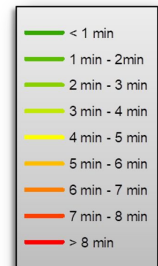
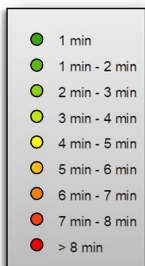


Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:33	0:03:18	0:03:07	0:02:50	0:02:41
Historic	0:06:53	0:05:27	0:04:37	0:04:05	0:03:41

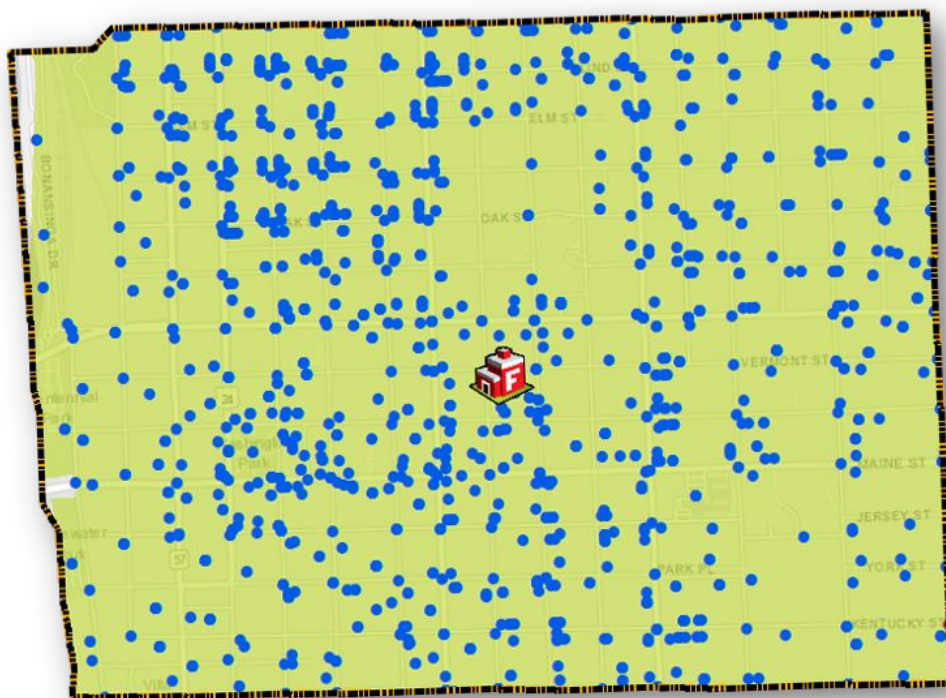


Incidents and streets are displayed based on travel time from the closest fire station.





INC TRAVEL TIME
100%
WITHIN 4 MINUTES



100%
INCIDENTS WITH
MULTI-STATION COVERAGE

8 MINUTE ERF
99%
5 STATION COVERAGE

8 MINUTE ERF
1%
4 STATION COVERAGE

- 4 Minute Catchment
- Incidents Inside Catchment
- Incidents Outside Catchment

INC RESPONSE TIME
93%
WITHIN 4 CATCHMENT

INC RESPONSE TIME
93%
WITHIN 4 CATCHMENT

INC RESPONSE TIME
93%
COMPLETE TRA

INC RESPONSE TIME
93%
COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:05:24	0:04:13	0:03:42	0:03:19	0:03:00
Fire	0:04:48	0:03:53	0:03:19	0:02:54	0:02:40
EMS	0:04:28	0:03:54	0:03:30	0:03:10	0:02:53



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:39	0:03:19	0:03:07	0:02:49	0:02:36
Historic	0:05:24	0:04:13	0:03:42	0:03:19	0:03:00



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:41	0:03:26	0:03:01	0:02:54	0:02:44
Historic	0:04:48	0:03:53	0:03:19	0:02:54	0:02:40



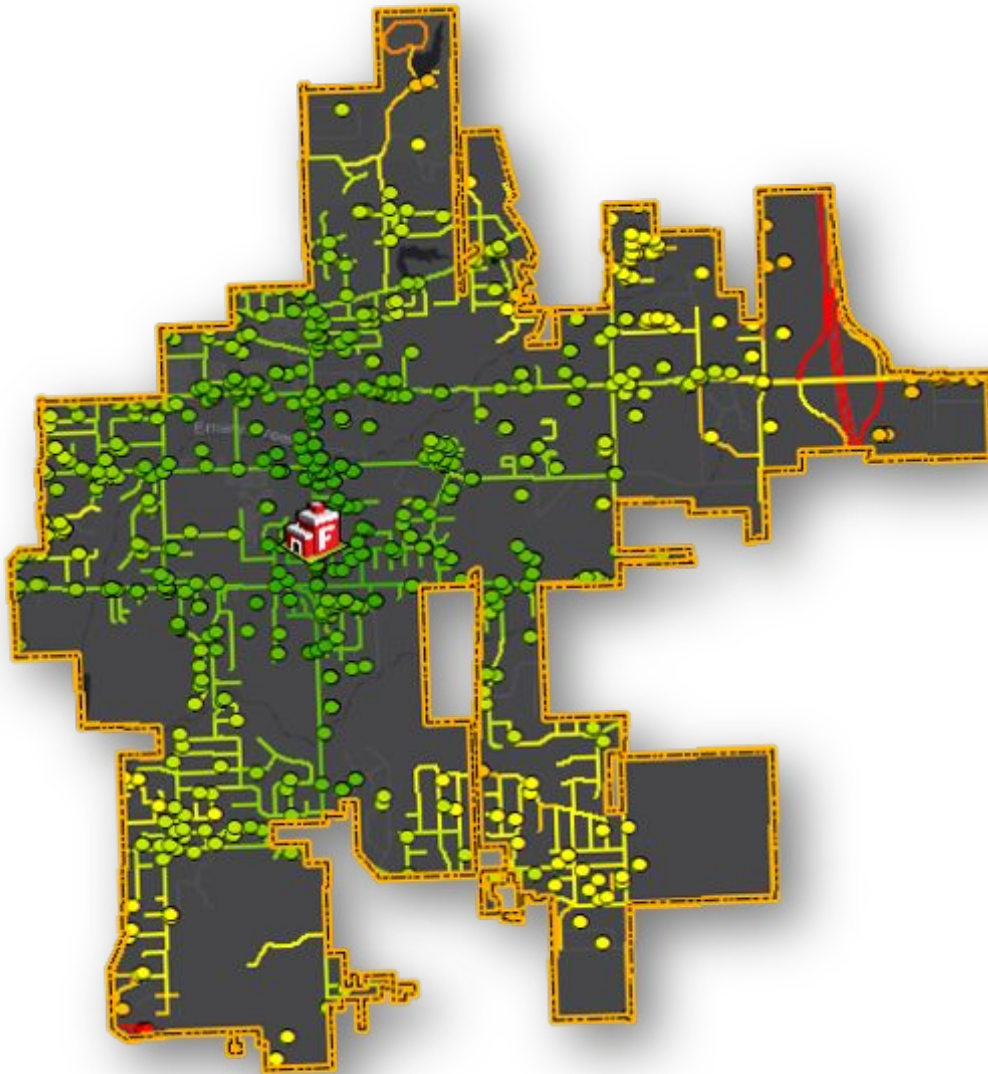
EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:39	0:03:20	0:03:10	0:02:49	0:02:40
Historic	0:04:28	0:03:54	0:03:30	0:03:10	0:02:53

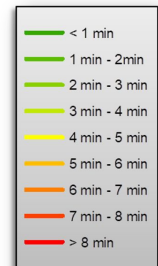
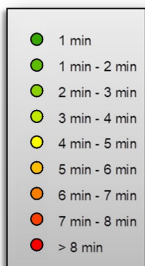


Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:33	0:03:18	0:03:03	0:02:48	0:02:31
Historic	0:07:20	0:05:50	0:04:31	0:03:47	0:03:21

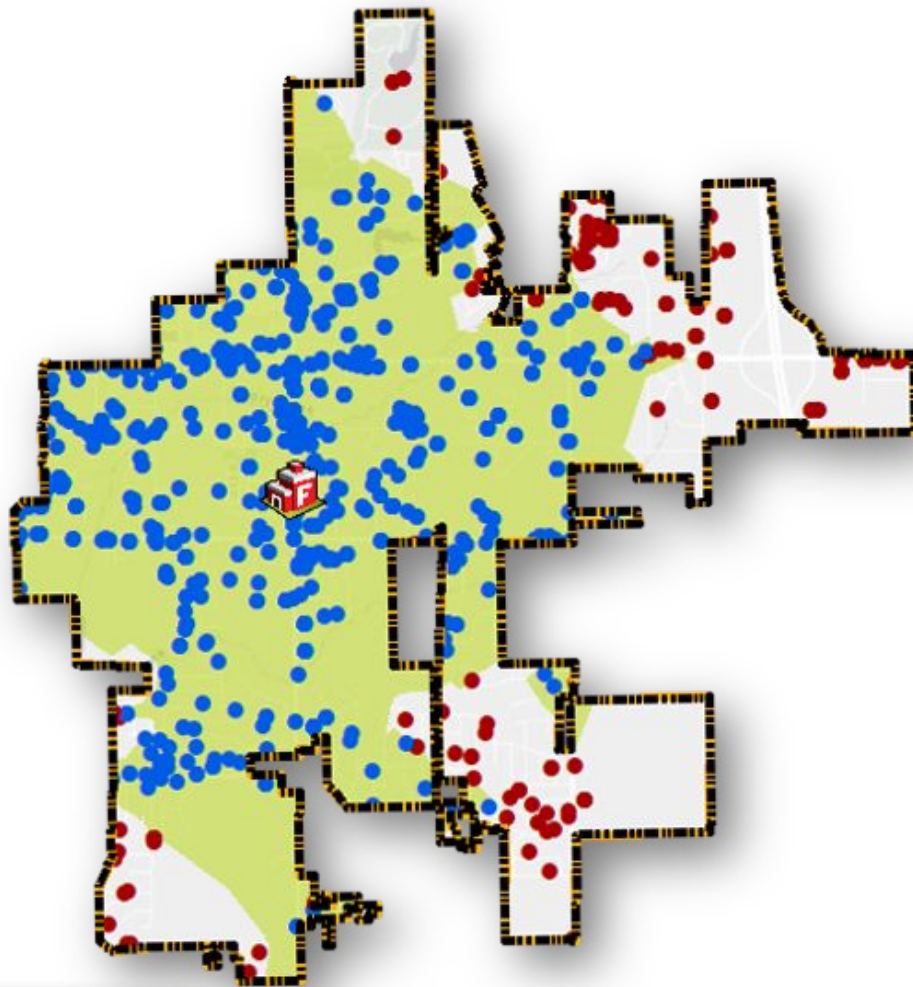


Incidents and streets are displayed based on travel time from the closest fire station.





INC TRAVEL TIME
89%
 WITHIN 4 MINUTES



98%
 INCIDENTS WITH
 MULTI-STATION COVERAGE

8 MINUTE ERF
24%
 5 STATION COVERAGE

8 MINUTE ERF
34%
 4 STATION COVERAGE

8 MINUTE ERF
30%
 3 STATION COVERAGE

8 MINUTE ERF
10%
 2 STATION COVERAGE

4 Minute Catchment
 Incidents Inside Catchment
 Incidents Outside Catchment

INC RESPONSE TIME
77%
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
86%
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
67%
 COMPLETE TRA

INC RESPONSE TIME
83%
 COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:05:20	0:04:19	0:03:48	0:03:27	0:03:09
Fire	0:04:29	0:03:46	0:03:32	0:03:13	0:02:57
EMS	0:04:23	0:03:48	0:03:28	0:03:11	0:02:56



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:25	0:03:16	0:03:05	0:02:56	0:02:43
Historic	0:05:20	0:04:19	0:03:48	0:03:27	0:03:09



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:49	0:03:32	0:03:22	0:03:09	0:03:00
Historic	0:04:29	0:03:46	0:03:32	0:03:13	0:02:57



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:25	0:03:16	0:03:04	0:02:57	0:02:43
Historic	0:04:23	0:03:48	0:03:28	0:03:11	0:02:56

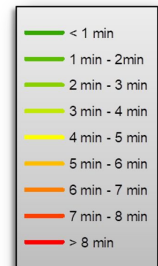
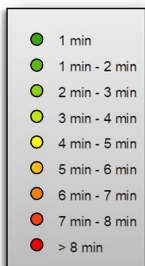


Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:24	0:03:15	0:03:07	0:02:54	0:02:40
Historic	0:06:41	0:05:28	0:04:43	0:04:11	0:03:44



Incidents and streets are displayed based on travel time from the closest fire station.

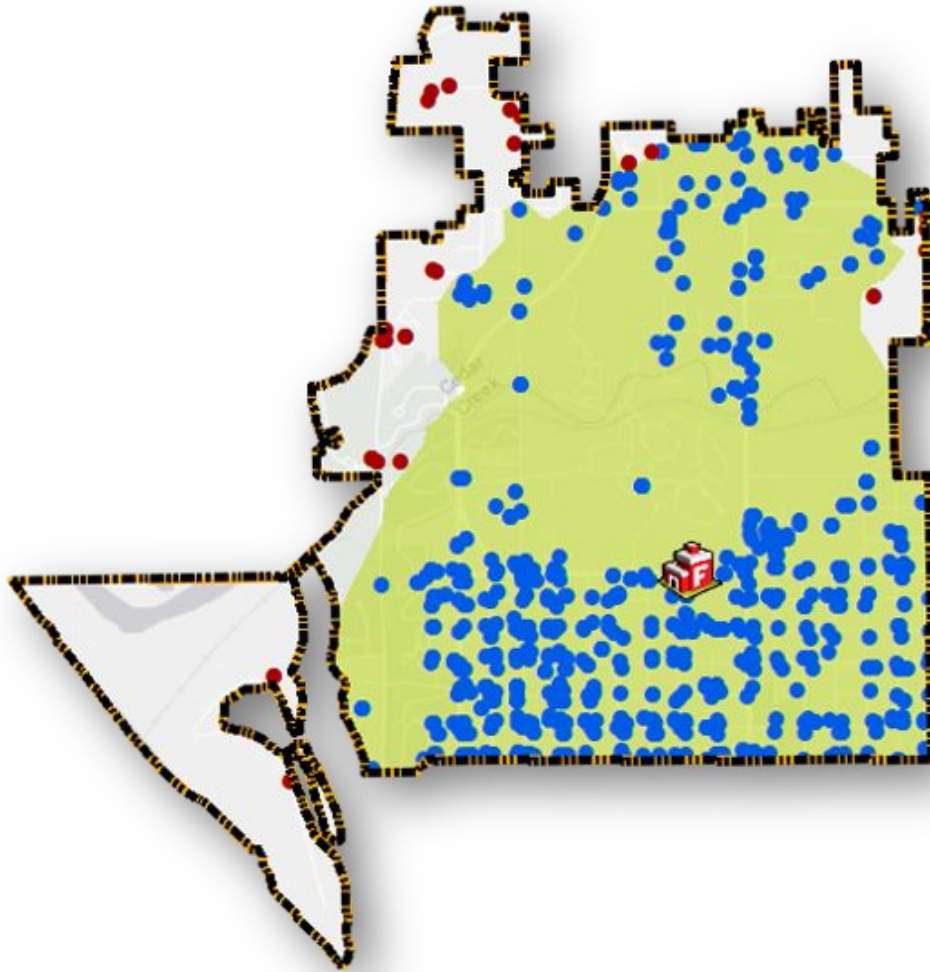




INC TRAVEL TIME

97%

WITHIN 4 MINUTES



- 4 Minute Catchment
- Incidents Inside Catchment
- Incidents Outside Catchment

100%
INCIDENTS WITH
MULTI-STATION COVERAGE

8 MINUTE ERF
 28%
5 STATION COVERAGE

8 MINUTE ERF
 43%
4 STATION COVERAGE

8 MINUTE ERF
 28%
3 STATION COVERAGE

8 MINUTE ERF
 1%
2 STATION COVERAGE

INC RESPONSE TIME

94%

WITHIN 4 CATCHMENT

INC RESPONSE TIME

94%

WITHIN 4 CATCHMENT

INC RESPONSE TIME

90%

COMPLETE TRA

INC RESPONSE TIME

93%

COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:05:07	0:04:25	0:04:00	0:03:41	0:03:23
Fire	0:05:22	0:04:25	0:04:05	0:03:23	0:02:45
EMS	0:04:37	0:04:07	0:03:43	0:03:25	0:03:09



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:47	0:03:23	0:03:02	0:02:41	0:02:41
Historic	0:05:07	0:04:25	0:04:00	0:03:41	0:03:23



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:57	0:03:18	0:03:04	0:02:58	0:02:45
Historic	0:05:22	0:04:25	0:04:05	0:03:23	0:02:45



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:46	0:03:21	0:02:58	0:02:41	0:02:35
Historic	0:04:37	0:04:07	0:03:43	0:03:25	0:03:09

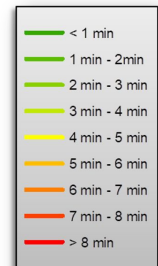
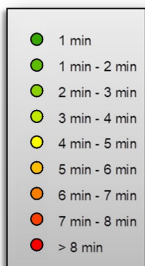


Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:47	0:03:25	0:03:06	0:02:46	0:02:41
Historic	0:05:33	0:04:47	0:04:17	0:03:55	0:03:40

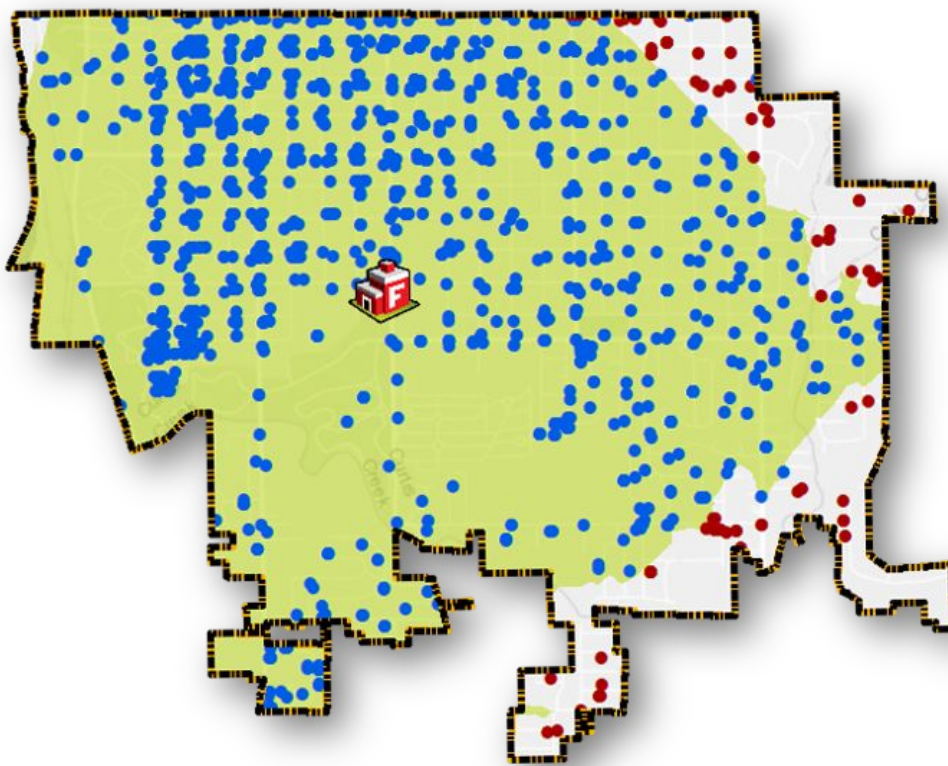


Incidents and streets are displayed based on travel time from the closest fire station.





INC TRAVEL TIME
94%
 WITHIN 4 MINUTES



99%
 INCIDENTS WITH
 MULTI-STATION COVERAGE

8 MINUTE ERF
49%
 5 STATION COVERAGE

8 MINUTE ERF
28%
 4 STATION COVERAGE

8 MINUTE ERF
17%
 3 STATION COVERAGE

8 MINUTE ERF
5%
 2 STATION COVERAGE

- 4 Minute Catchment
- Incidents Inside Catchment
- Incidents Outside Catchment

INC RESPONSE TIME
92%
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
91%
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
92%
 COMPLETE TRA

INC RESPONSE TIME
90%
 COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:05:11	0:04:22	0:03:56	0:03:35	0:03:18
Fire	0:04:28	0:03:35	0:03:18	0:03:10	0:02:56
EMS	0:04:37	0:04:05	0:03:41	0:03:25	0:03:09



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:51	0:03:29	0:03:13	0:03:04	0:02:50
Historic	0:05:11	0:04:22	0:03:56	0:03:35	0:03:18



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:41	0:03:22	0:03:09	0:03:01	0:02:52
Historic	0:04:28	0:03:35	0:03:18	0:03:10	0:02:56



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:53	0:03:31	0:03:13	0:03:04	0:02:50
Historic	0:04:37	0:04:05	0:03:41	0:03:25	0:03:09

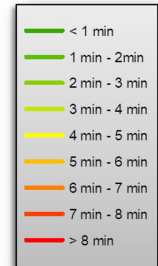
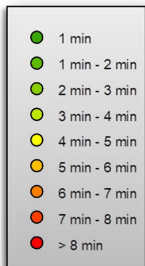


Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:47	0:03:23	0:03:13	0:03:01	0:02:50
Historic	0:07:11	0:05:39	0:04:45	0:04:10	0:03:50

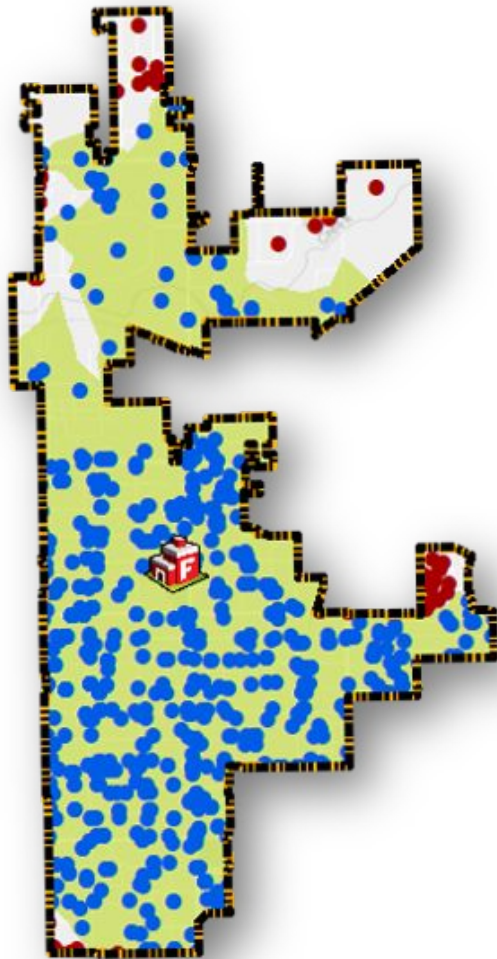


Incidents and streets are displayed based on travel time from the closest fire station.








INC TRAVEL TIME
 **93%**
 WITHIN 4 MINUTES







 **100%**
 INCIDENTS WITH
 MULTI-STATION COVERAGE


8 MINUTE ERF
 **64%**
 5 STATION COVERAGE


8 MINUTE ERF
 **27%**
 4 STATION COVERAGE

8 MINUTE ERF
 **7%**
 3 STATION COVERAGE

8 MINUTE ERF
 **2%**
 2 STATION COVERAGE

 4 Minute Catchment
 Incidents Inside Catchment
 Incidents Outside Catchment

INC RESPONSE TIME
 **92%**
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
 **87%**
 WITHIN 4 CATCHMENT

INC RESPONSE TIME
 **90%**
 COMPLETE TRA

INC RESPONSE TIME
 **85%**
 COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:05:44	0:04:47	0:04:16	0:03:53	0:03:35
Fire	0:03:53	0:03:25	0:03:22	0:03:18	0:03:07
EMS	0:05:05	0:04:23	0:03:58	0:03:40	0:03:25



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:16	0:03:14	0:03:14	0:02:53	0:02:50
Historic	0:05:44	0:04:47	0:04:16	0:03:53	0:03:35



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:35	0:03:29	0:03:21	0:03:15	0:02:54
Historic	0:03:53	0:03:25	0:03:22	0:03:18	0:03:07



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:14	0:03:14	0:03:14	0:02:59	0:02:50
Historic	0:05:05	0:04:23	0:03:58	0:03:40	0:03:25



Other Incidents Response Time (h:mm:ss)





	90th %	80th %	70th %	60th %	50th %
Ideal	0:03:30	0:03:14	0:03:06	0:02:50	0:02:39
Historic	0:07:10	0:05:45	0:05:01	0:04:33	0:04:09



- Station Details Overview
 - Jurisdiction Overview
 - Jurisdiction Area
 - Area of Responsibility (AoR) 1
 - Station 1 Details
 - Area of Responsibility (AoR) 2
 - Station 2 Details
 - Area of Responsibility (AoR) 3
 - Station 3 Details
 - Area of Responsibility (AoR) 4
 - Station 4 Details










	RADIO NAME	STATUS	STAFFING MINIMUM	STAFFING MAXIMUM	MEDICAL CAPABILITIES
 STATION 1					
AMBULANCE	3A15	Active	2	2	ALS
AMBULANCE	3A16	Active	2	2	ALS
AMBULANCE	3A20	Active	2	2	ALS
OTHER	800	Active	1	1	ALS
AMBULANCE	3A26	Reserve	2	2	ALS
 STATION 2					
AMBULANCE	3A17	Active	2	2	ALS
 STATION 3					
AMBULANCE	3A18	Active	2	2	ALS
 STATION 4					
AMBULANCE	3A19	Active	2	2	ALS

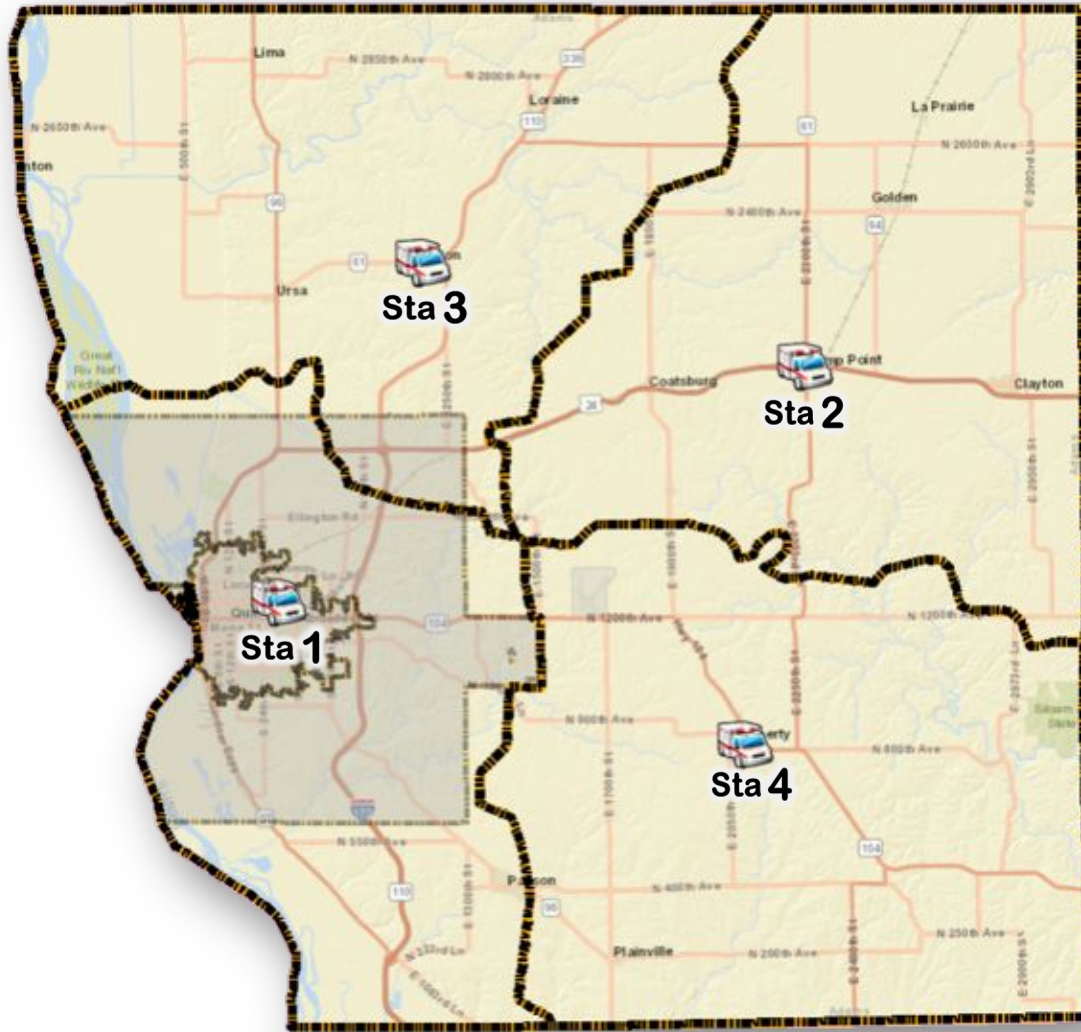


The following demographic data is provided using Esri's demographic estimates for popular variables including: 2018 Total Population, 2018 Household Population, 2018 Median Age, 2018 Median Household Income, 2018 Per Capita Income, 2018 Diversity index and many more. Data is available from country, state, county, ZIP Code, tract, and block group level.


	 TOTAL POPULATION	 TOTAL HOUSEHOLDS	 > 65 YEARS OF AGE	 < 5 YEARS OF AGE	 MEDIAN INCOME
TRA	67,322	27,474	19,948	3,950	\$45,120
AOR 1	53,312	22,055	11,300	3,162	\$50,163
AOR 2	5,500	2,121	1,043	314	\$50,403
AOR 3	4,681	1,838	946	247	\$52,650
AOR 4	3,829	1,460	659	227	\$61,715

STATS ARE WITHIN PRIMARY SERVICE AREA





 **870.9**
AREA IN SQUARE MILE

 **67,322**
TOTAL POPULATION

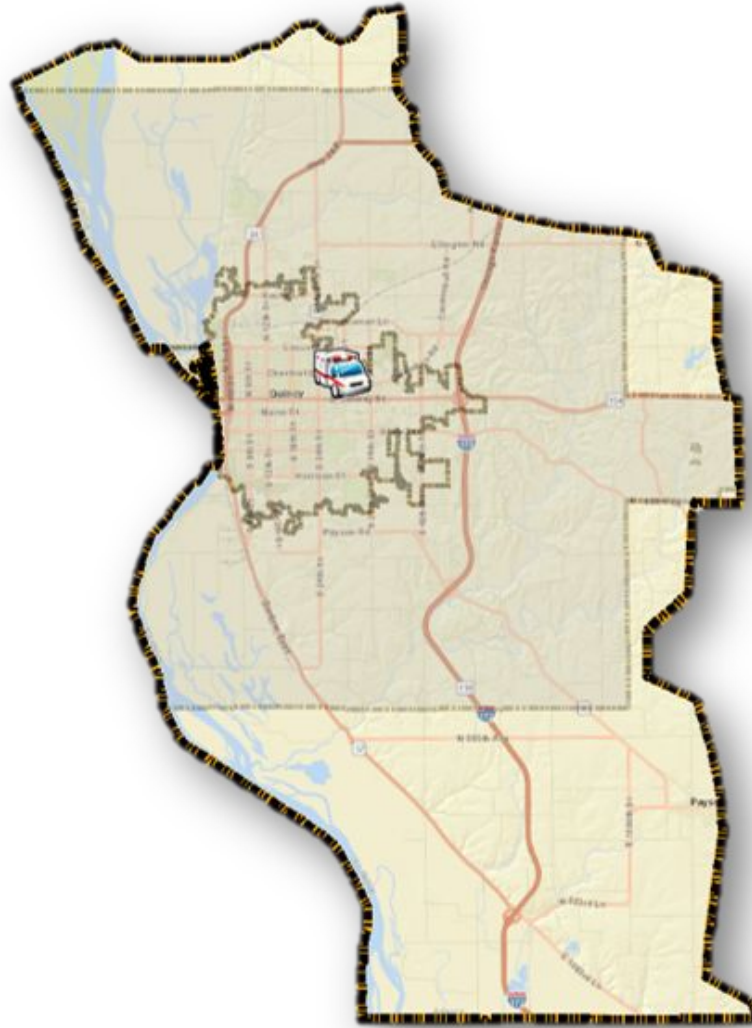
 **27,474**
TOTAL HOUSEHOLDS

 **13,948**
OVER 64 YEARS OF AGE

 **3,950**
UNDER 5 YEARS OF AGE

 **\$45,120**
MEDIAN INCOME





 **177.3**
AREA IN SQUARE MILE

 **53,312**
TOTAL POPULATION

 **22,055**
TOTAL HOUSEHOLDS

 **11,300**
OVER 64 YEARS OF AGE

 **3,162**
UNDER 5 YEARS OF AGE

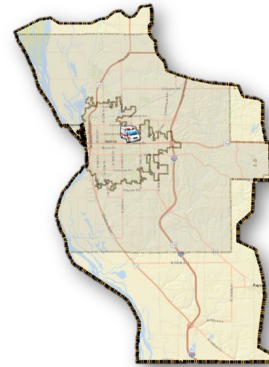
 **\$50,163**
MEDIAN INCOME





Station 1

2906 Chestnut St.
Quincy, IL 62301



AMBULANCE

3A15

ALS

0 OFFICER

1 PARAMEDIC

1 OTHER

STAFFING: MAX 2 MIN 2

FRONTLINE



AMBULANCE

3A16

ALS

0 OFFICER

1 PARAMEDIC

1 OTHER

STAFFING: MAX 2 MIN 2

FRONTLINE



AMBULANCE

3A20

ALS

0 OFFICER

1 PARAMEDIC

1 OTHER

STAFFING: MAX 2 MIN 2

FRONTLINE



OTHER

800

ALS

1 OFFICER



AMBULANCE

3A26

ALS

0 OFFICER

1 PARAMEDIC

1 OTHER


STAFFING: MAX 2 MIN 2

FRONTLINE





 **232.8**
AREA IN SQUARE MILE

 **5,500**
TOTAL POPULATION

 **2,121**
TOTAL HOUSEHOLDS

 **1,043**
OVER 64 YEARS OF AGE

 **314**
UNDER 5 YEARS OF AGE

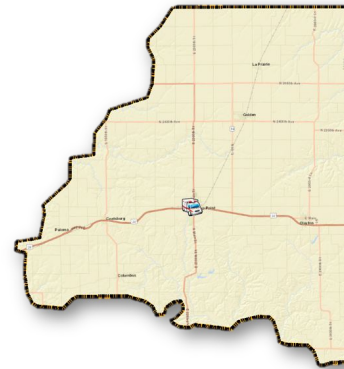
 **\$50,403**
MEDIAN INCOME





Station 2

301 W Wood St.
Camp Point, IL 62320



AMBULANCE

3A17

ALS

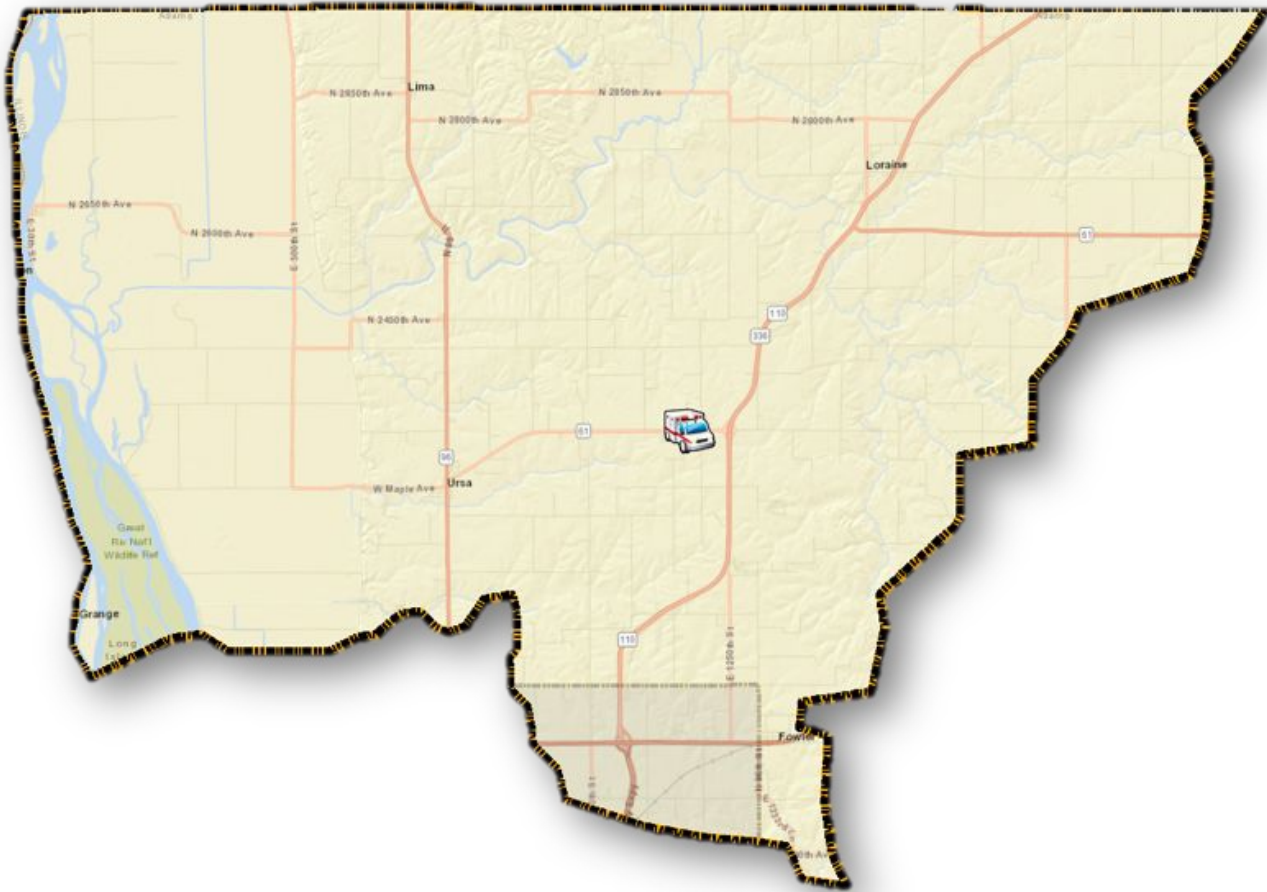
0 OFFICER

1 PARAMEDIC

1 OTHER

STAFFING: MAX 2 MIN 2

FRONTLINE



230.7

AREA IN SQUARE MILE



4,681

TOTAL POPULATION



1,838

TOTAL HOUSEHOLDS



946

OVER 64 YEARS OF AGE



247

UNDER 5 YEARS OF AGE



\$52,650

MEDIAN INCOME





Station 3

136 W Collins St.
Mendon, IL 62351



AMBULANCE

3A18

ALS

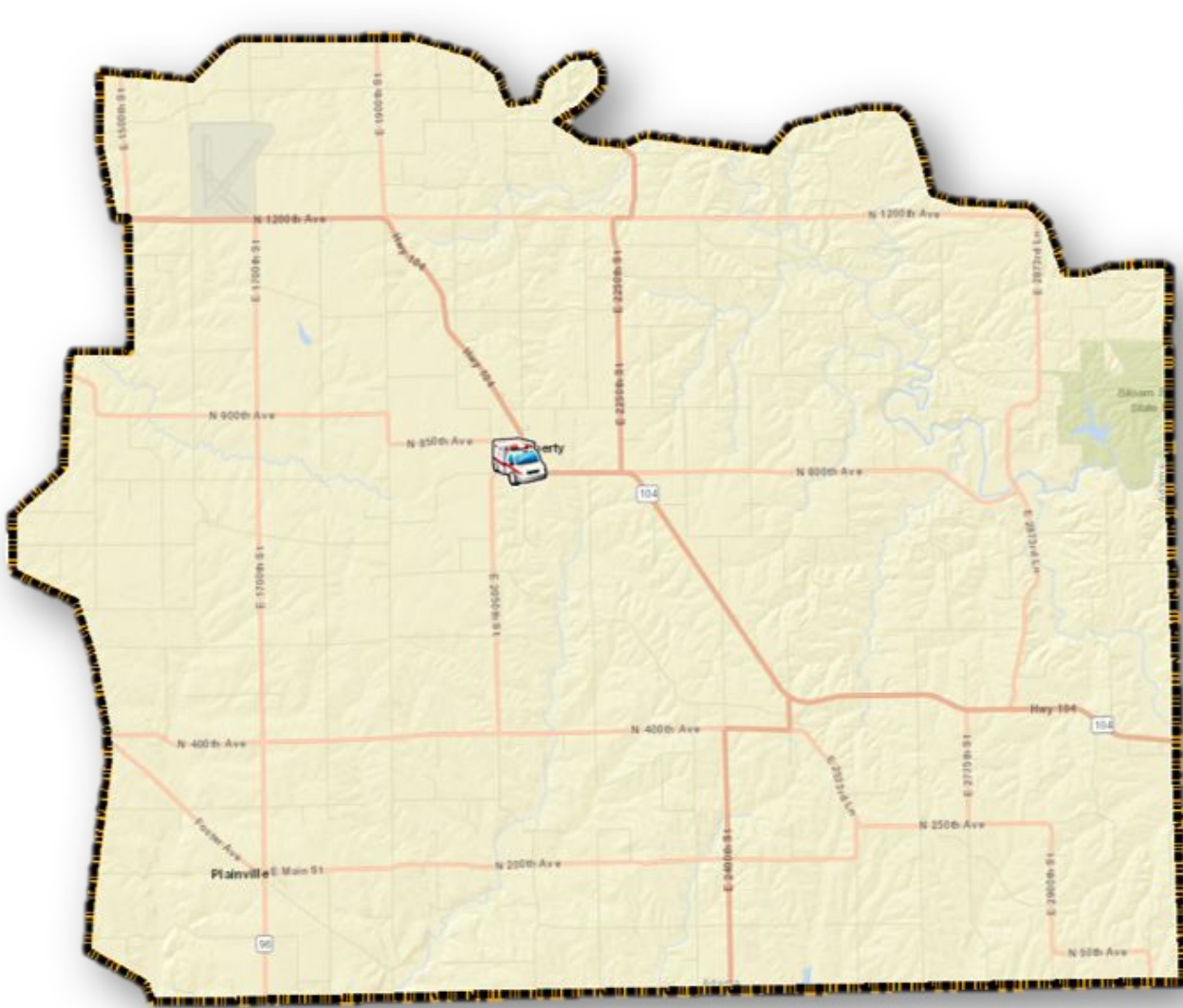
0 OFFICER

1 PARAMEDIC


1 OTHER

STAFFING: MAX 2 MIN 2

FRONTLINE



 **230.1**
AREA IN SQUARE MILE

 **3,829**
TOTAL POPULATION

 **1,460**
TOTAL HOUSEHOLDS

 **659**
OVER 64 YEARS OF AGE

 **227**
UNDER 5 YEARS OF AGE

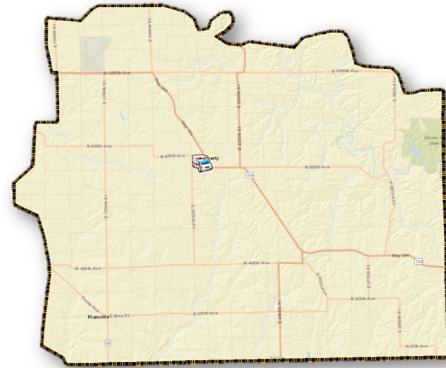
 **\$61,715**
MEDIAN INCOME





Station 4

608 Main St.
Liberty, IL 62347



AMBULANCE

3A19

ALS

0 OFFICER

1 PARAMEDIC

1 OTHER

STAFFING: MAX 2 MIN 2

FRONTLINE



- Service Area Overview
- Area Served by Drive Time
- Streets Covered by Drive Time
- Area and Streets by Time - AoR 1
 - TRA Coverage - Station 1
- Area and Streets by Time - AoR 2
 - TRA Coverage - Station 2
- Area and Streets by Time - AoR 3
 - TRA Coverage - Station 3
- Area and Streets by Time - AoR 4
 - TRA Coverage - Station 4





AREA SERVED

4 MIN CATCHMENT:
AREA

STREETS SERVED

4 MIN CATCHMENT:
STREETS

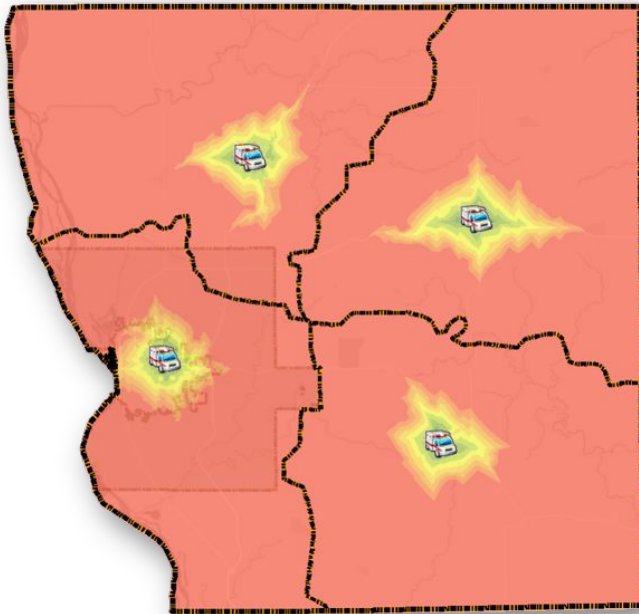
TRA	870.9	2%	2,165.1	5%
AOR 1	177.3	2%	686.0	7%
AOR 2	232.8	3%	538.8	5%
AOR 3	230.7	2%	485.6	4%
AOR 4	230.1	2%	454.7	3%

AREA IN SQUARE
MILES


STREETS IN MILES

STATS ARE WITHIN PRIMARY SERVICE AREA

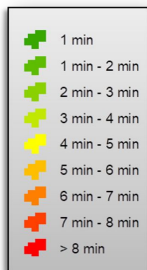




4 MINUTE COVERAGE
 **19.8**
 AREA IN SQUARE MILES

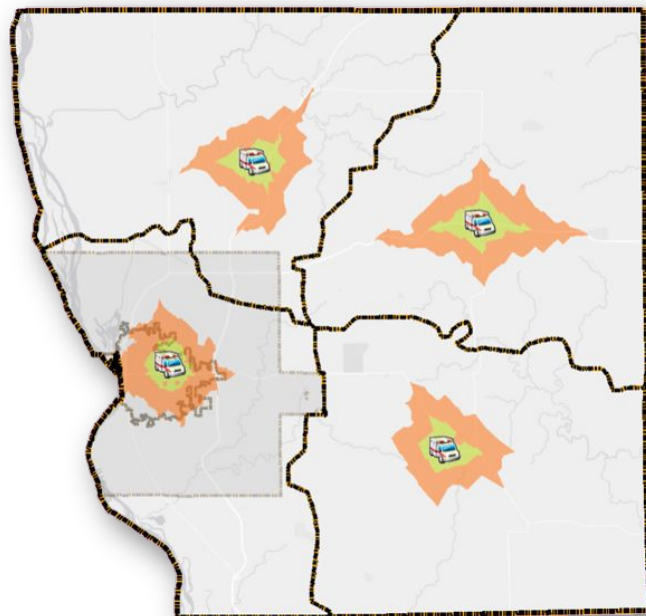
4 MINUTE COVERAGE
 **2%**
 PERCENTAGE OF TRA

One-minute catchment increments..

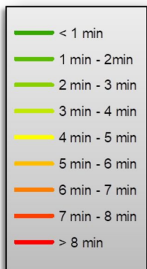
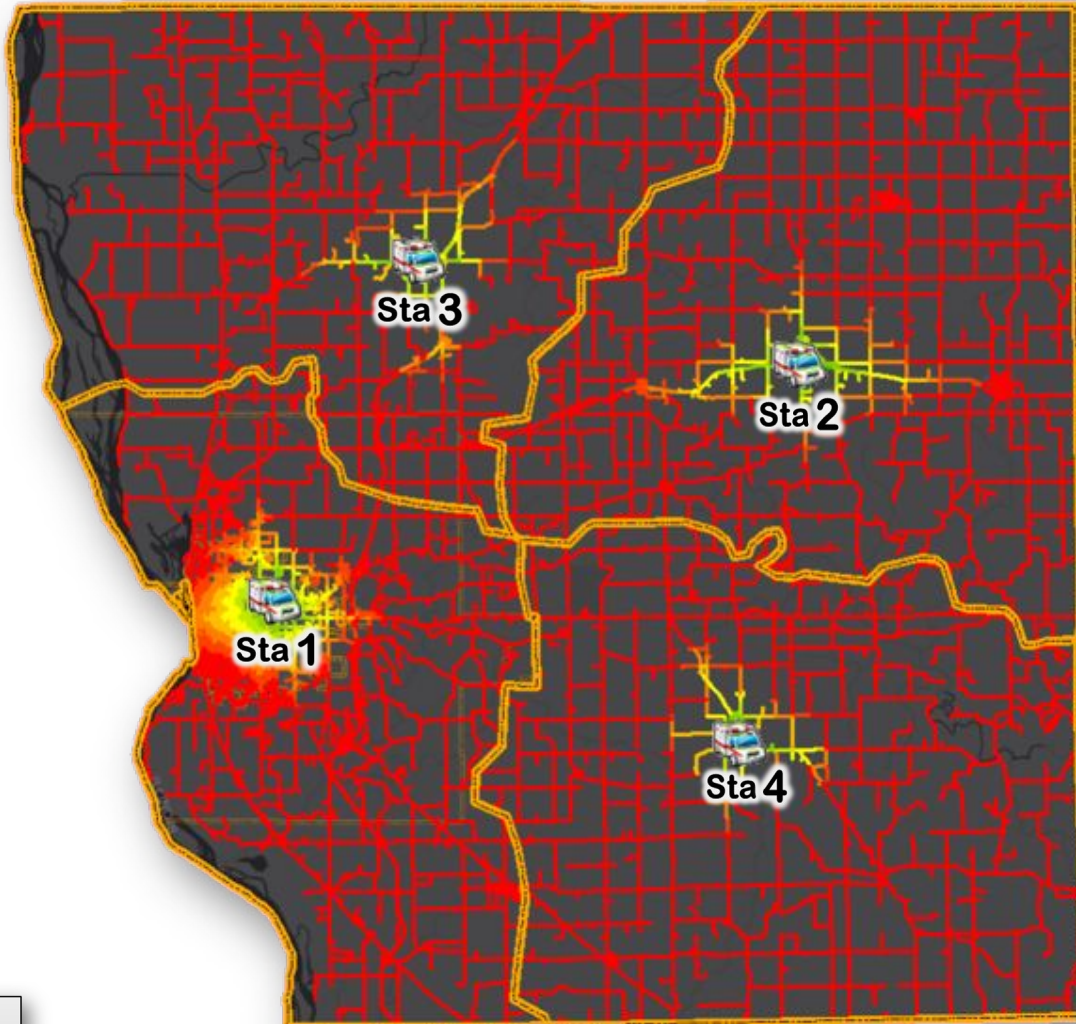


8 MINUTE COVERAGE
 **85.2**
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **10%**
 PERCENTAGE OF TRA




Four-minute and eight-minute catchments.

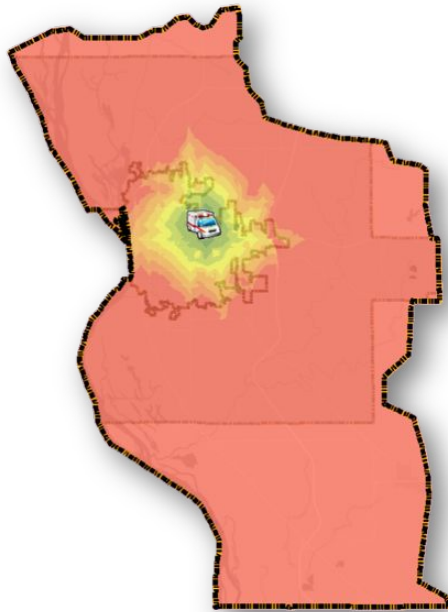


 **2,165.1**
ROAD MILES


4 MINUTE COVERAGE
 **105.9**
ROAD MILES

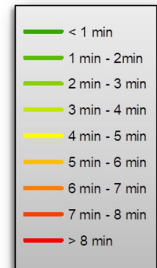
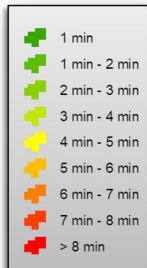
4 MINUTE COVERAGE
 **5%**
PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **4.1**
 AREA IN SQUARE MILES

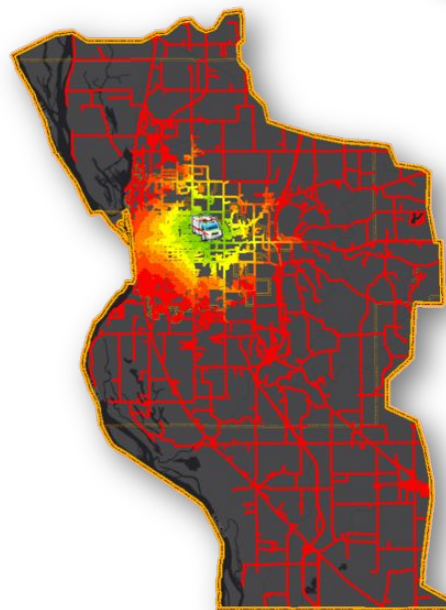
4 MINUTE COVERAGE
 **2%**
 PERCENTAGE OF AOR

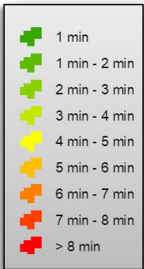
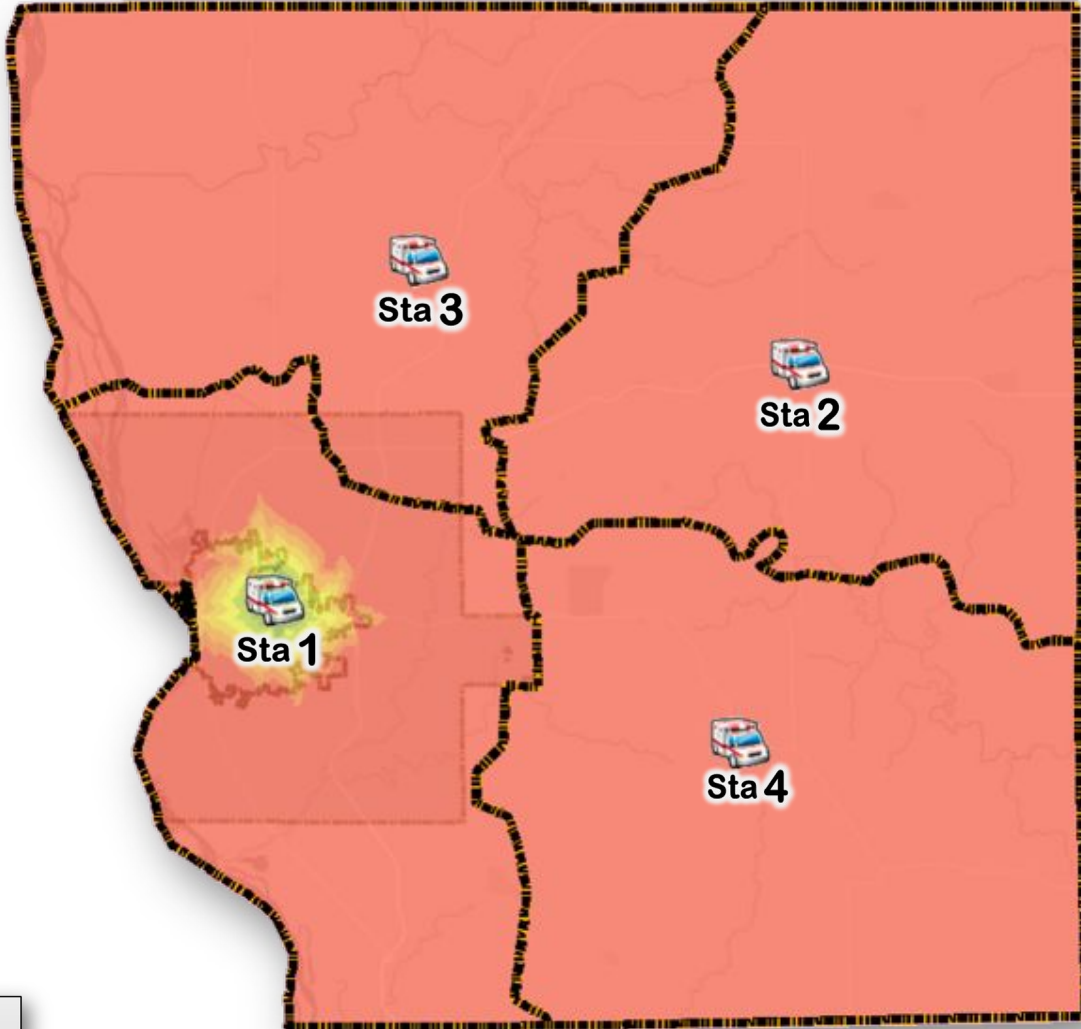


 **686.0**
 ROAD MILES

4 MINUTE COVERAGE
 **51.0**
 ROAD MILES


4 MINUTE COVERAGE
 **7%**
 PERCENTAGE OF AOR






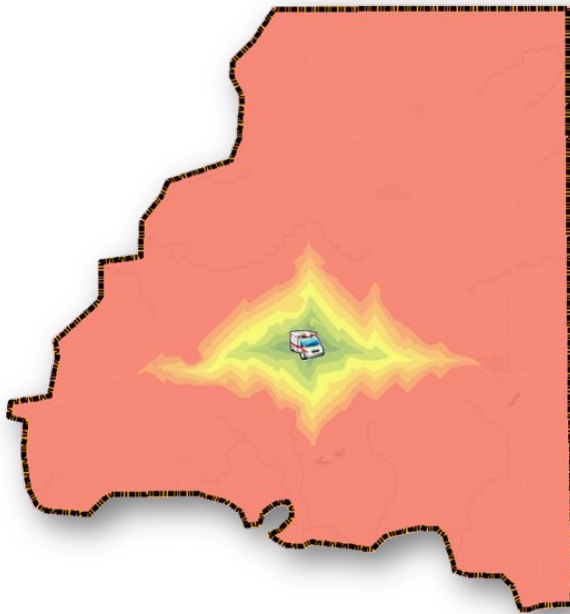
4 MINUTE COVERAGE
 **4.1**
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **19.1**
 AREA IN SQUARE MILES


4 MINUTE COVERAGE
 **< 1%**
 PERCENTAGE OF TRA

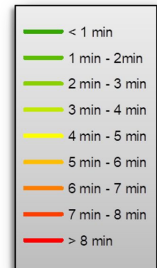
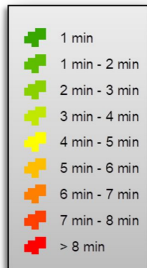
8 MINUTE COVERAGE
 **2%**
 PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **5.8**
 AREA IN SQUARE MILES

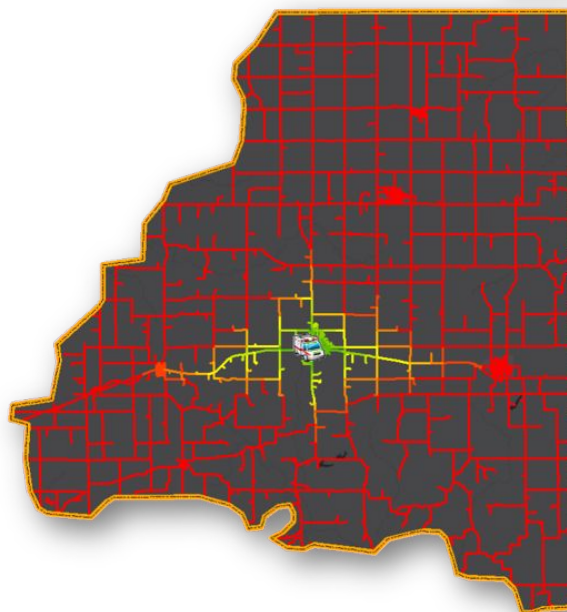
4 MINUTE COVERAGE
 **3%**
 PERCENTAGE OF AOR

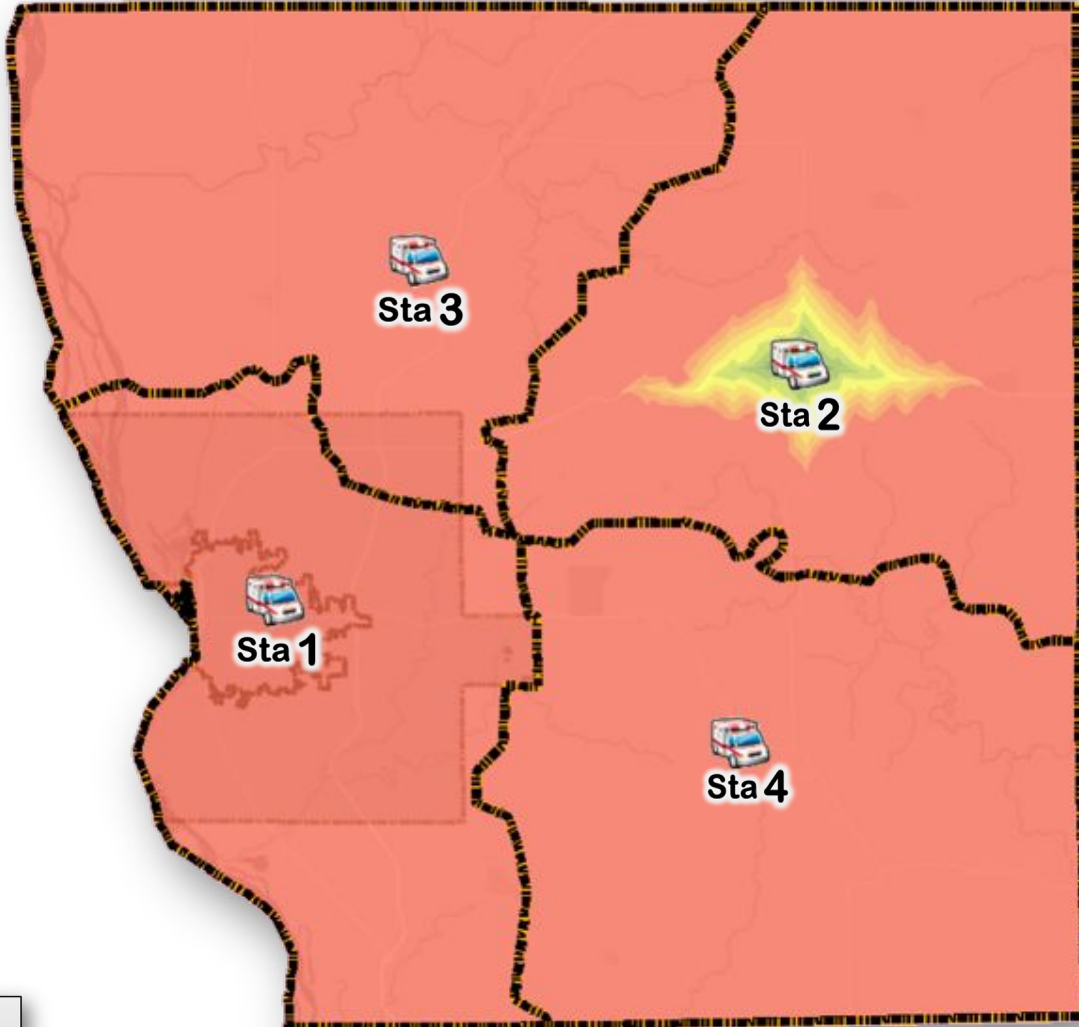


 **538.8**
 ROAD MILES


4 MINUTE COVERAGE
 **24.8**
 ROAD MILES

4 MINUTE COVERAGE
 **5%**
 PERCENTAGE OF AOR







- 1 min
- 1 min - 2 min
- 2 min - 3 min
- 3 min - 4 min
- 4 min - 5 min
- 5 min - 6 min
- 6 min - 7 min
- 7 min - 8 min
- > 8 min

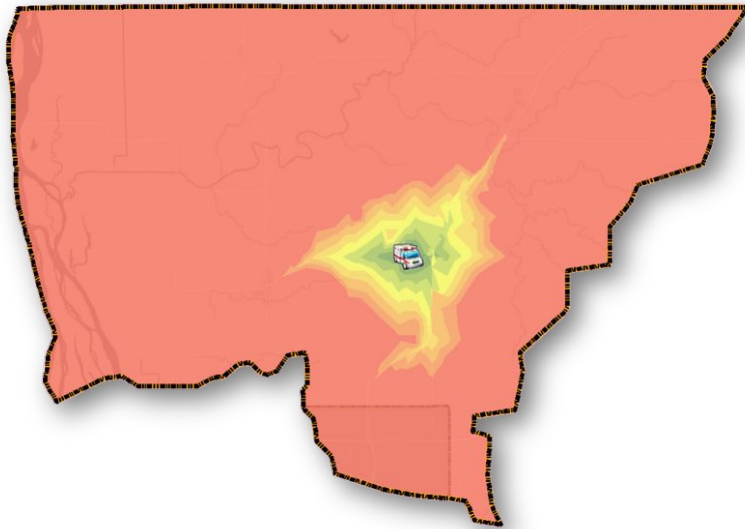
4 MINUTE COVERAGE
 **5.8**
AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **25.5**
AREA IN SQUARE MILES


4 MINUTE COVERAGE
 **1%**
PERCENTAGE OF TRA

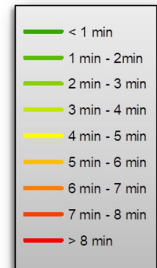
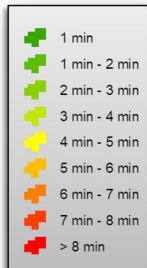
8 MINUTE COVERAGE
 **3%**
PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **4.5**
 AREA IN SQUARE MILES

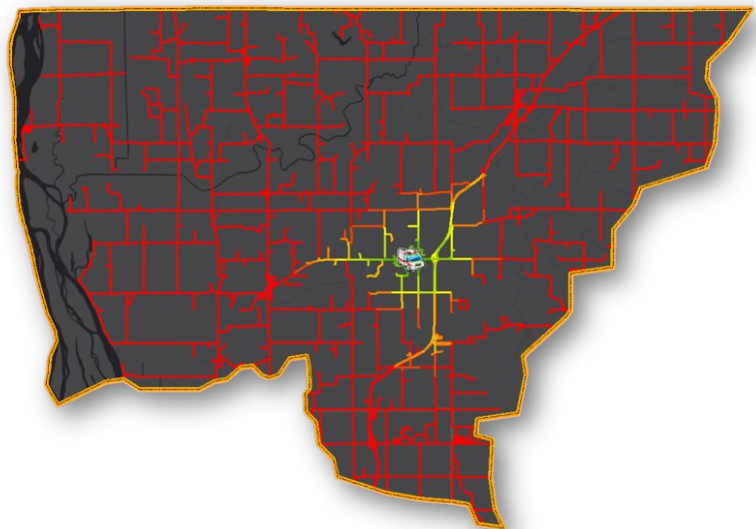
4 MINUTE COVERAGE
 **2%**
 PERCENTAGE OF AOR

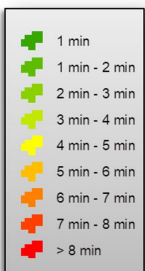
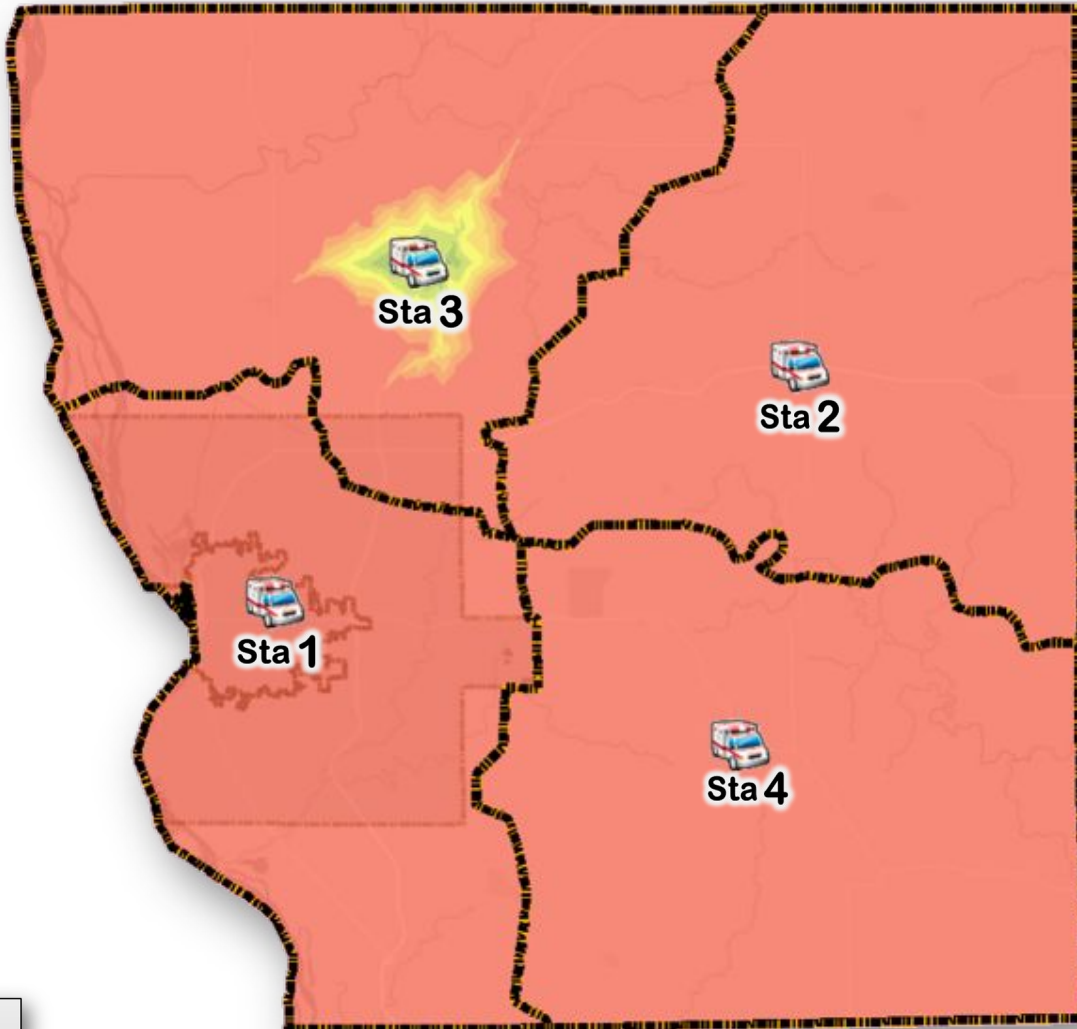


 **485.6**
 ROAD MILES

4 MINUTE COVERAGE
 **18.5**
 ROAD MILES

4 MINUTE COVERAGE
 **4%**
 PERCENTAGE OF AOR





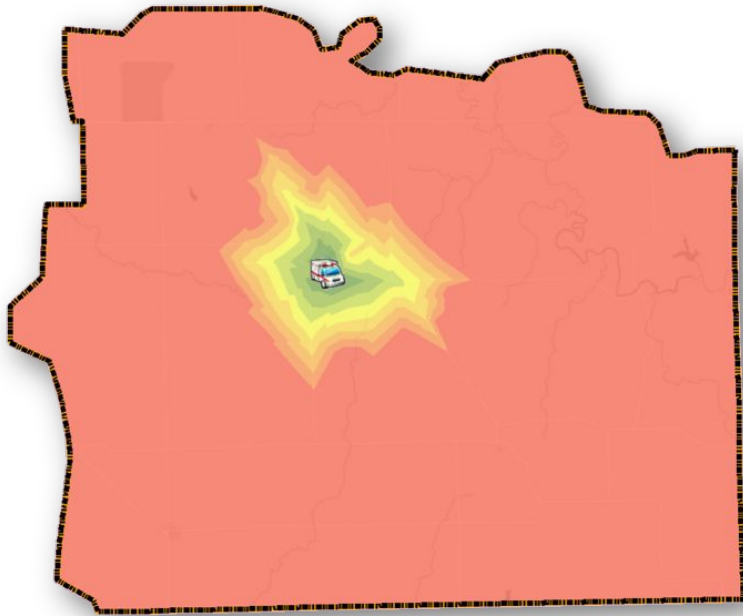
4 MINUTE COVERAGE
4.5
AREA IN SQUARE MILES

4 MINUTE COVERAGE
1%
PERCENTAGE OF TRA


8 MINUTE COVERAGE
20.8
AREA IN SQUARE MILES

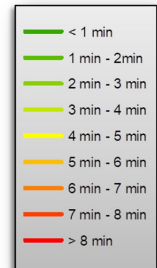
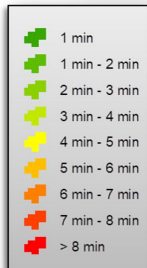
8 MINUTE COVERAGE
2%
PERCENTAGE OF TRA






4 MINUTE COVERAGE
 **4.5**
 AREA IN SQUARE MILES

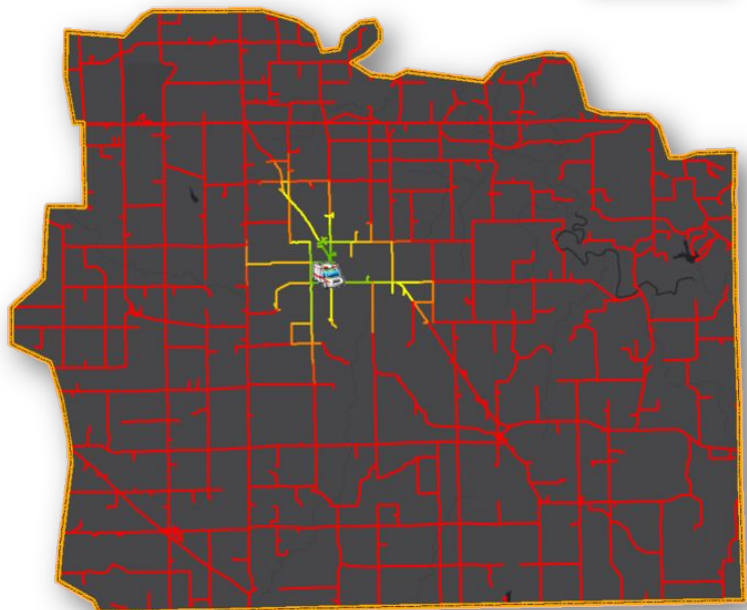
4 MINUTE COVERAGE
 **2%**
 PERCENTAGE OF AOR

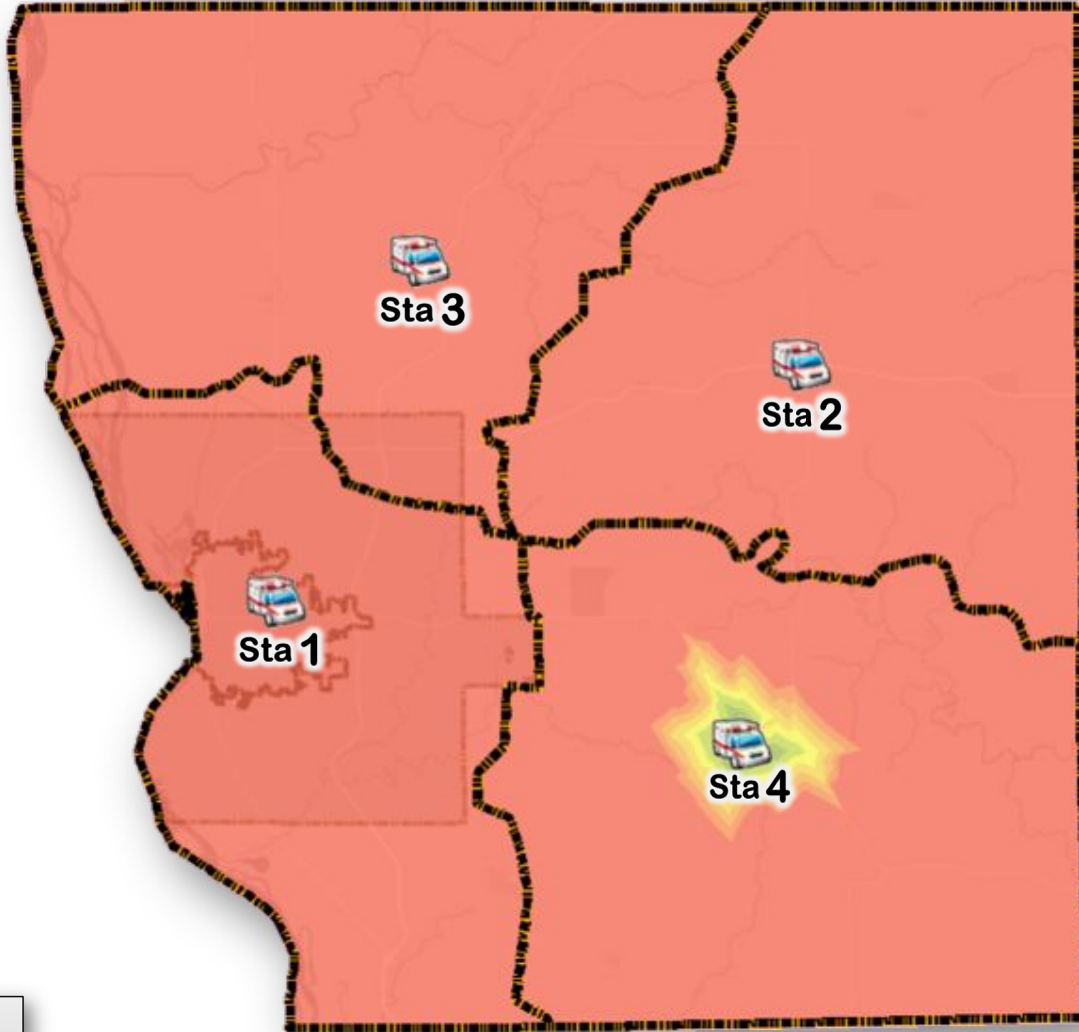


 **454.7**
 ROAD MILES

4 MINUTE COVERAGE
 **11.6**
 ROAD MILES

4 MINUTE COVERAGE
 **3%**
 PERCENTAGE OF AOR





- 1 min
- 1 min - 2 min
- 2 min - 3 min
- 3 min - 4 min
- 4 min - 5 min
- 5 min - 6 min
- 6 min - 7 min
- 7 min - 8 min
- > 8 min

4 MINUTE COVERAGE
1.5
AREA IN SQUARE MILES

8 MINUTE COVERAGE
19.6
AREA IN SQUARE MILES

4 MINUTE COVERAGE
1%
PERCENTAGE OF TRA

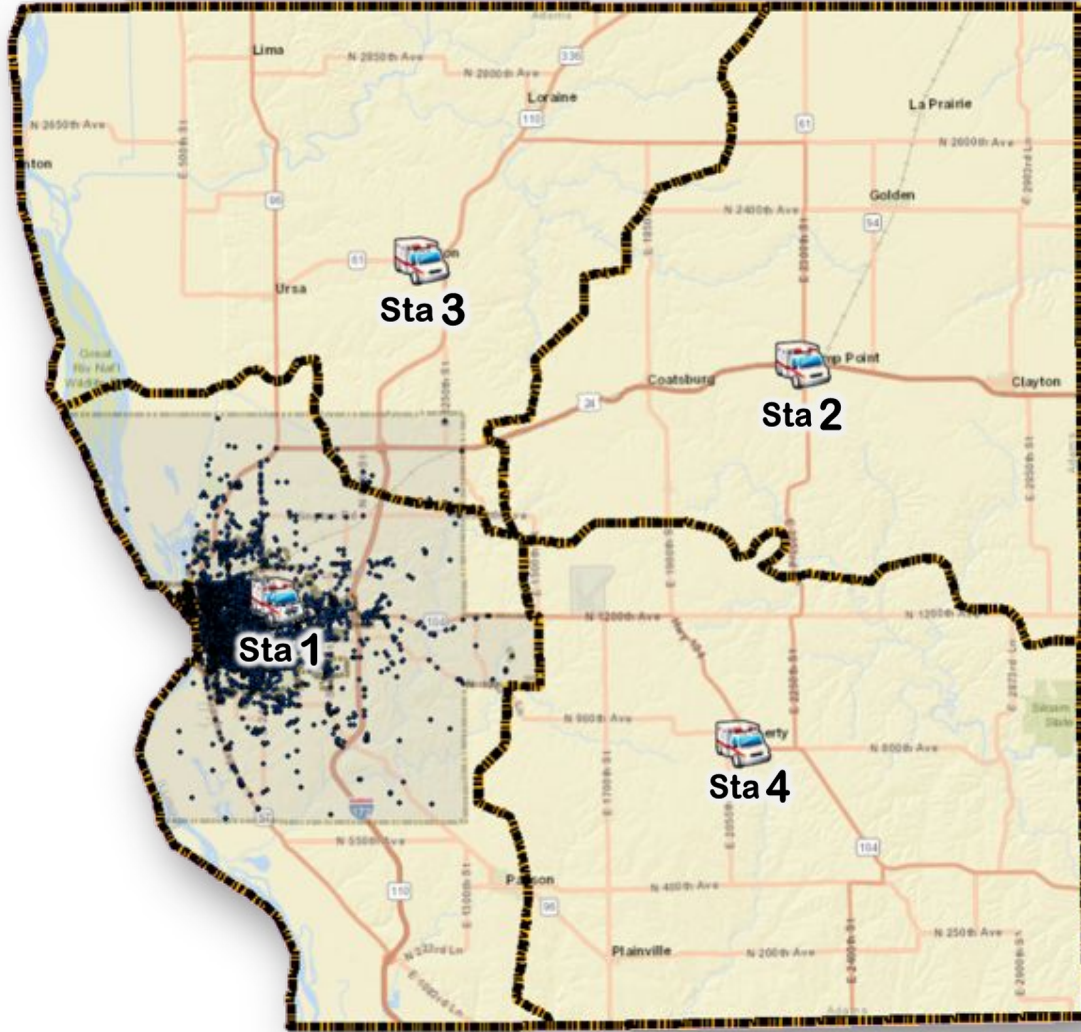
8 MINUTE COVERAGE
2%
PERCENTAGE OF TRA





All Incidents
TRA Incidents by NFIRS Code
Incident Hotspots - NFIRS Type 111
Incident Hotspots - NFIRS Group 300





Quincy FD & Tri-Township FPD

SOURCE OF INCIDENT DATA



JAN 2016 - DEC 2018

INCIDENT TIME PERIOD



8,506

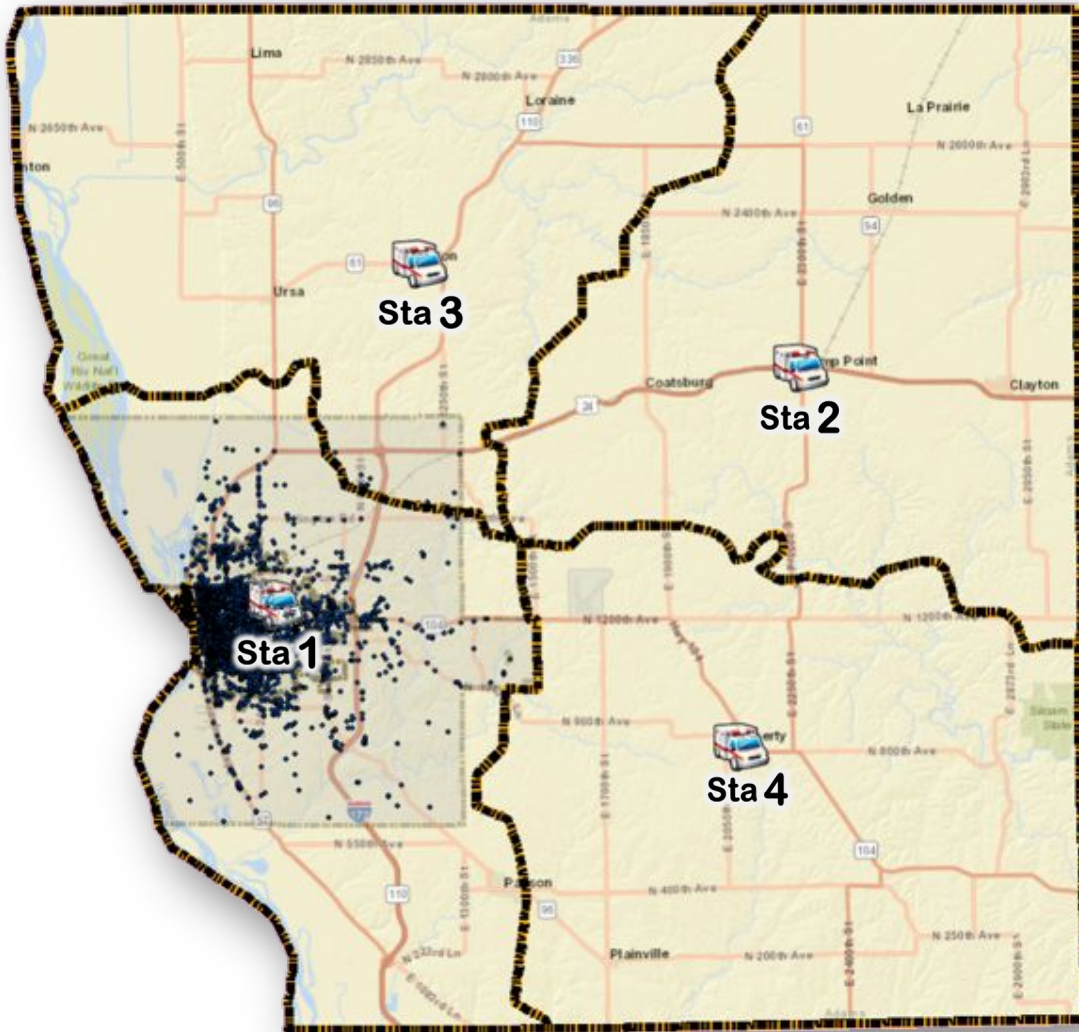
TOTAL INCIDENTS

Incidents are NFIRS code 111 (structure fire) and NFIRS group 300 (Rescue EMS)





 **8,506**
QFD & TTFPD INCIDENTS



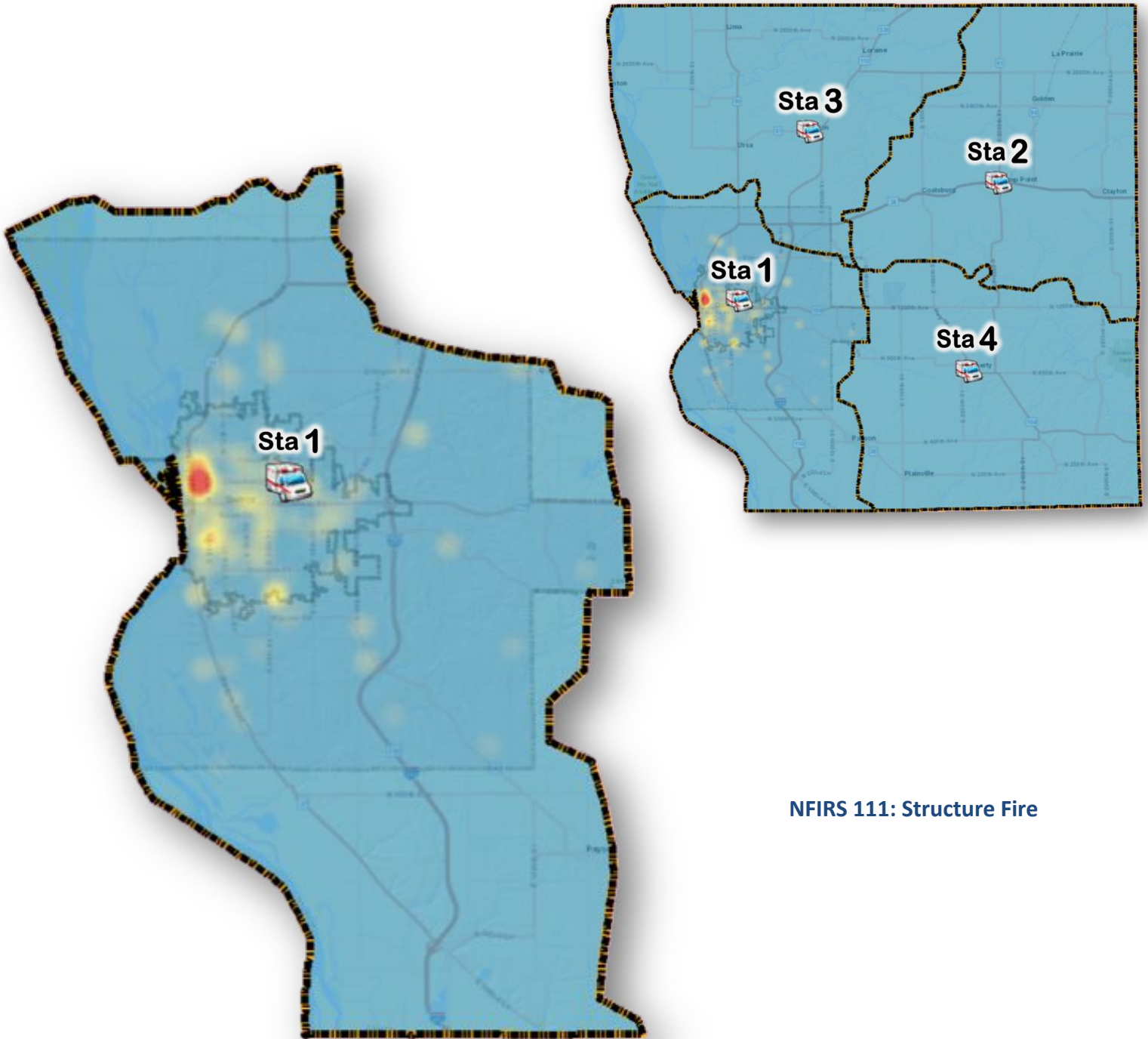
NFIRS Groups: Counts and Percentages

100	300
192	8,314
2.2%	97.7%





 **192**
QFD & TTFPD INCIDENTS

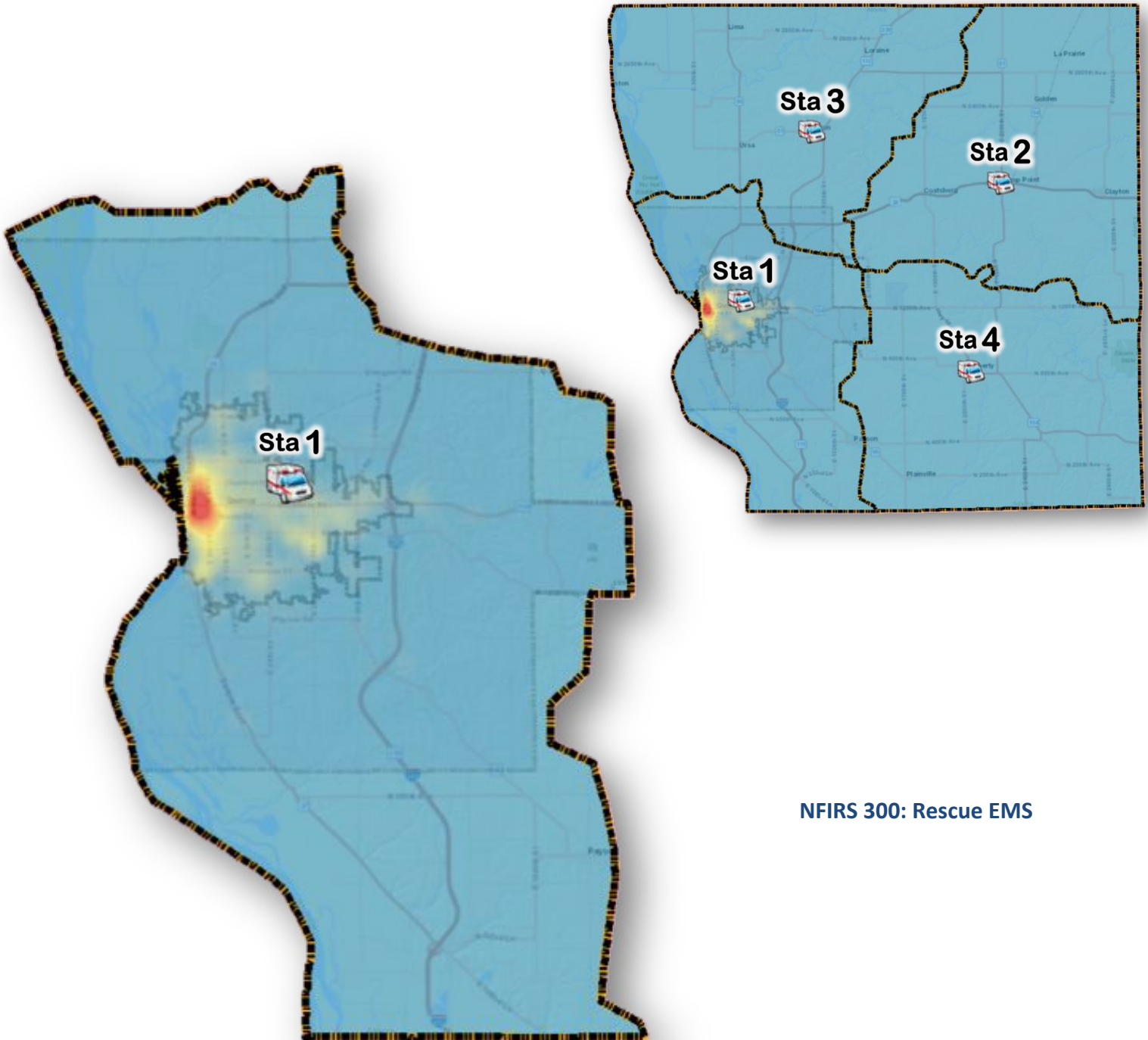


NFIRS 111: Structure Fire





 **8,314**
QFD & TTFPD INCIDENTS



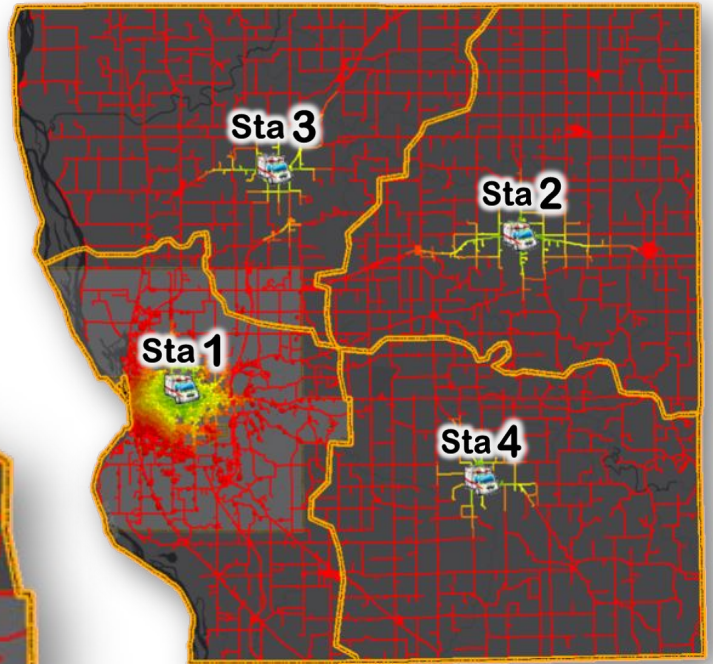
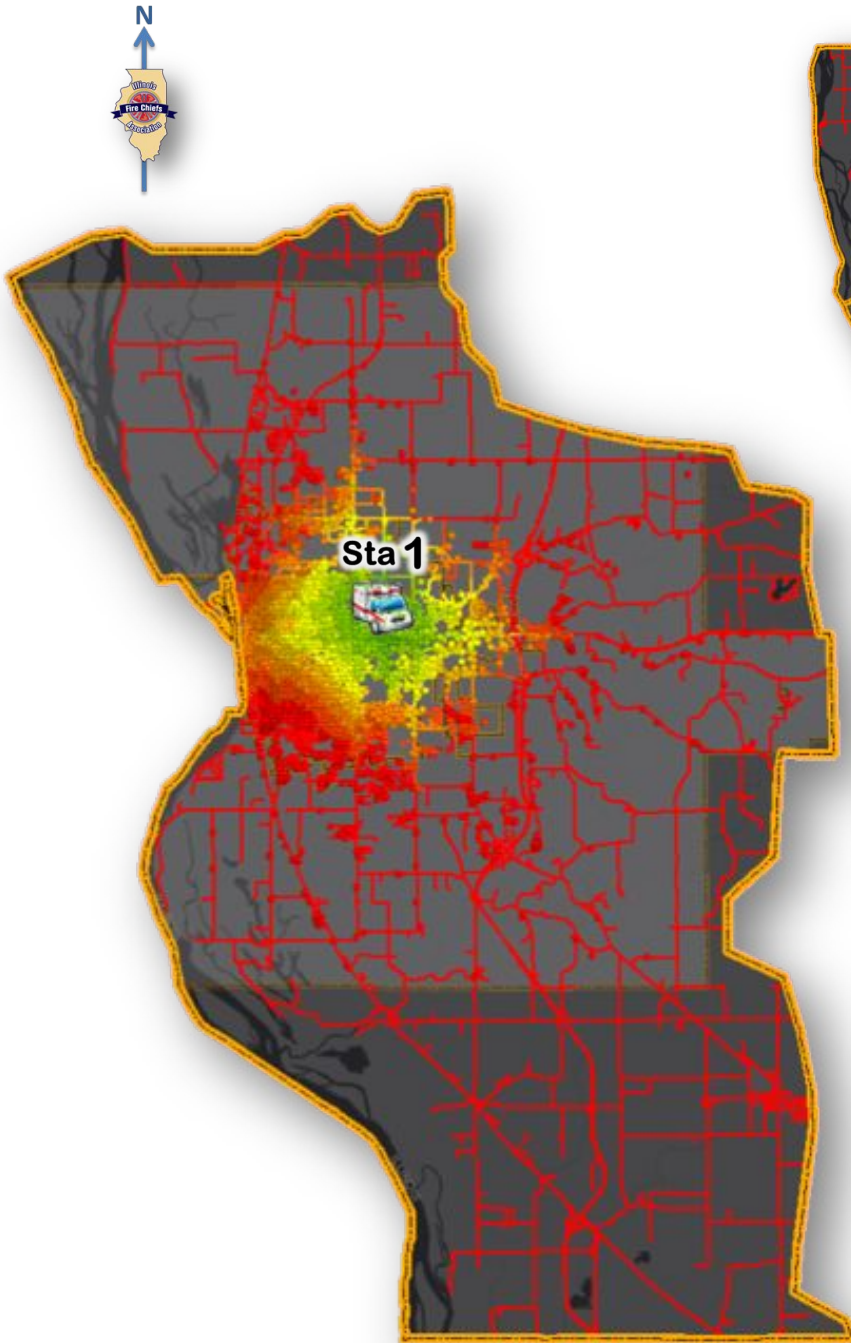
NFIRS 300: Rescue EMS



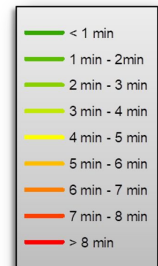
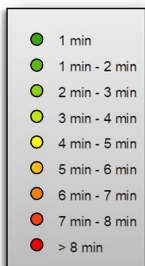


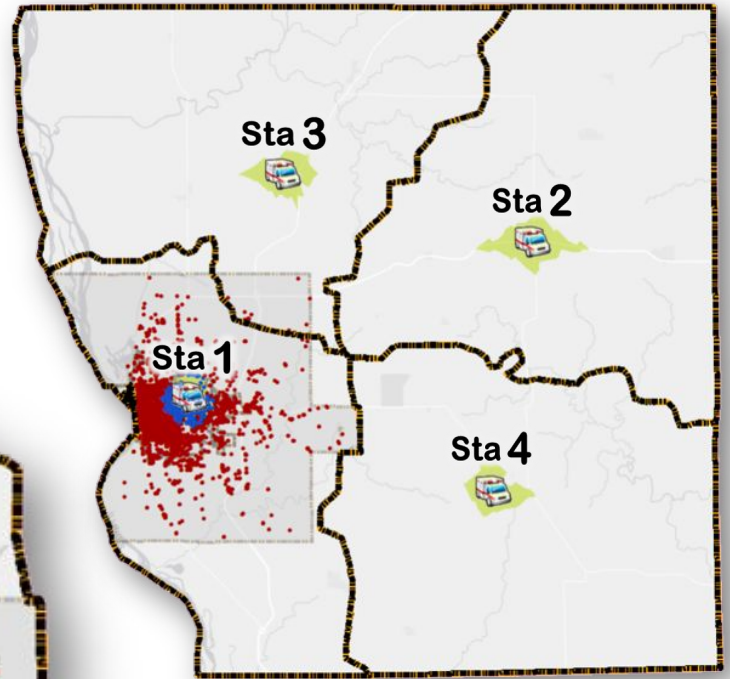
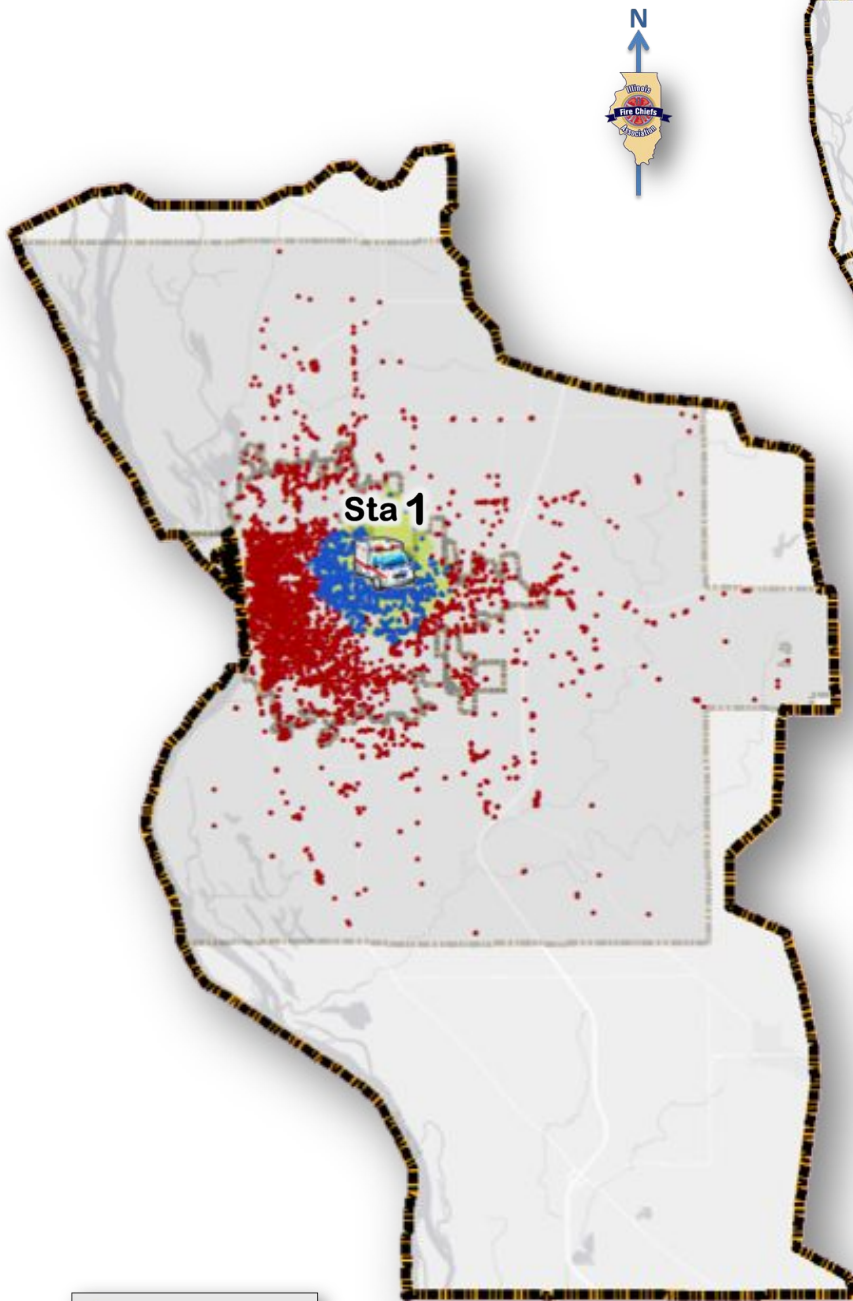
Incidents & Streets by Drive Time - TRA
TRA Incidents
Response Times - TRA





Incidents and streets are displayed based on travel time from the closest fire station.





- 4 Minute Catchment
- Incidents Inside Catchment
- Incidents Outside Catchment

INC TRAVEL TIME
18%
 WITHIN 4 MINUTES

84%
 INCIDENTS WITHIN
 8 MINUTE COVERAGE

INC TRAVEL TIME
31%
 WITHIN 4 CATCHMENT

INC TRAVEL TIME
17%
 WITHIN 4 CATCHMENT

INC TRAVEL TIME
69%
 WITHIN 8 CATCHMENT

INC TRAVEL TIME
84%
 WITHIN 8 CATCHMENT





Fire & EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
ACEMS	0:10:02	0:08:43	0:08:02	0:07:34	0:07:12
Fire Agencies	0:06:06	0:04:47	0:04:13	0:03:48	0:03:29



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
ACEMS	0:13:00	0:10:50	0:09:35	0:08:42	0:08:03
Fire Agencies	0:09:13	0:06:28	0:04:49	0:04:08	0:03:46



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
ACEMS	0:09:56	0:08:42	0:08:00	0:07:32	0:07:10
Fire Agencies	0:06:02	0:04:46	0:04:12	0:03:48	0:03:28

Adams County EMS (ACEMS) times are calculated response times.
 Quincy FD and Tri-Township FPD (Fire Agencies) times are historic response times



- Station Details Overview
- Jurisdiction Overview
- Jurisdiction Area
- Station 1 Details - Frontline
- Station 1 Details - Reserve










	RADIO NAME	STATUS	STAFFING MINIMUM	STAFFING MAXIMUM	MEDICAL CAPABILITIES
STATION 1					
ENGINE	E1	Active	2	4	BLS
ENGINE	E2	Active	0	0	
TENDER	Tanker 3	Active	0	0	BLS
BRUSH	BT5	Active	0	2	
SQUAD	Unit 4	Active	0	0	BLS
AMBULANCE	3A27	Reserve	2	2	ALS
AMBULANCE	3A11	Reserve	2	2	ALS
AMBULANCE	3A12	Reserve	2	2	ALS

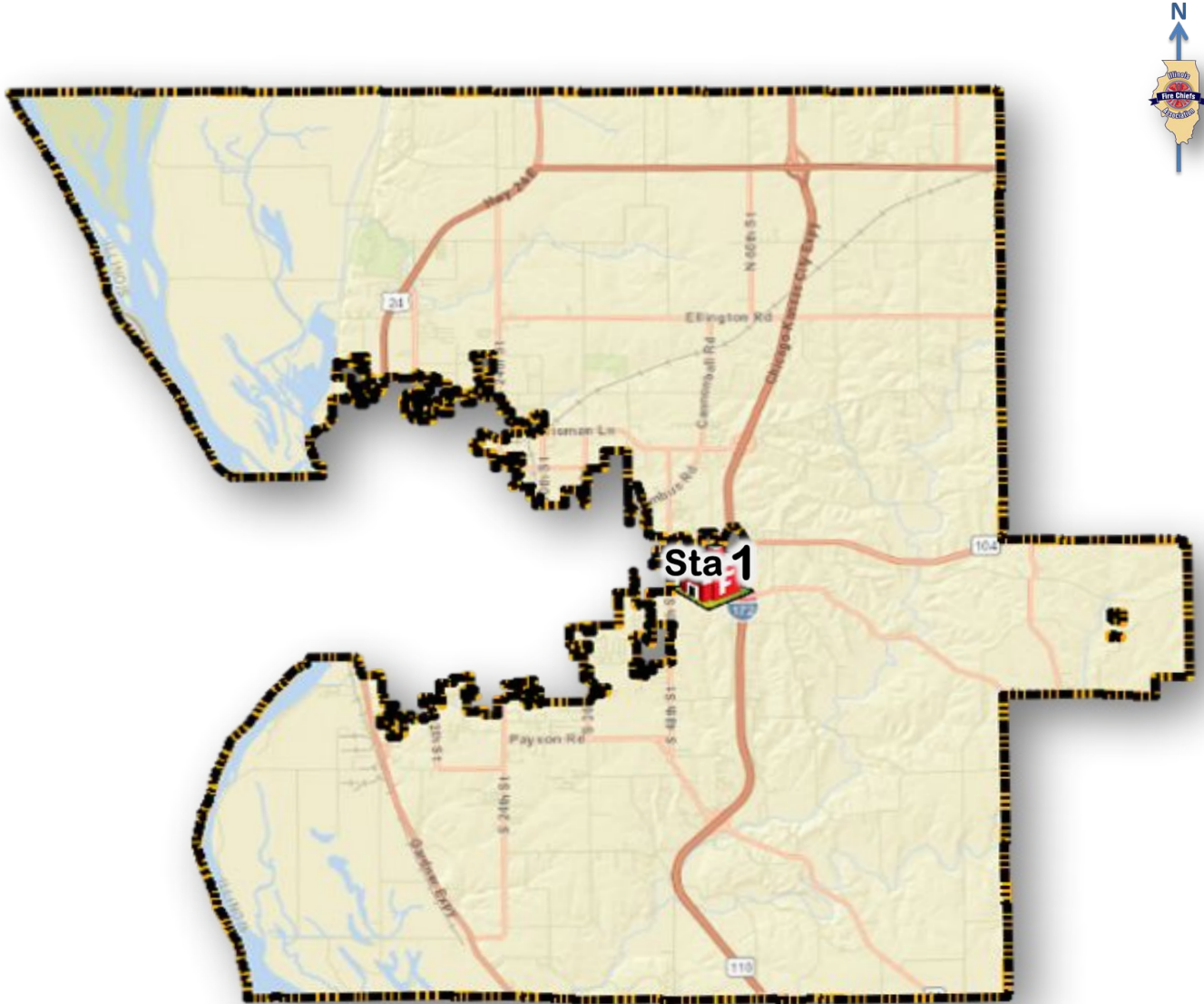




The following demographic data is provided using Esri’s demographic estimates for popular variables including: 2018 Total Population, 2018 Household Population, 2018 Median Age, 2018 Median Household Income, 2018 Per Capita Income, 2018 Diversity index and many more. Data is available from country, state, county, ZIP Code, tract, and block group level.

	 TOTAL POPULATION	 TOTAL HOUSEHOLDS	 > 65 YEARS OF AGE	 < 5 YEARS OF AGE	 MEDIAN INCOME
TRA	13,337	5,206	3,018	695	\$64,915

STATS ARE WITHIN PRIMARY SERVICE AREA



 **108.4**
AREA IN SQUARE MILE

 **13,337**
TOTAL POPULATION

 **5,206**
TOTAL HOUSEHOLDS

 **3,018**
OVER 64 YEARS OF AGE

 **695**
UNDER 5 YEARS OF AGE

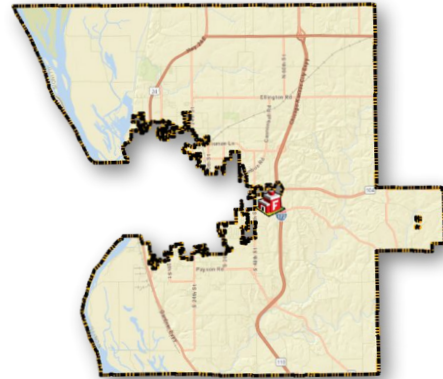
 **\$64,915**
MEDIAN INCOME





Station 1

227 S 54th St.
Quincy, IL 62305



ENGINE

E1

BLS

1 OFFICER

0 ENGINEER

2 FIREFIGHTER

STAFFING: MAX **4** MIN **2**

FRONTLINE



ENGINE

E2

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX **0** MIN **0**

FRONTLINE



TENDER

Tanker 3

BLS

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX **0** MIN **0**

FRONTLINE



Brush

BT5

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX **2** MIN **0**

FRONTLINE



SQUAD

UNIT 4

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX **0** MIN **0**

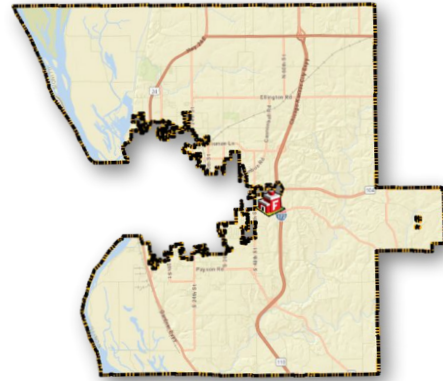
FRONTLINE





Station 1

227 S 54th St.
Quincy, IL 62305



AMBULANCE

3A27

ALS

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX 2 MIN 2

RESERVE



AMBULANCE

3A11

ALS

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX 2 MIN 2

RESERVE



AMBULANCE

3A12

ALS

0 OFFICER

0 ENGINEER

0 FIREFIGHTER

STAFFING: MAX 2 MIN 2

RESERVE





Service Area Overview
Area Served by Drive Time
Streets Covered by Drive Time





AREA SERVED

108.4

AREA IN SQUARE
MILES



4 MIN CATCHMENT:
AREA

3%



STREETS SERVED

343.7

STREETS IN MILES



4 MIN CATCHMENT:
STREETS

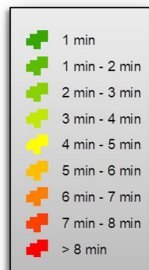
3%


TRA


STATS ARE WITHIN PRIMARY SERVICE AREA



One-minute catchment increments..



4 MINUTE COVERAGE

2.8
 AREA IN SQUARE MILES

4 MINUTE COVERAGE

3%
 PERCENTAGE OF TRA

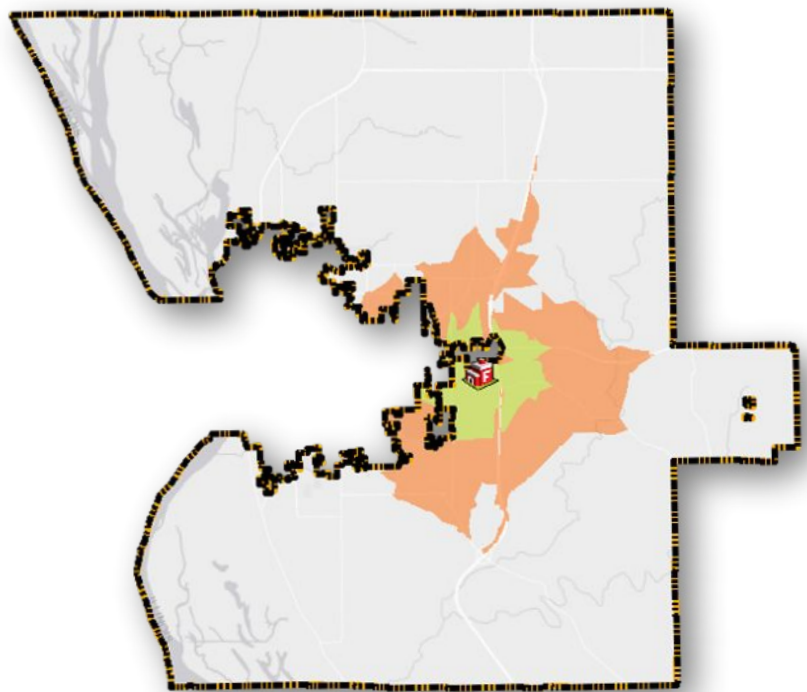


8 MINUTE COVERAGE

13.6
 AREA IN SQUARE MILES

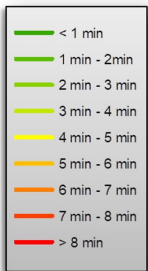
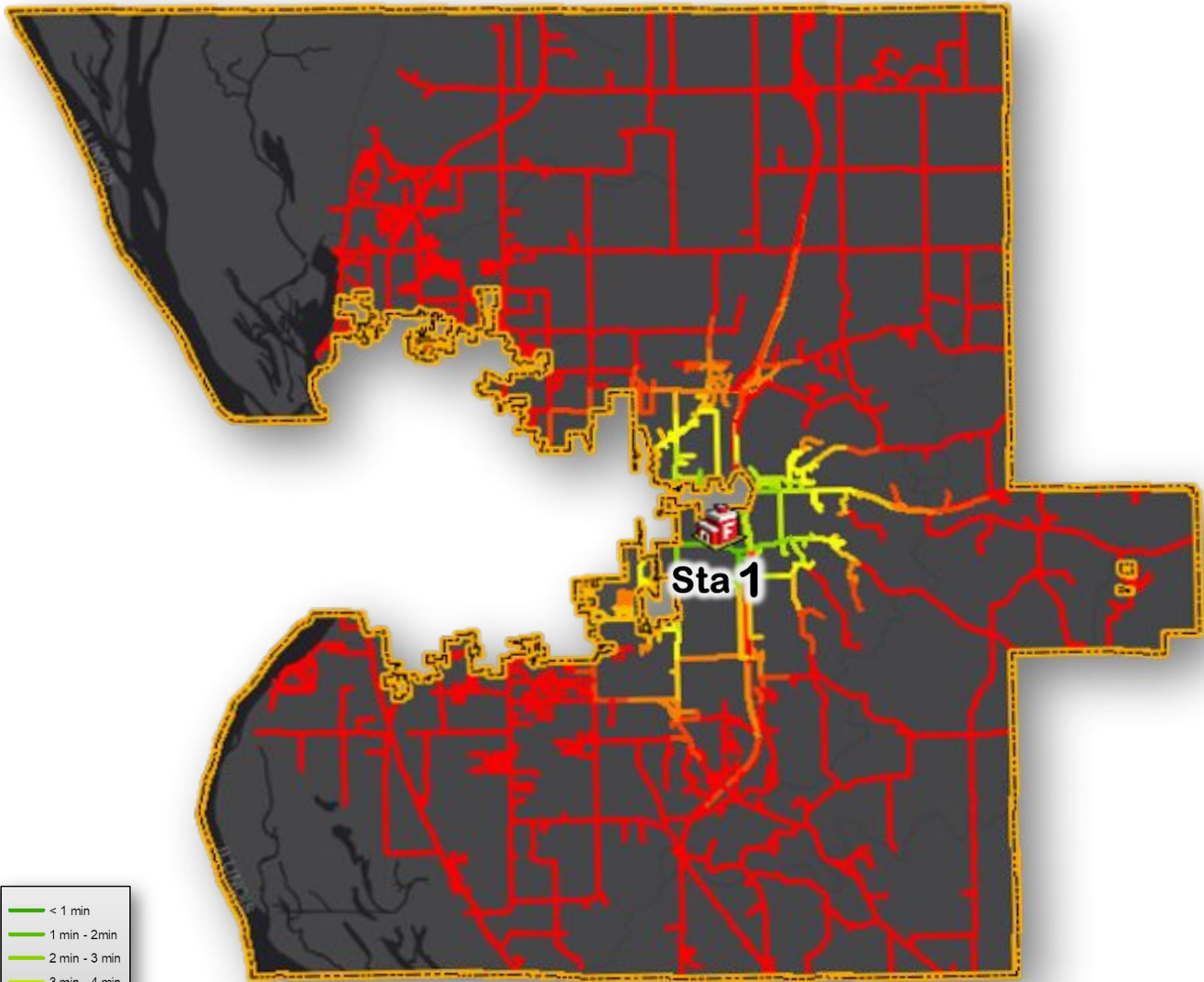
8 MINUTE COVERAGE

13%
 PERCENTAGE OF TRA




Four-minute and eight-minute catchments.





 **343.7**
ROAD MILES

4 MINUTE COVERAGE
 **11.2**
ROAD MILES

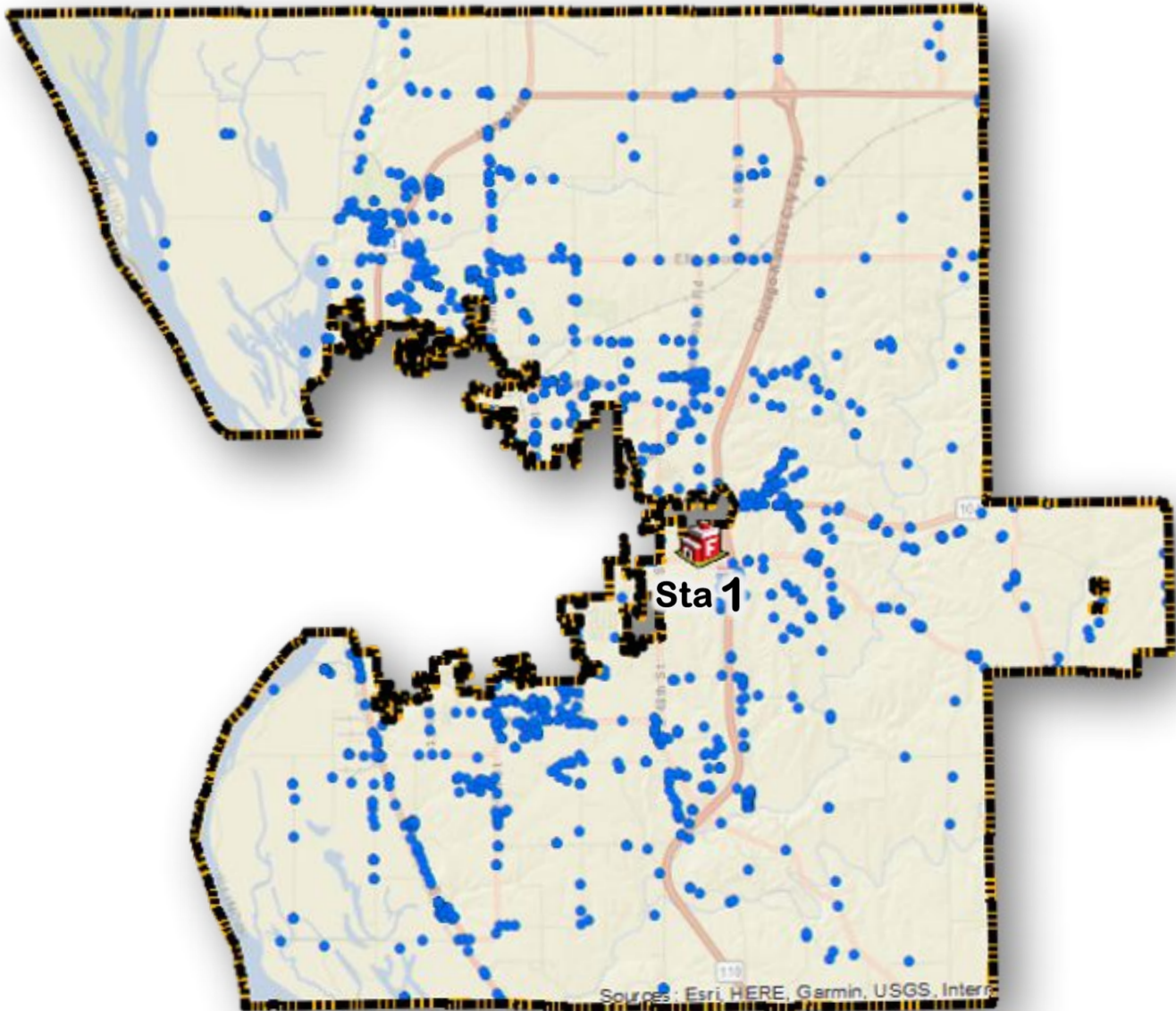
4 MINUTE COVERAGE
 **3%**
PERCENTAGE OF TRA





- All Incidents
- Incidents by Year
- NFIRS Group 100
- NFIRS Group 200
- NFIRS Group 300
- NFIRS Group 400
- NFIRS Group 500
- NFIRS Group 600
- NFIRS Group 700
- NFIRS Group 800
- NFIRS Group 900





Tri-Township FPD

SOURCE OF INCIDENT DATA



1,862
TOTAL INCIDENTS



JAN 2016 - DEC 2018

INCIDENT TIME PERIOD

1,675
TRA INCIDENTS











All Incident

	2016	2017	2,018
In TRA	511	560	526
Outside TRA	67	76	83

Incident by Class In District

	2016	2017	2,018
 Fire	59	46	47
 EMS	243	241	248
 Other	249	273	231

Incident by Class Outside District

	2016	2017	2,018
 Fire	7	11	16
 EMS	21	18	22
 Other	39	47	45

Incident Classes:

Fire: All NFIRS group 100

EMS: All NFIRS group 300

Other: All NFIRS groups excluding groups 100 and 300





Fire

Brush or brush-and-grass mixture fire	25
Building fire	42
Chimney or flue fire, confined to chimney or flue	1
Fire in mobile home used as fixed residence	2
Fire, other	4
Fires in structure other than in a building	1
Forest, woods or wildland fire	8
Grass fire	21
Incinerator overload or malfunction, fire confined	1
Mobile property (vehicle) fire, other	6
Natural vegetation fire, other	4
Off-road vehicle or heavy equipment fire	1
Outside equipment fire	1
Outside rubbish, trash or waste fire	33
Outside storage fire	1
Passenger vehicle fire	16
Road freight or transport vehicle fire	1
Trash or rubbish fire, contained	18

186





Overpressure Rupture Explosion Overheat No Fire

0

0





Rescue EMS

Extrication of victim(s) from machinery	1
Extrication of victim(s) from vehicle	2
Lock-in (if lock out , use 511)	1
Medical assist, assist EMS crew	703
Motor vehicle accident with injuries	81
Motor vehicle/pedestrian accident (MV Ped)	1
Search for person in water	2
Swift water rescue	1
Swimming/recreational water areas rescue	1

793





Hazardous Condition No Fire

Aircraft standby	1
Arcing, shorted electrical equipment	13
Breakdown of light ballast	1
Carbon monoxide incident	10
Chemical spill or leak	1
Electrical wiring/equipment problem, other	6
Gas leak (natural gas or LPG)	19
Gasoline or other flammable liquid spill	1
Hazardous condition, other	4
Heat from short circuit (wiring), defective/worn	1
Overheated motor	3
Power line down	25
Refrigeration leak	1
Vehicle accident, general cleanup	90
	176





Service Call

Animal problem, other	1
Assist invalid	11
Assist police or other governmental agency	6
Person in distress, other	13
Service Call, other	35
Smoke or odor removal	1
Unauthorized burning	2
Water problem, other	2

71





Canceled Good Intent

Authorized controlled burning	43
Dispatched & canceled en route	326
Good intent call, other	41
HazMat release investigation w/no HazMat	7
Smoke scare, odor of smoke	8
Steam, vapor, fog or dust thought to be smoke	2

427





False Alarm False Call

Alarm system activation, no fire - unintentional	42
Alarm system sounded due to malfunction	14
Carbon monoxide detector activation, no CO	9
CO detector activation due to malfunction	8
Detector activation, no fire - unintentional	96
False alarm or false call, other	20
Heat detector activation due to malfunction	1
Smoke detector activation due to malfunction	3
Smoke detector activation, no fire - unintentional	9
Sprinkler activation due to malfunction	2
System malfunction, other	1
Unintentional transmission of alarm, other	1
	206





Severe Weather and Natural Disaster

Lightning strike (no fire)

2

2





Special Incident Type

Special type of incident, other

2

2





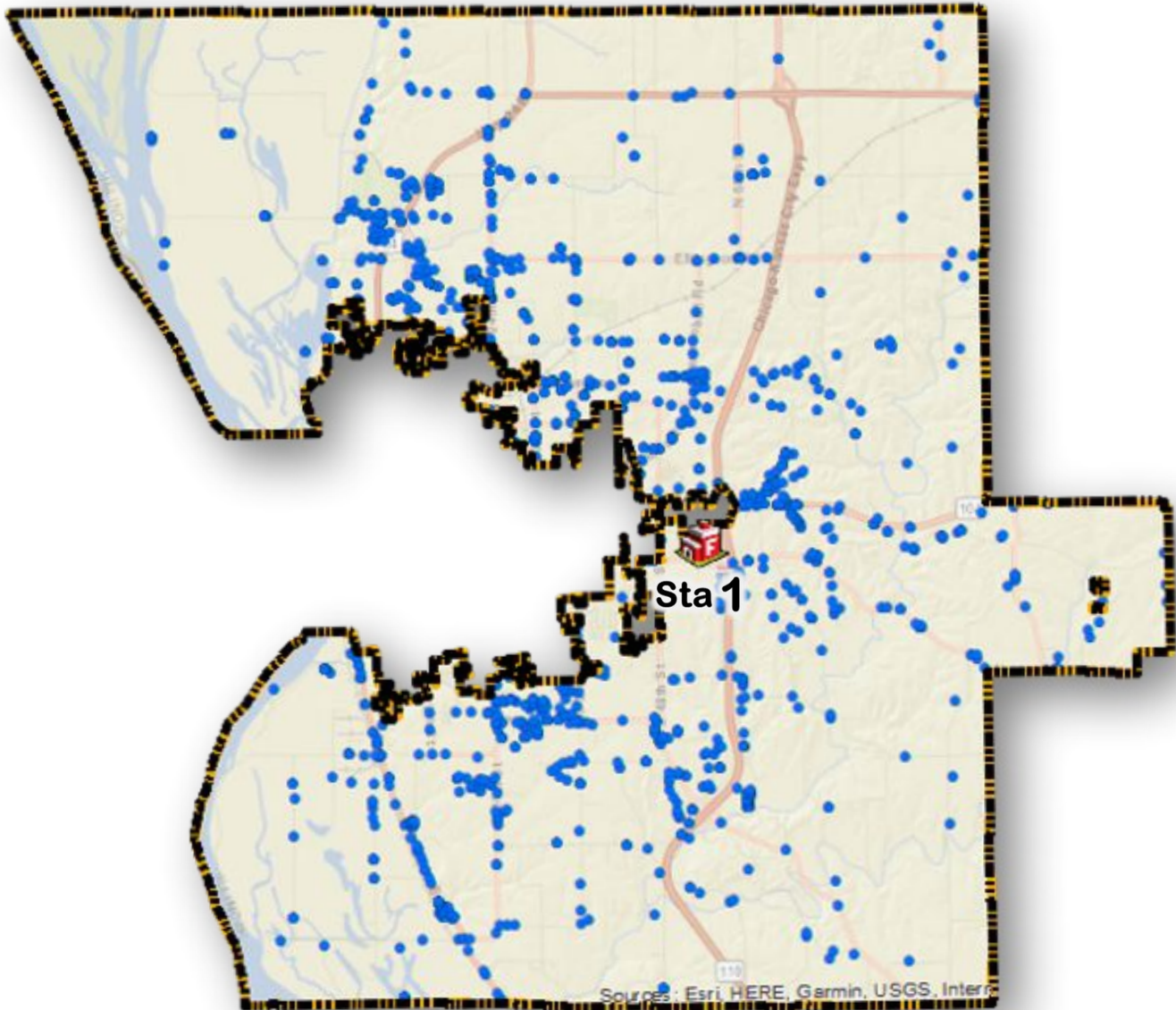
TRA





1,675

AOR INCIDENTS



NFIRS Groups: Counts and Percentages

100	300	400	500	600	700	800	900
154	743	152	60	367	196	2	1
9.2%	44.4%	9.1%	3.6%	21.9%	11.7%	0.1%	0.1%





All Incidents

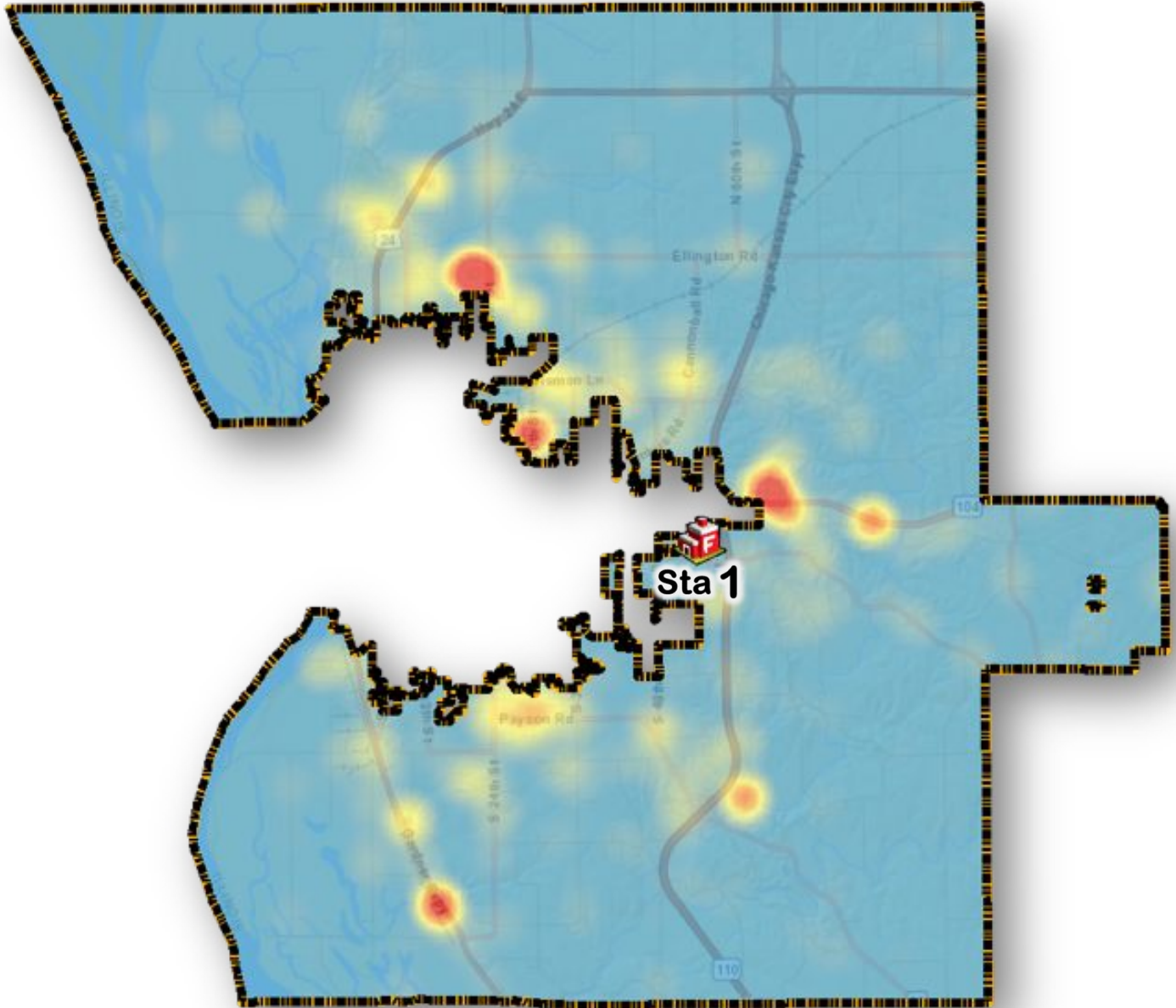
- NFIRS Group 100
- NFIRS Group 200
- NFIRS Group 300
- NFIRS Group 400
- NFIRS Group 500
- NFIRS Group 600
- NFIRS Group 700
- NFIRS Group 800
- NFIRS Group 900





1,675

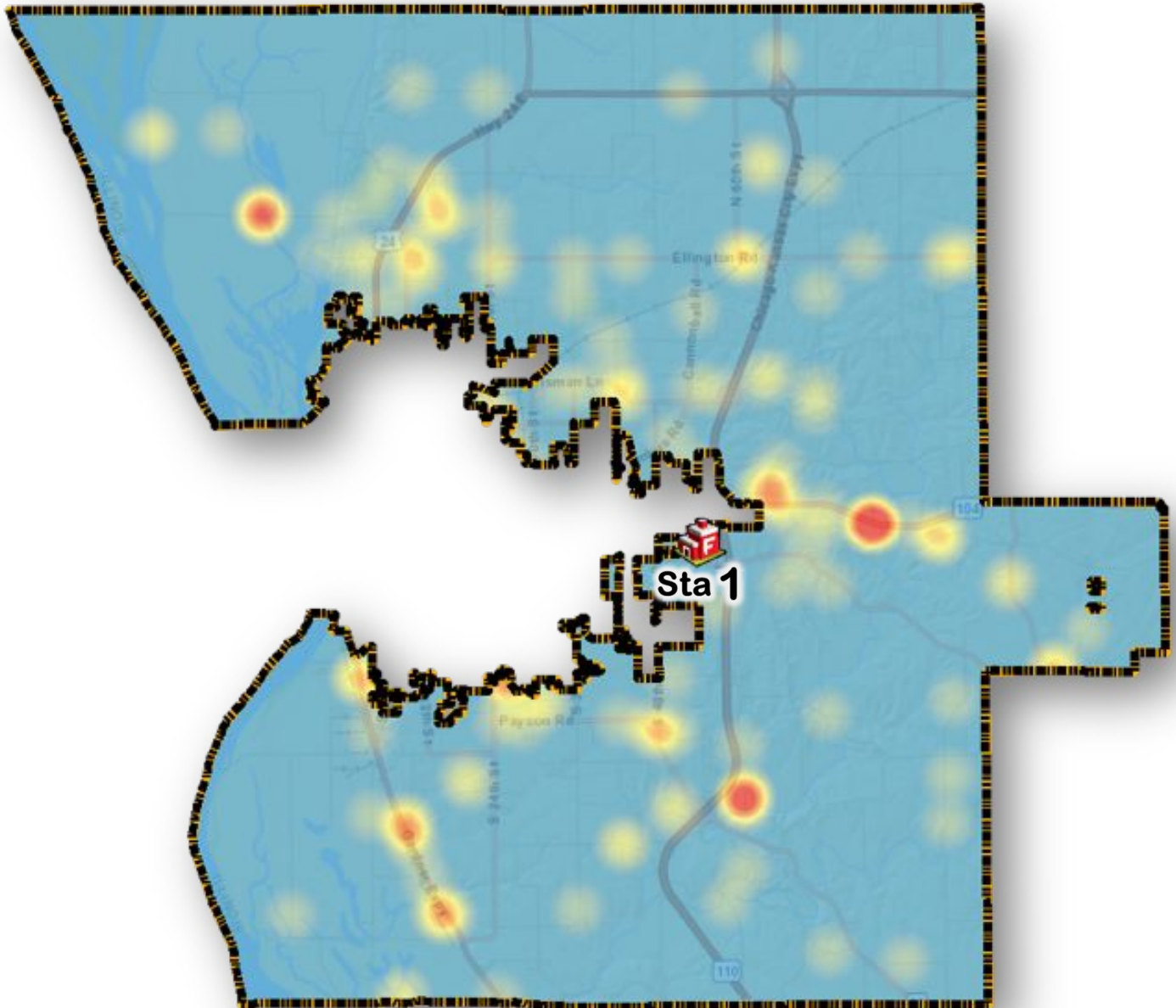
AOR INCIDENTS





154

AOR INCIDENTS



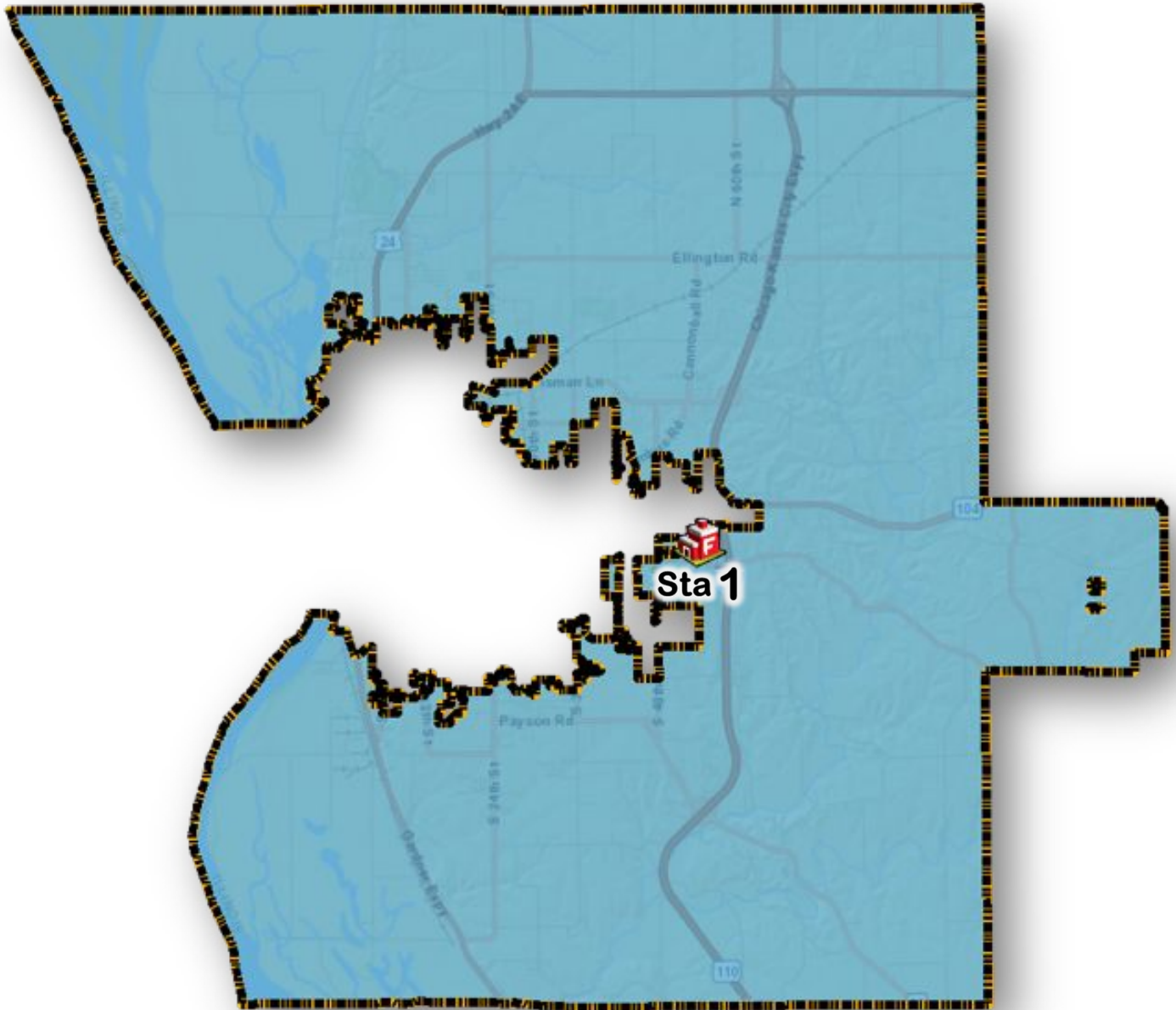
NFIRS 100: Fire





0

AOR INCIDENTS

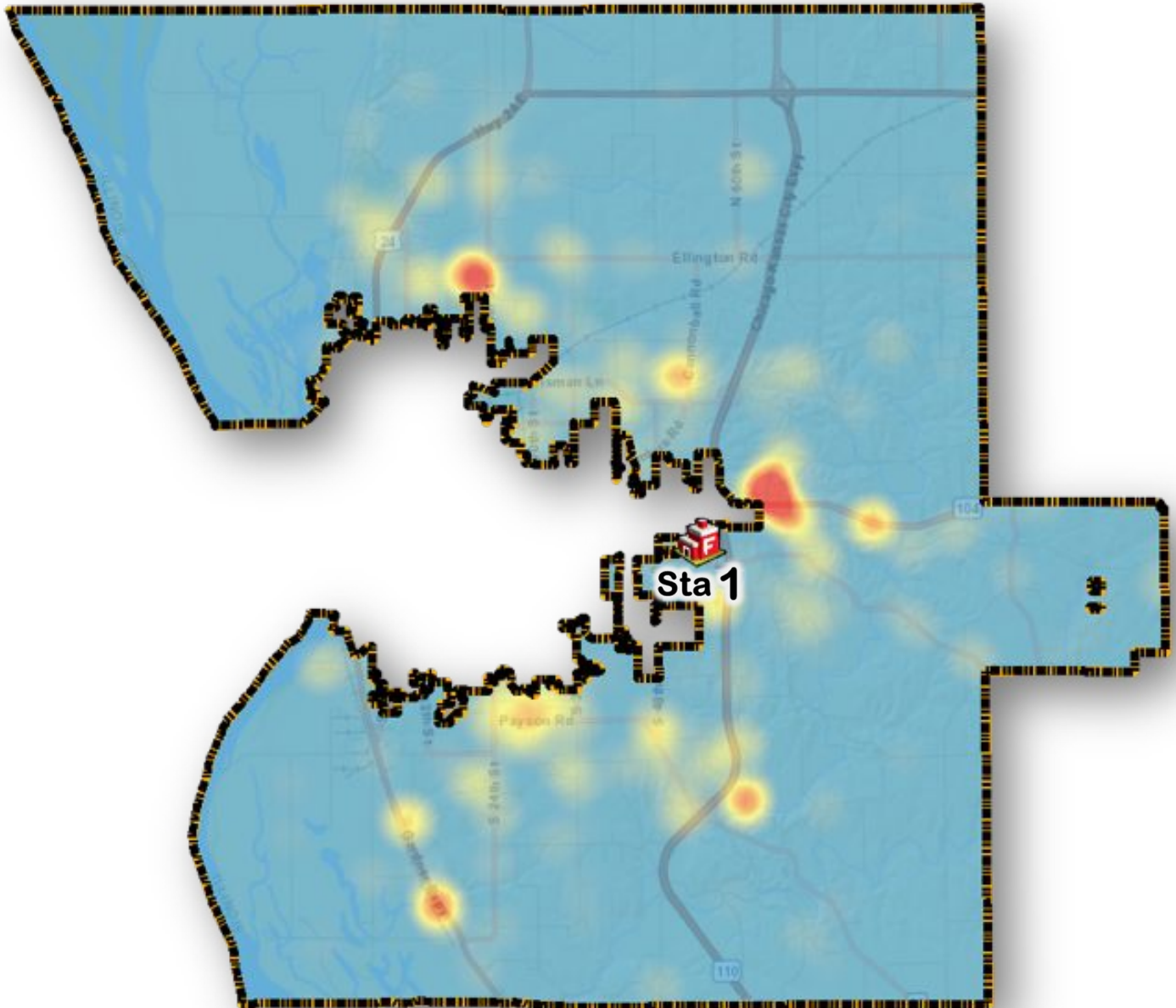


NFIRS 200: Overpressure Rupture Explosion
Overheat No Fire



743

AOR INCIDENTS



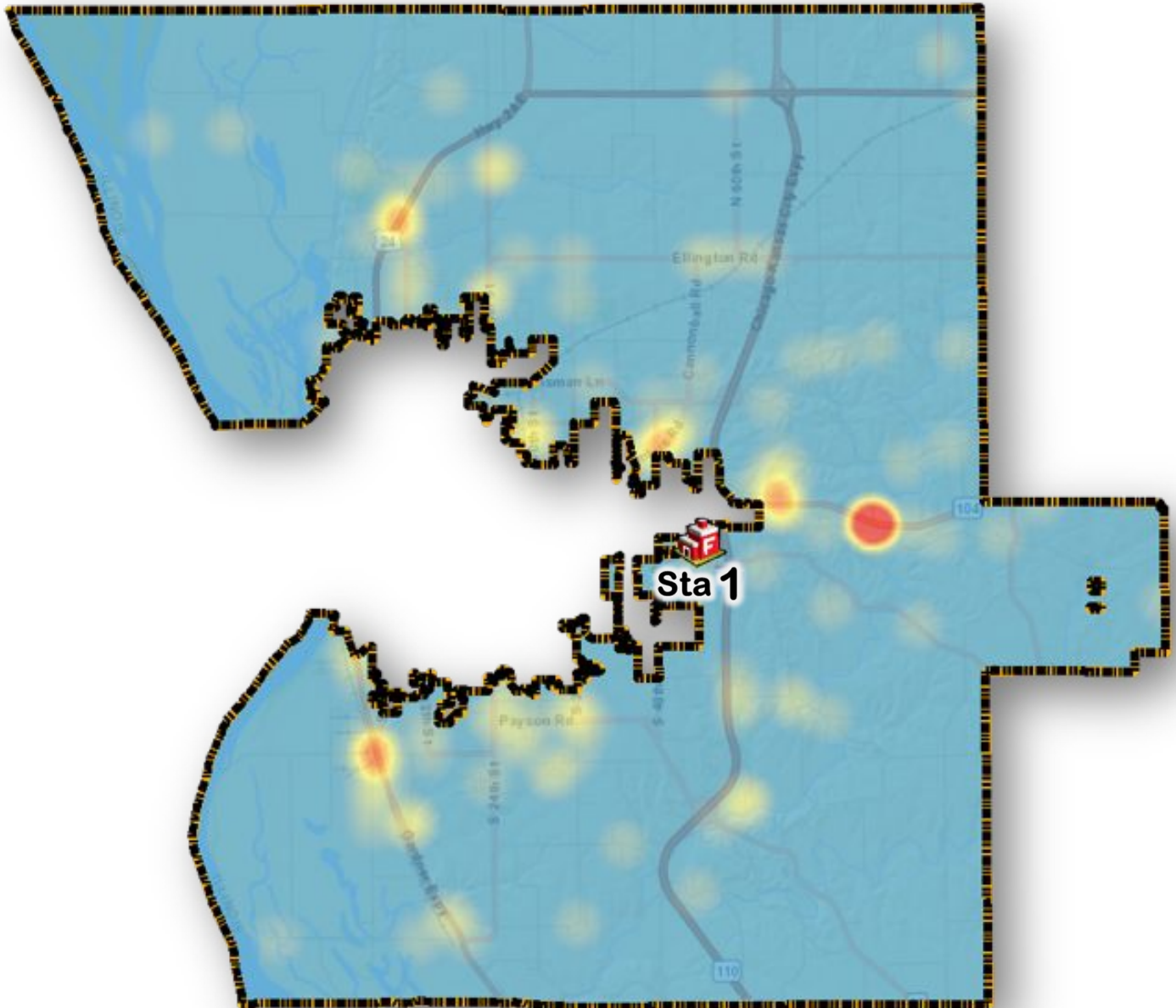
NFIRS 300: Rescue EMS





152

AOR INCIDENTS



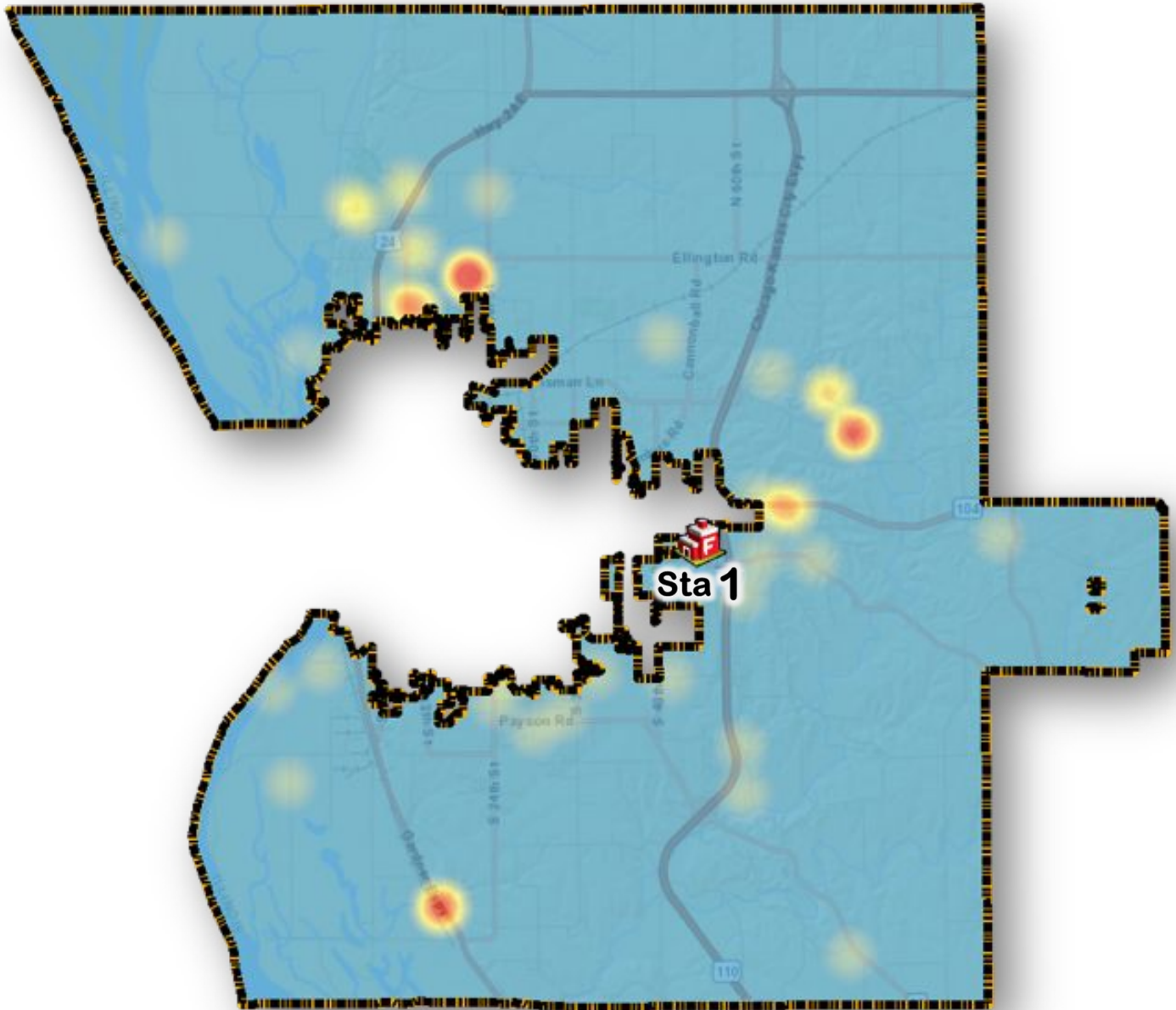
NFIRS 400: Hazardous Condition No Fire





60

AOR INCIDENTS



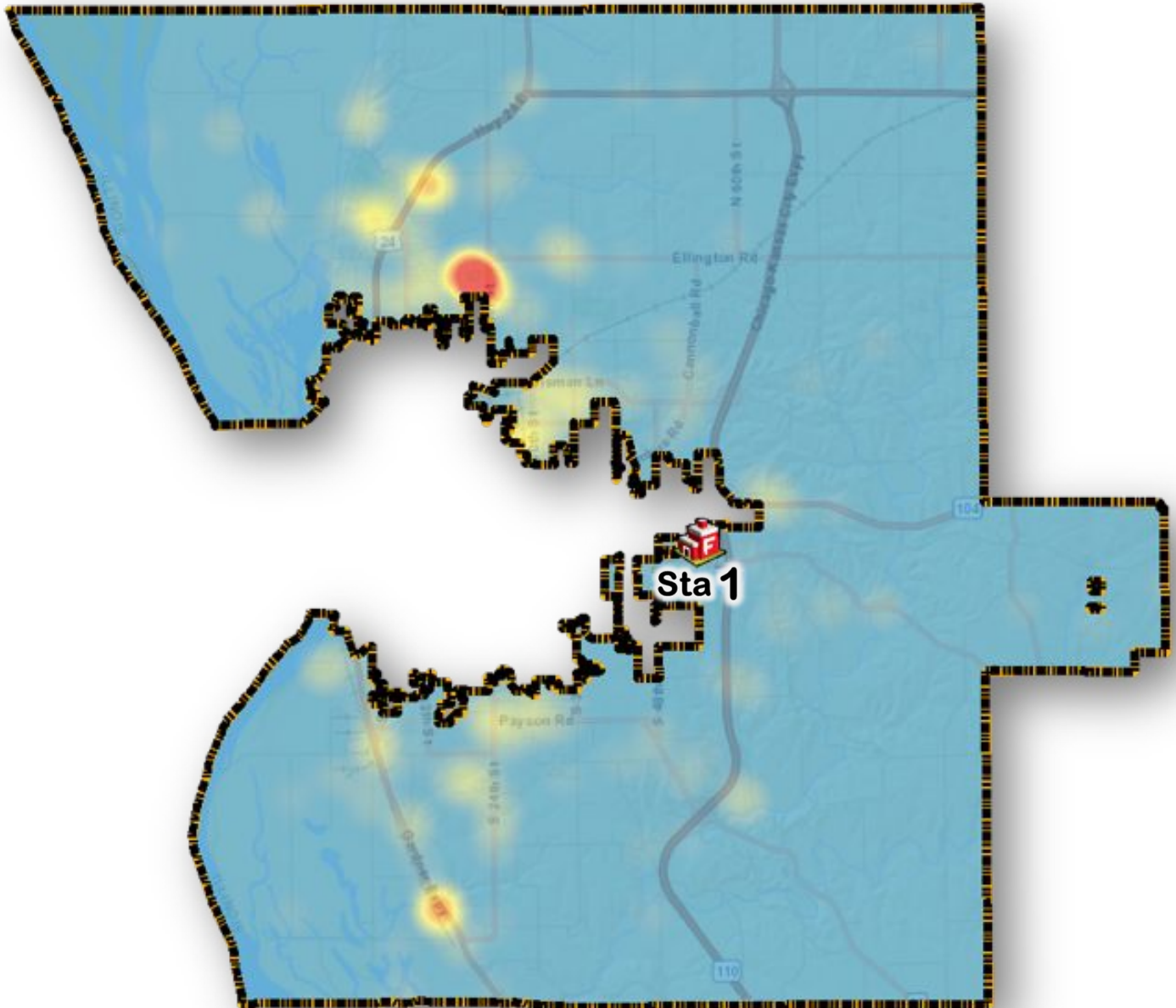
NFIRS 500: Service Call





367

AOR INCIDENTS



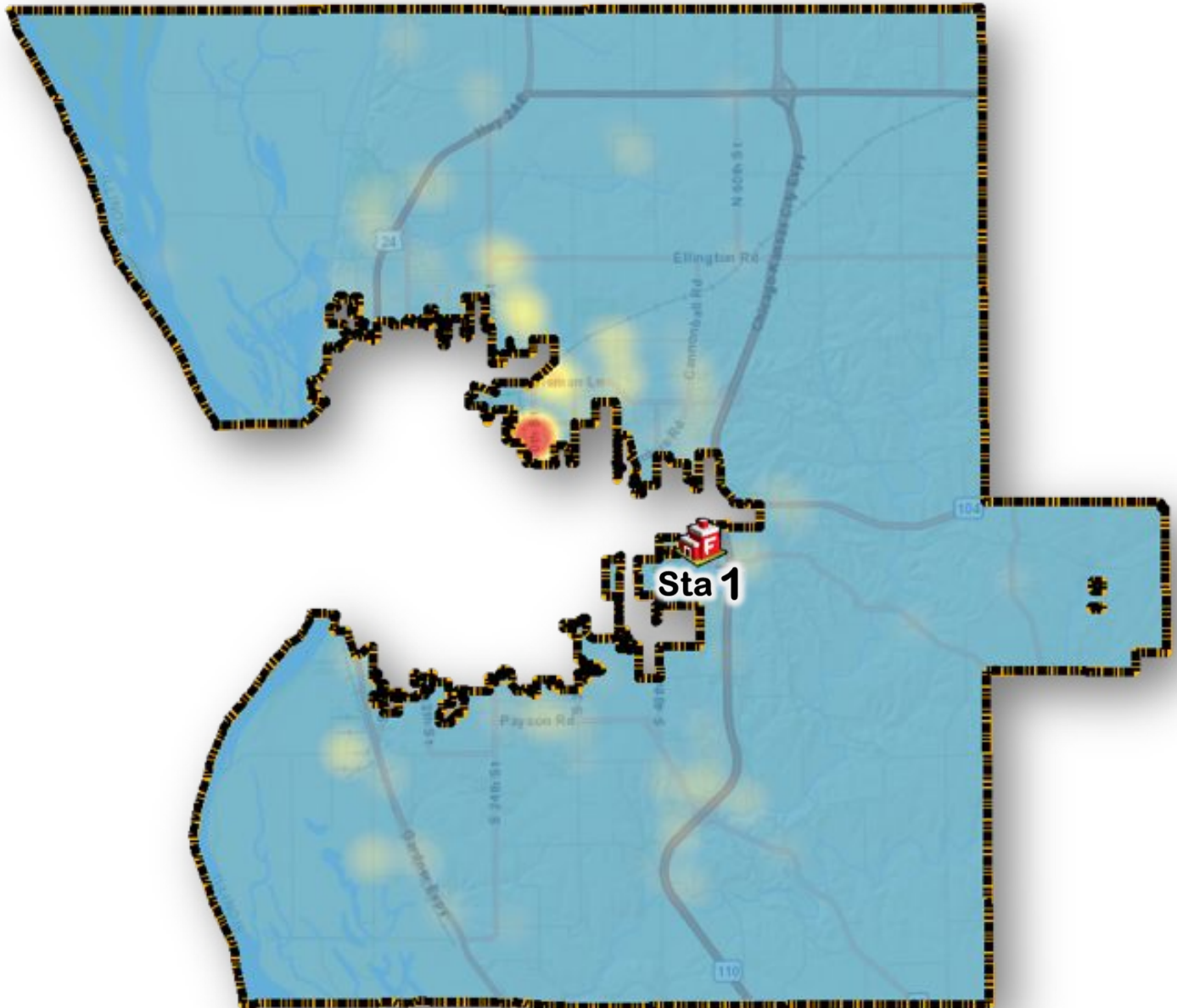
NFIRS 600: Canceled Good Intent





196

AOR INCIDENTS



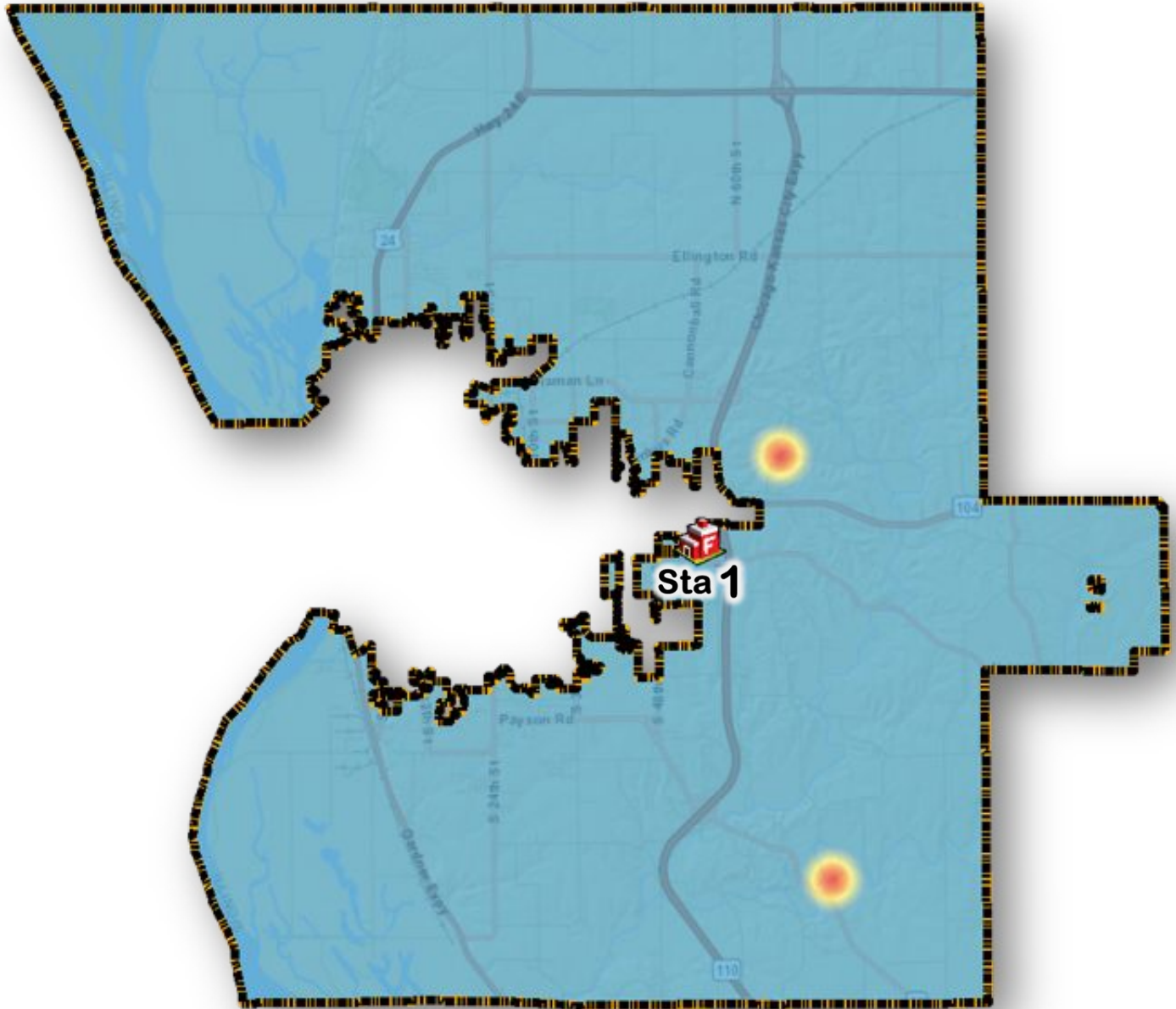
NFIRS 700: False Alarm False Call





2

AOR INCIDENTS

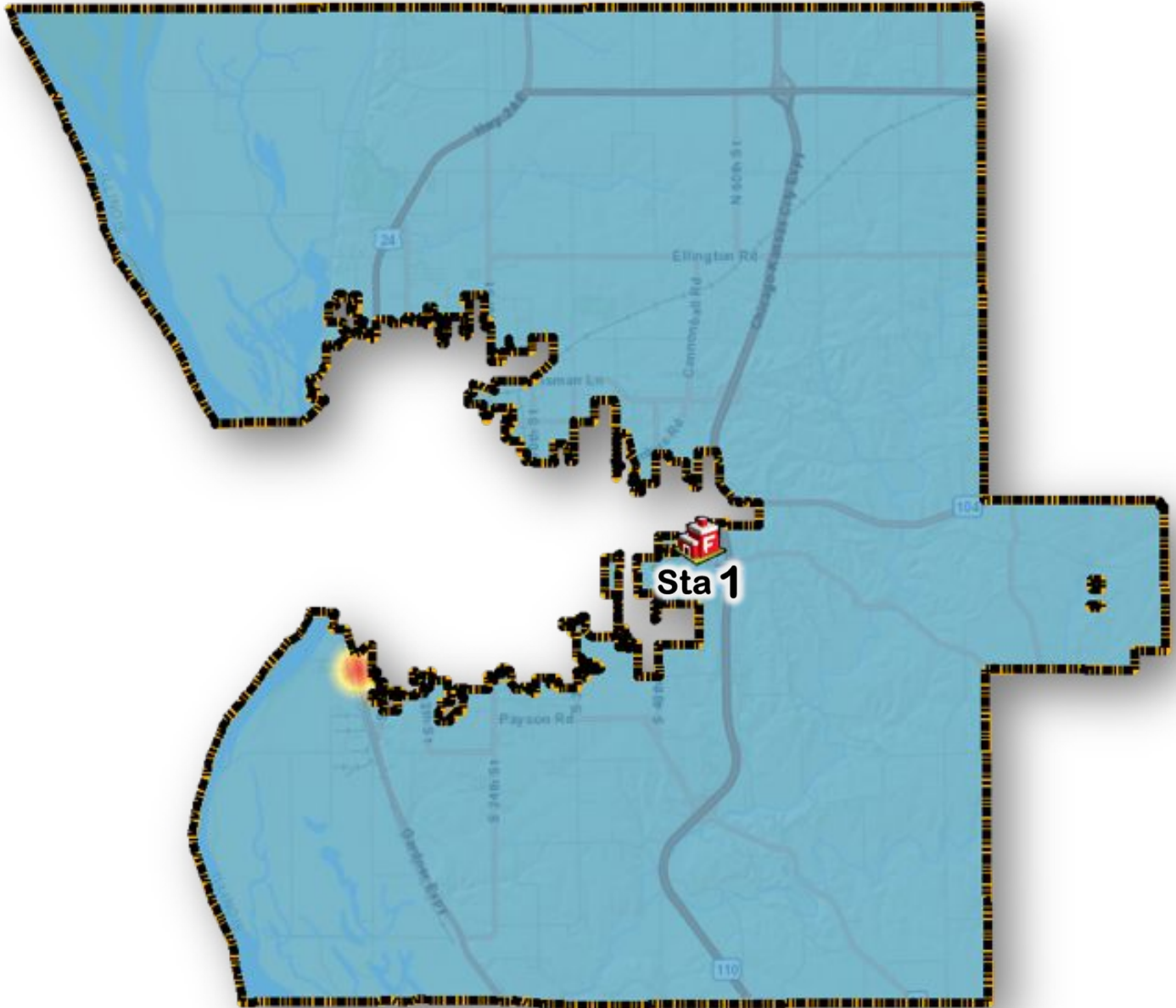


NFIRS 800: Severe Weather and natural Disaster



1

AOR INCIDENTS



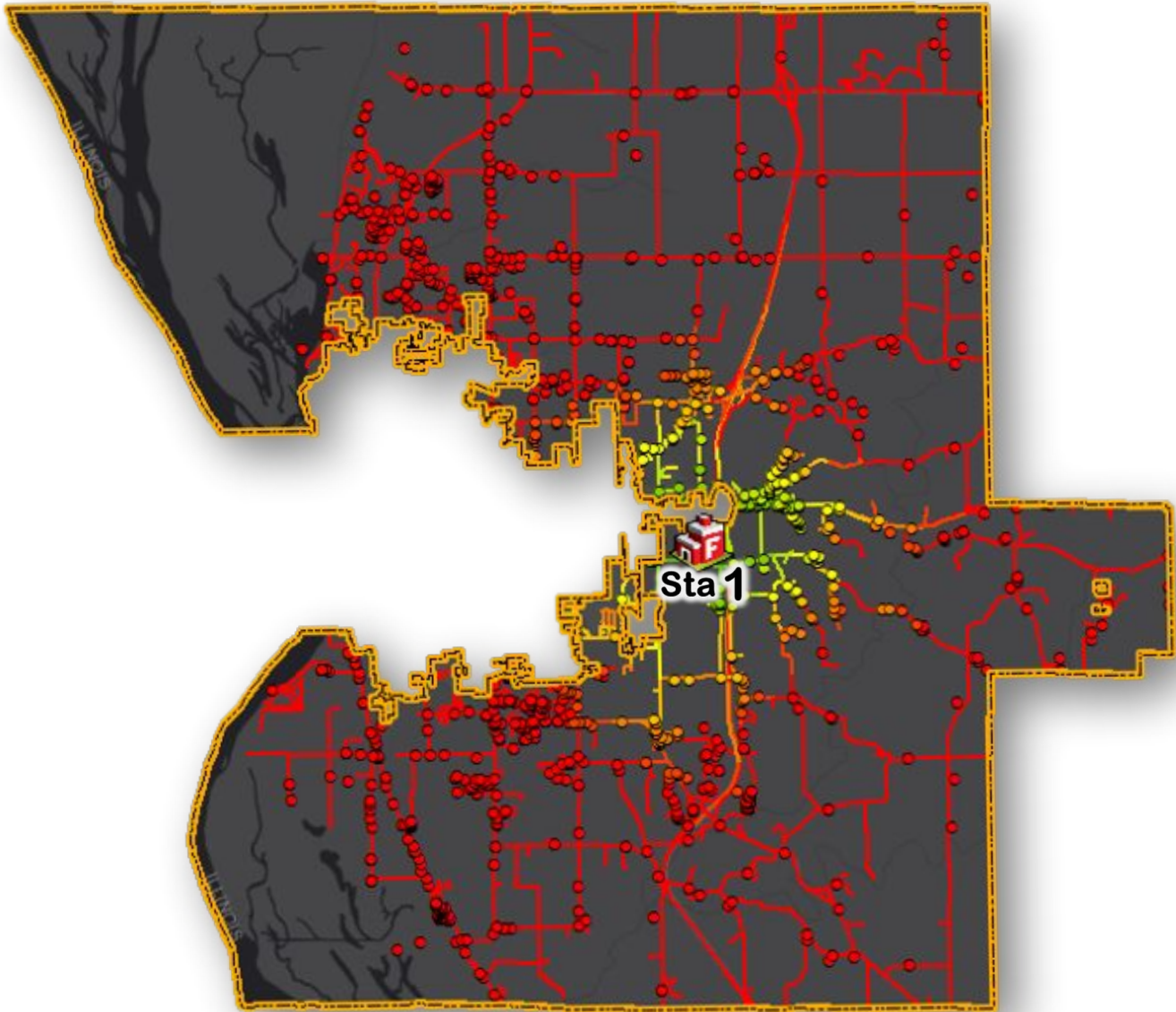
NFIRS 900: Special Incident Type



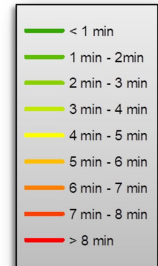
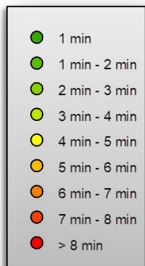


Incidents & Streets by Drive Time - TRA
TRA Incidents
Response Times - TRA





Incidents and streets are displayed based on travel time from the closest fire station.



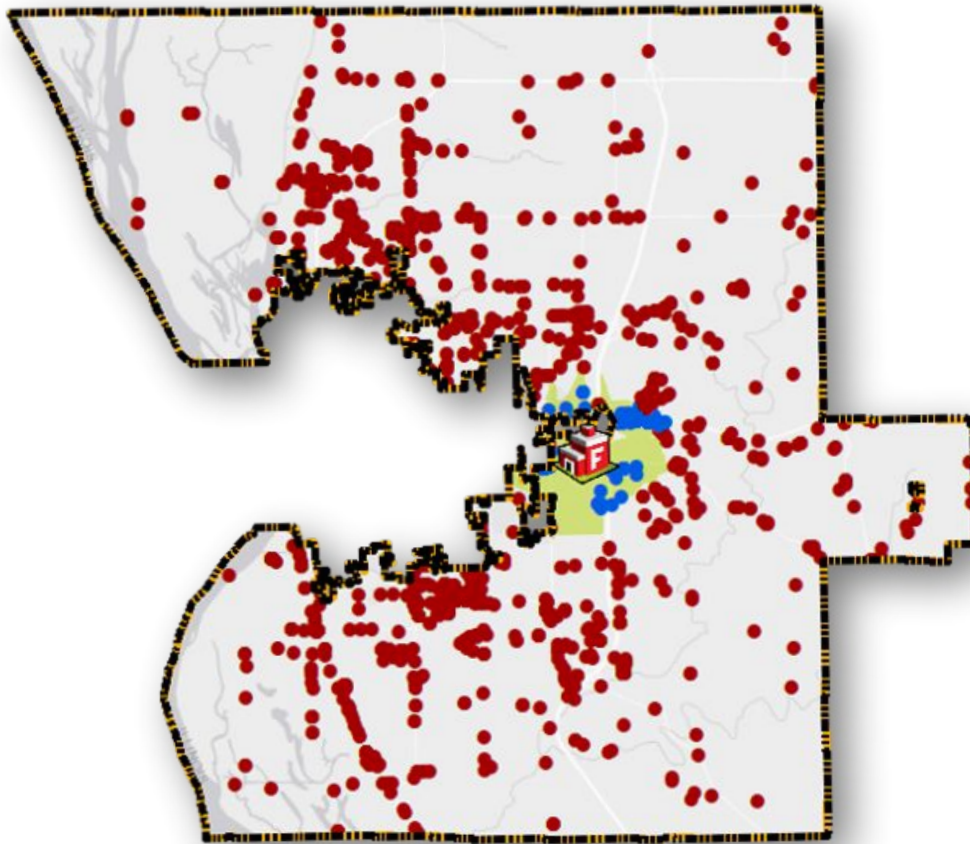



INC TRAVEL TIME






8%

WITHIN 4 MINUTES



 **30%**
INCIDENTS WITHIN
8 MINUTE COVERAGE

-  4 Minute Catchment
-  Incidents Inside Catchment
-  Incidents Outside Catchment

INC RESPONSE TIME



89%

WITHIN 4 CATCHMENT

INC RESPONSE TIME



73%

WITHIN 4 CATCHMENT

INC RESPONSE TIME



16%

COMPLETE TRA

INC RESPONSE TIME



20%

COMPLETE TRA





Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
All	0:14:16	0:12:18	0:10:39	0:09:19	0:08:19
Fire	0:14:48	0:13:00	0:11:36	0:10:04	0:09:30
EMS	0:13:10	0:11:28	0:09:57	0:08:55	0:07:50



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:17:47	0:16:00	0:14:09	0:12:42	0:11:12
Historic	0:14:16	0:12:18	0:10:39	0:09:19	0:08:19



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:19:21	0:17:35	0:16:08	0:14:13	0:13:03
Historic	0:14:48	0:13:00	0:11:36	0:10:04	0:09:30



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:17:23	0:15:17	0:14:01	0:12:01	0:11:02
Historic	0:13:10	0:11:28	0:09:57	0:08:55	0:07:50



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Ideal	0:17:52	0:16:11	0:14:13	0:12:53	0:11:12
Historic	0:15:41	0:13:25	0:11:42	0:09:47	0:08:41



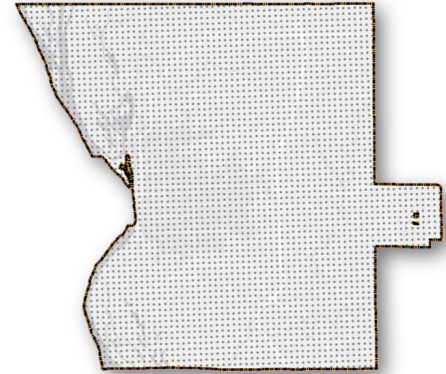
- Ideal 6 Fire Station Placement
- Ideal Fire Station Plus One
- Ideal Fire Station Minus One
- Ideal Fire Station Minimal Compliance
- Area Served by Drive Time
- TRA Coverage - Station QF 1
- TRA Coverage - Station QF 3
- TRA Coverage - Station QF 4
- TRA Coverage - Station QF 5
- TRA Coverage - Station QF 6
- TRA Coverage - Station TTF 1
- Incident Hotspots - All
- Incident Hotspots - Fire
- Incident Hotspots - EMS
- Incident Hotspots - Other
- Comparison - TRA Incidents
- Comparison - QF 1 vs Proposed QF 1
- Comparison - QF 3 vs Proposed QF 3
- Comparison - QF 4 vs Proposed QF 4
- Comparison - QF 5 vs Proposed QF 5
- Comparison - QF 6 vs Proposed QF 6
- Comparison - TTF 1 vs Proposed TTF 1



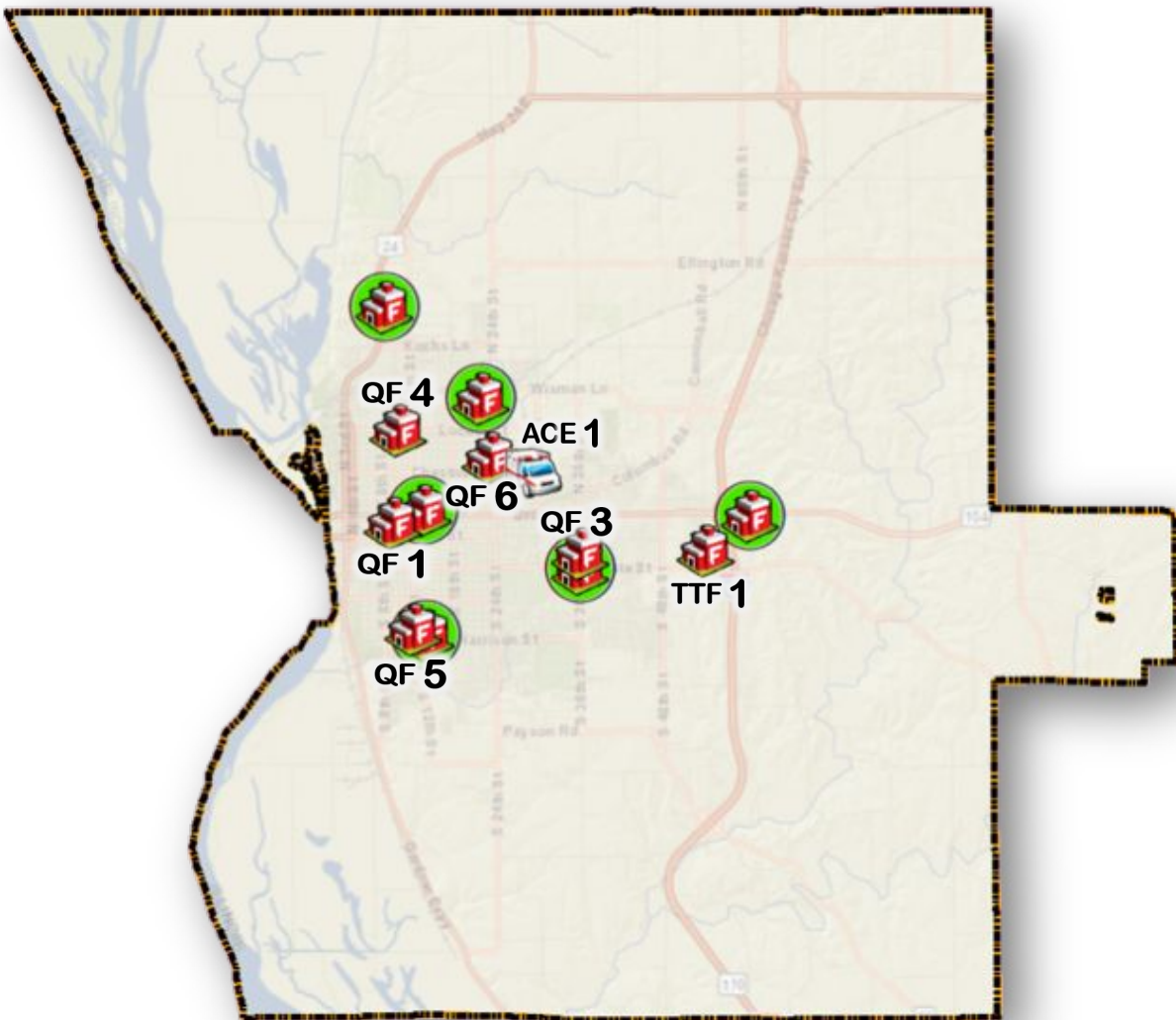


INC PERCENTAGE
91.7%
WITHIN 4 MINUTES
TRAVEL TIME

6
IDEAL STATIONS



3,419 possible sites.



Ideal Station Location:

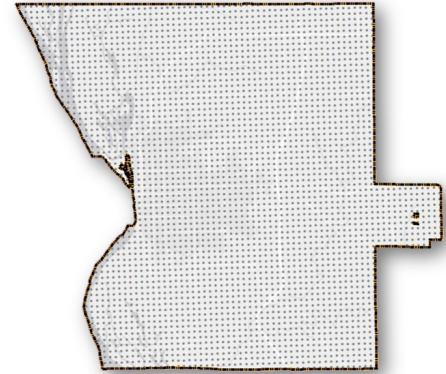
The Ideal Station Location was calculated using ESRI's Location –Allocation Analysis tool. 3,419 possible fire station sites were used with a 4 min drive time as the cutoff to reach as many incidents as possible.



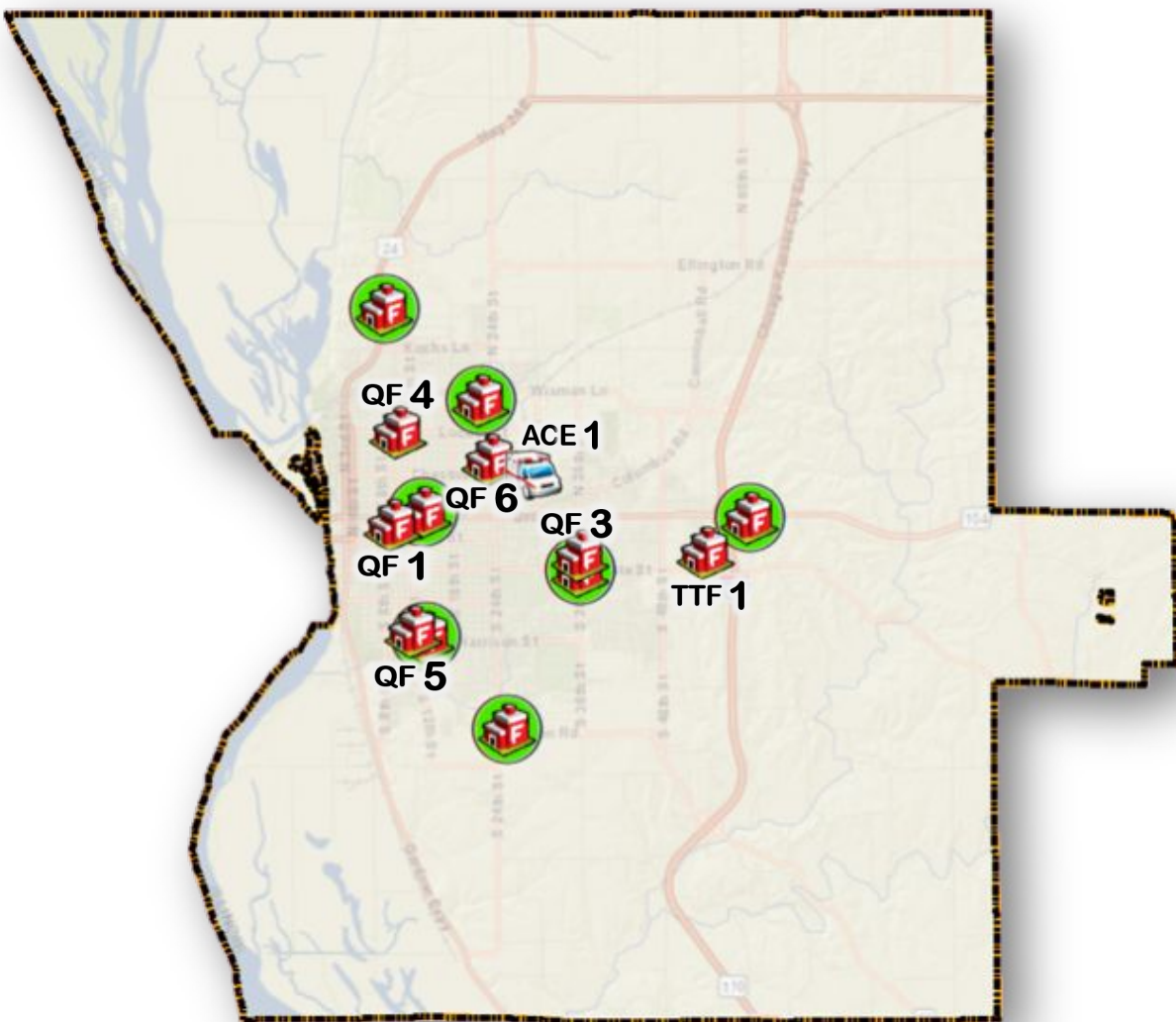


INC PERCENTAGE
93.2%
WITHIN 4 MINUTES
TRAVEL TIME

7
IDEAL STATIONS



3,419 possible sites.



Ideal Station Location:

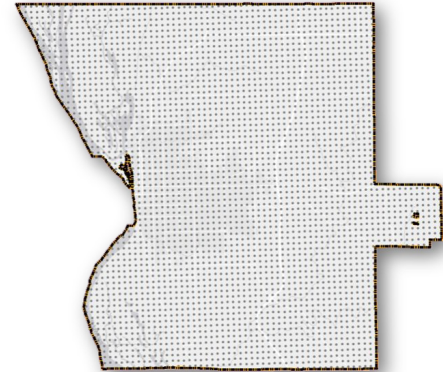
The Ideal Station Location was calculated using ESRI's Location –Allocation Analysis tool. 3,419 possible fire station sites were used with a 4 min drive time as the cutoff to reach as many incidents as possible.



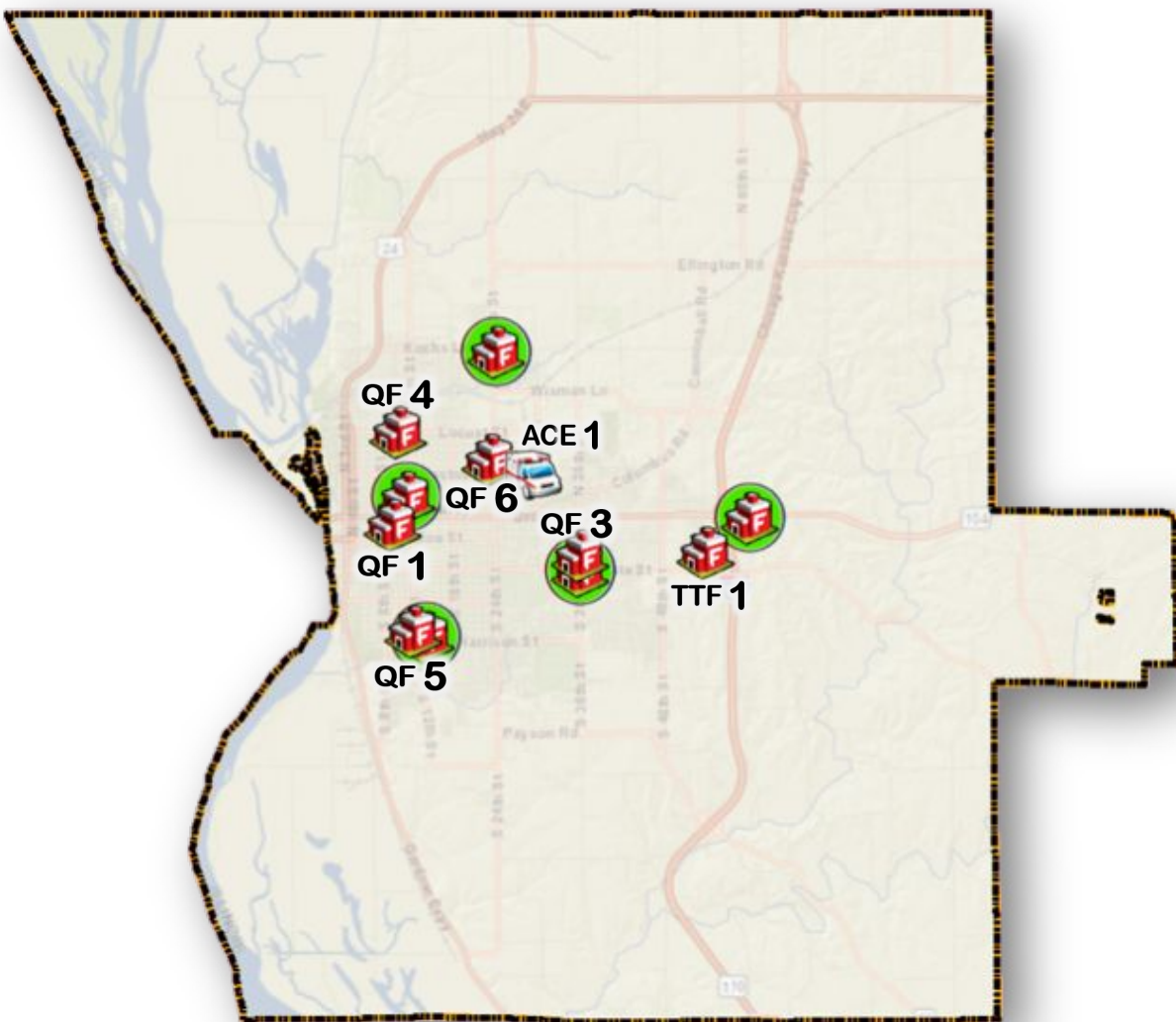


INC PERCENTAGE
89.8%
WITHIN 4 MINUTES
TRAVEL TIME

5
IDEAL STATIONS



3,419 possible sites.



Ideal Station Location:

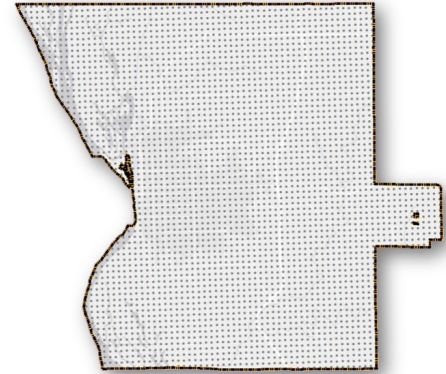
The Ideal Station Location was calculated using ESRI's Location –Allocation Analysis tool. 3,419 possible fire station sites were used with a 4 min drive time as the cutoff to reach as many incidents as possible.



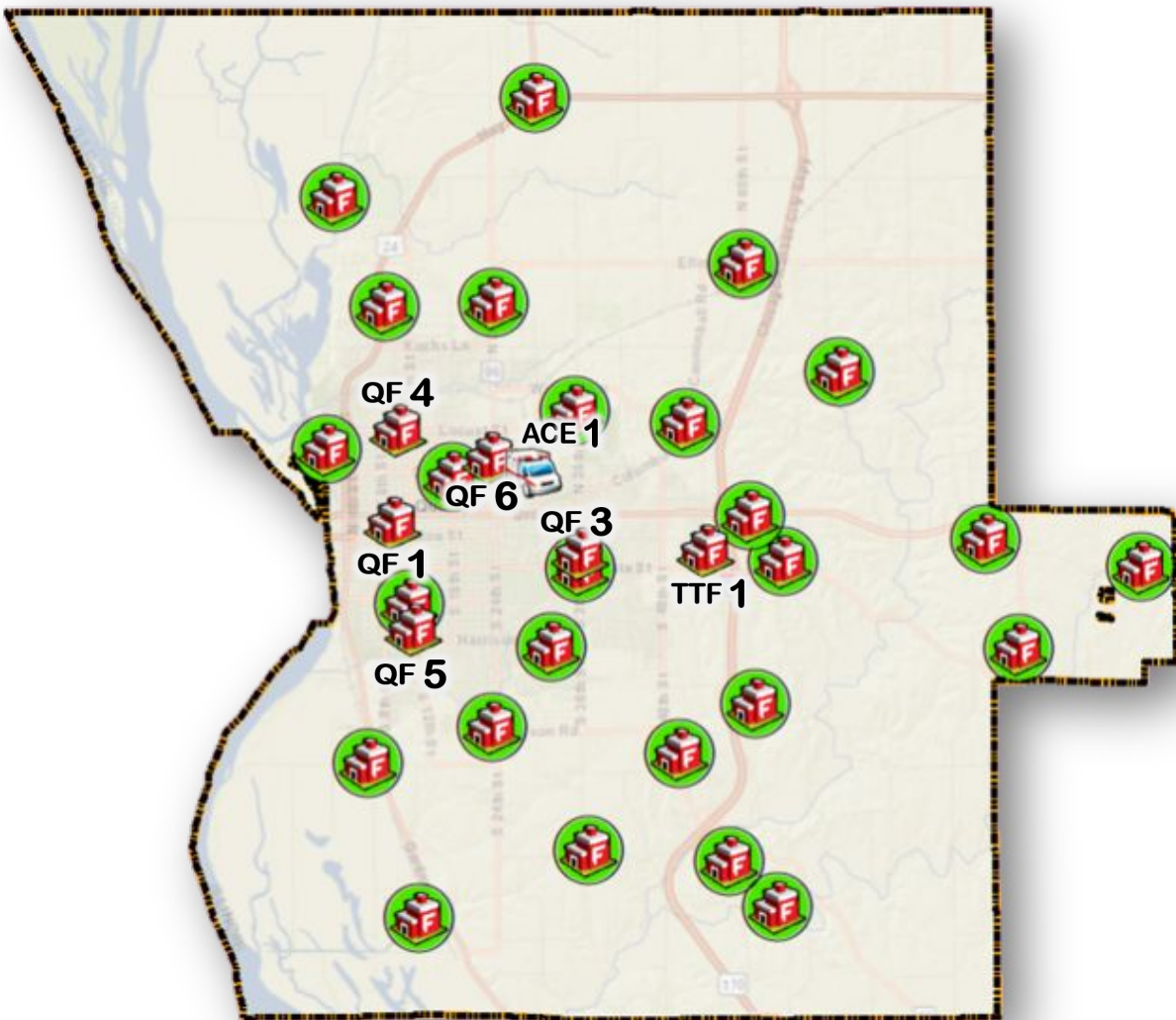


INC PERCENTAGE
99.5%
WITHIN 4 MINUTES
TRAVEL TIME

26
IDEAL STATIONS



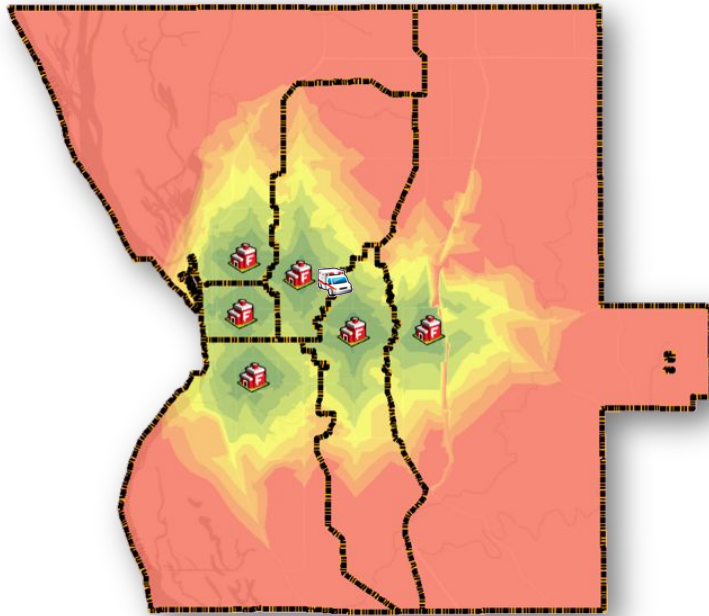
3,419 possible sites.



Ideal Station Location:

The Ideal Station Location was calculated using ESRI's Location –Allocation Analysis tool. 3,419 possible fire station sites were used with a 4 min drive time as the cutoff to reach as many incidents as possible.



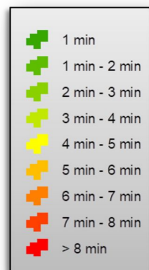


4 MINUTE COVERAGE
27.3
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
13%
 PERCENTAGE OF TRA

4 MINUTE COVERAGE
84%
 PERCENTAGE OF Incidents

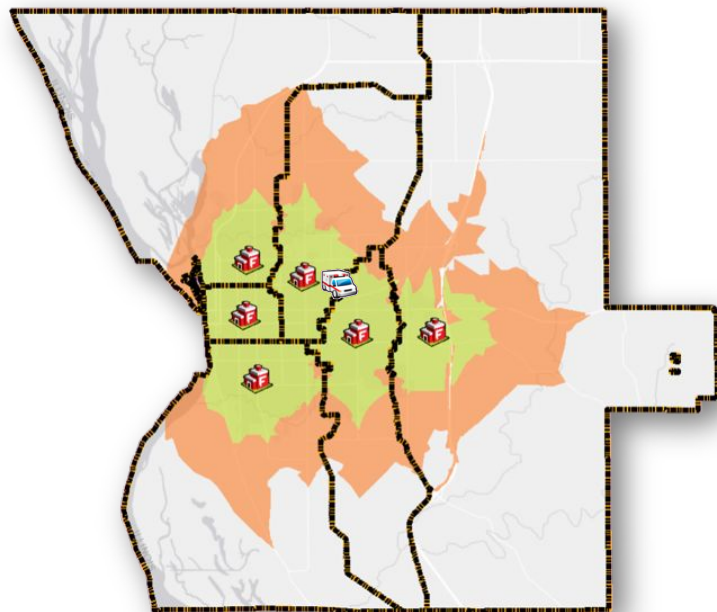
One-minute catchment increments..



8 MINUTE COVERAGE
68.8
 AREA IN SQUARE MILES

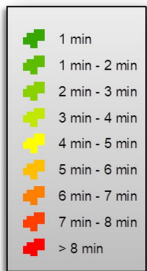
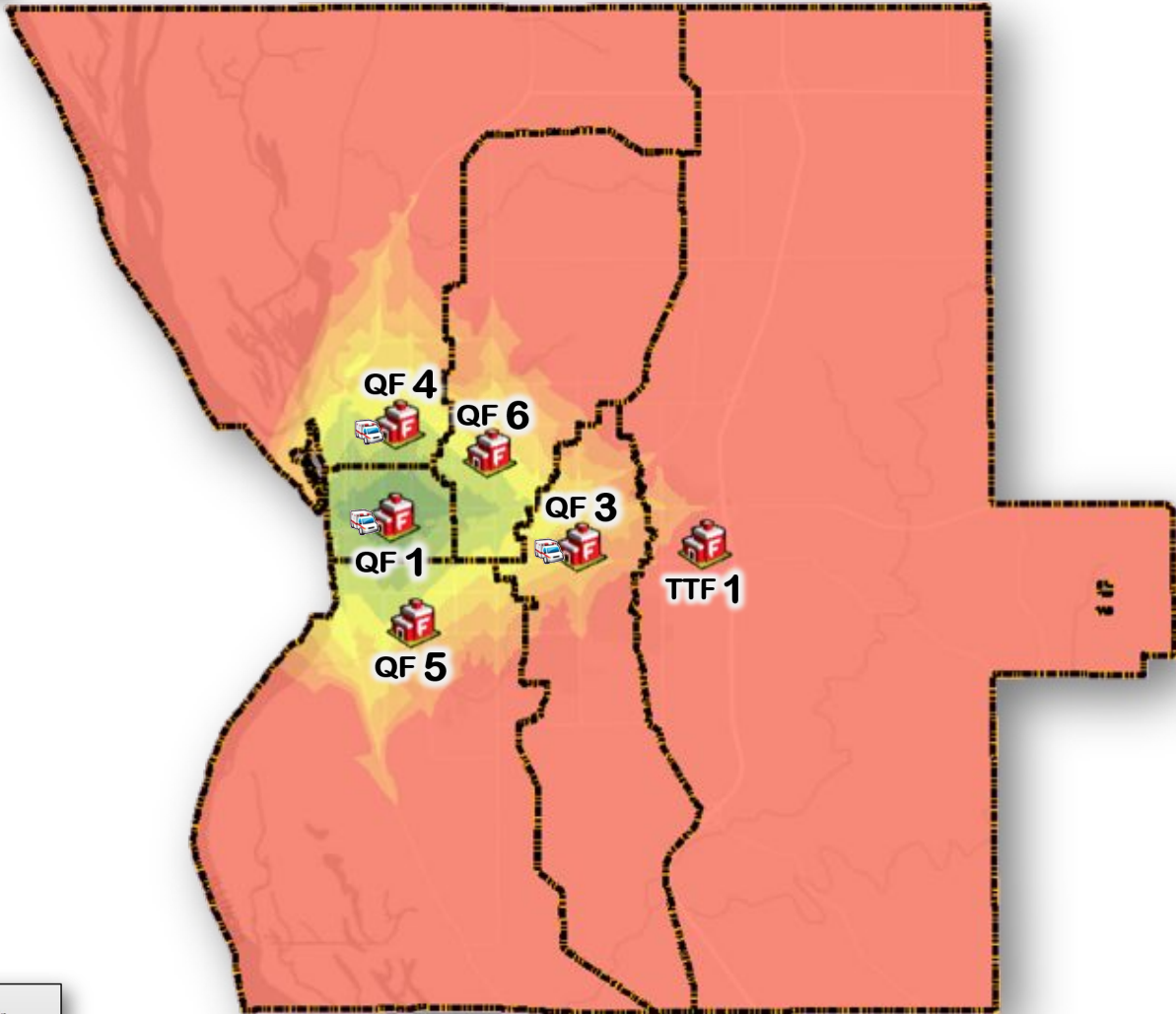
8 MINUTE COVERAGE
33%
 PERCENTAGE OF TRA


8 MINUTE COVERAGE
97.6%
 PERCENTAGE OF Incidents




Four-minute and eight-minute catchments.





4 MINUTE COVERAGE

3.7
 AREA IN SQUARE MILES

4 MINUTE COVERAGE

3%
 PERCENTAGE OF TRA

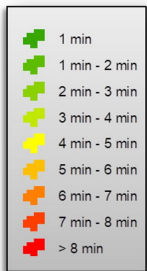
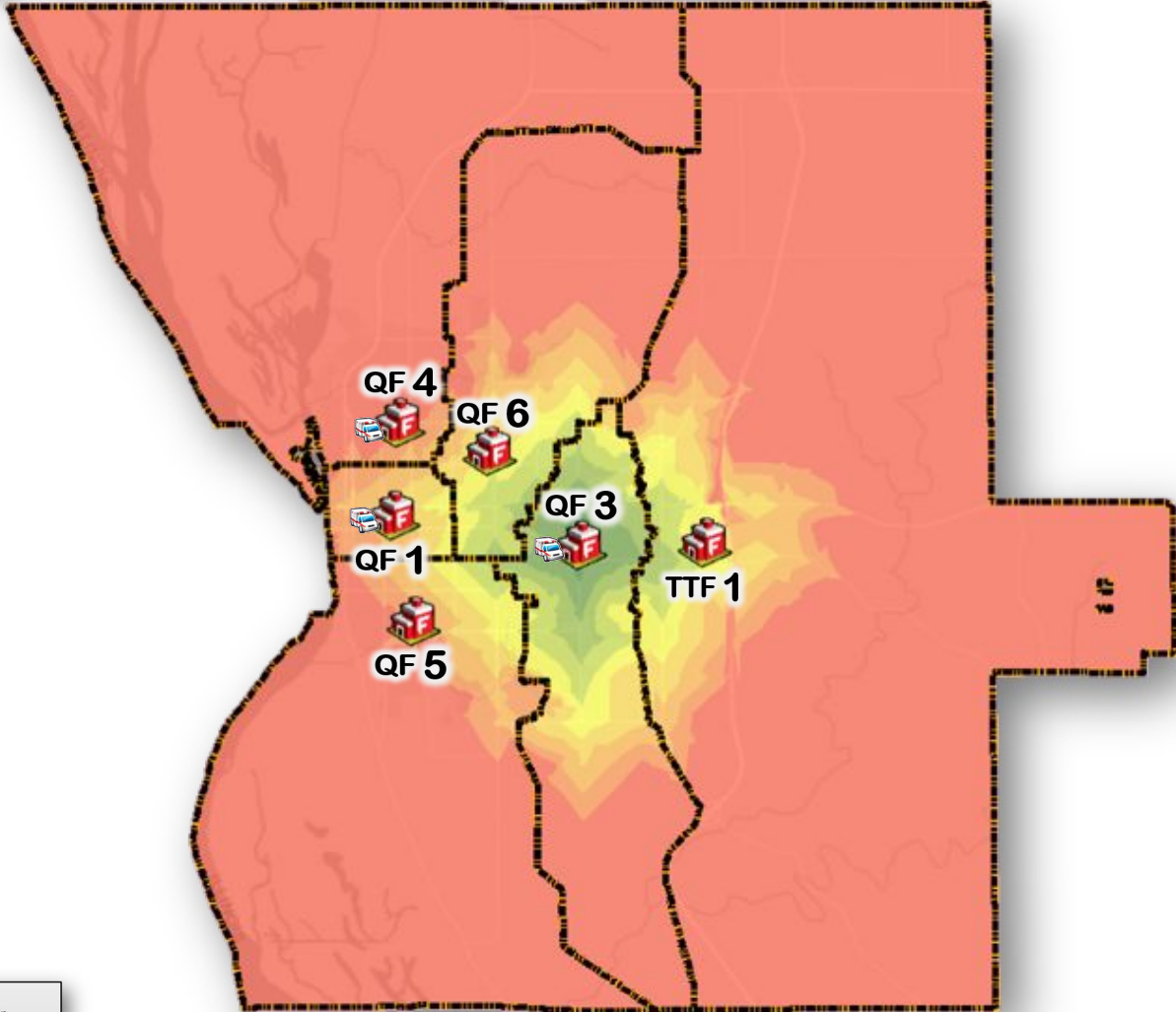
8 MINUTE COVERAGE

16.1
 AREA IN SQUARE MILES

8 MINUTE COVERAGE

13%
 PERCENTAGE OF TRA





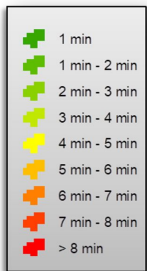
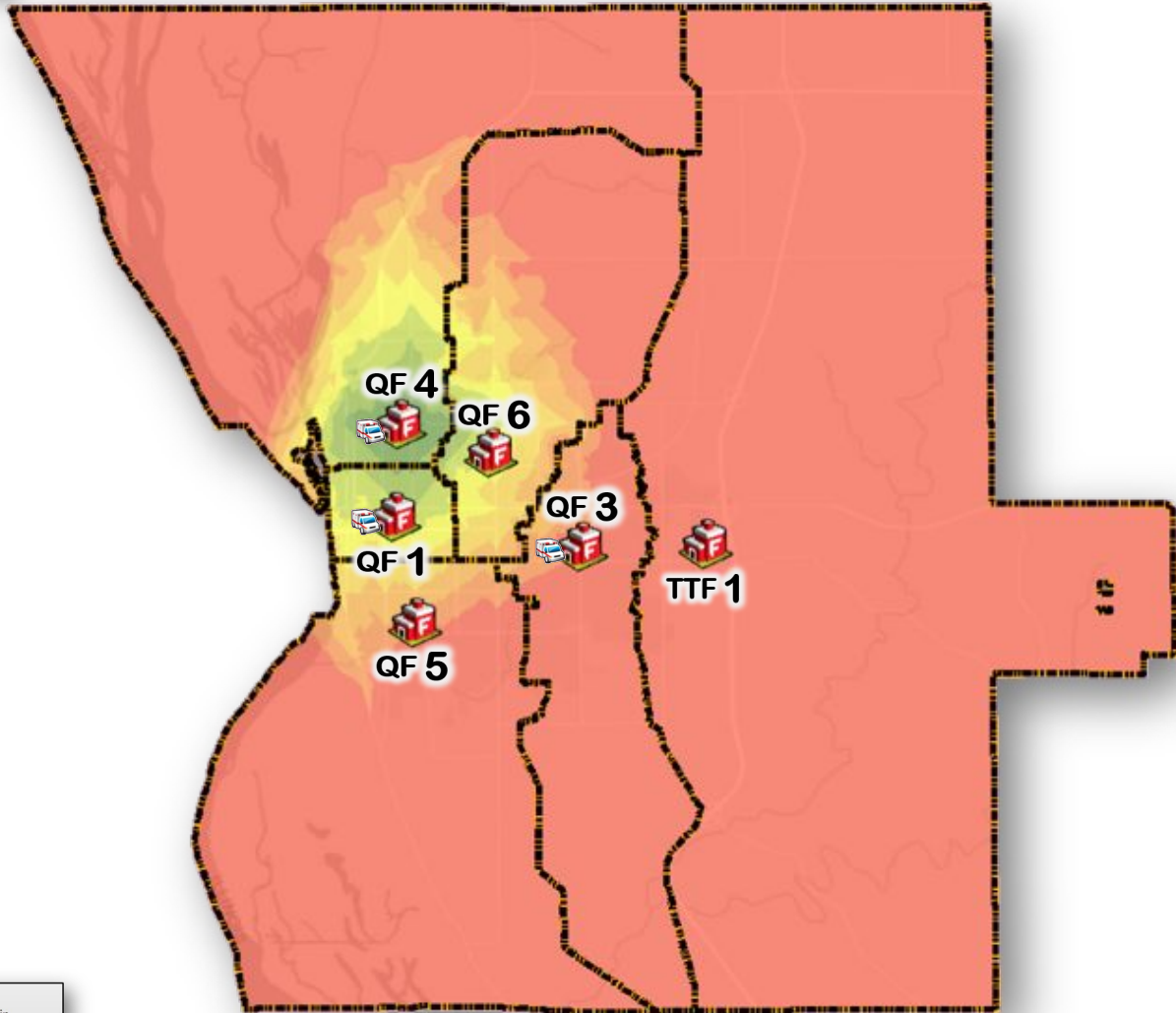
4 MINUTE COVERAGE
4.2
AREA IN SQUARE MILES

4 MINUTE COVERAGE
3%
PERCENTAGE OF TRA

8 MINUTE COVERAGE
16.7
AREA IN SQUARE MILES

8 MINUTE COVERAGE
14%
PERCENTAGE OF TRA





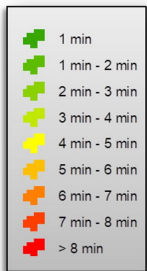
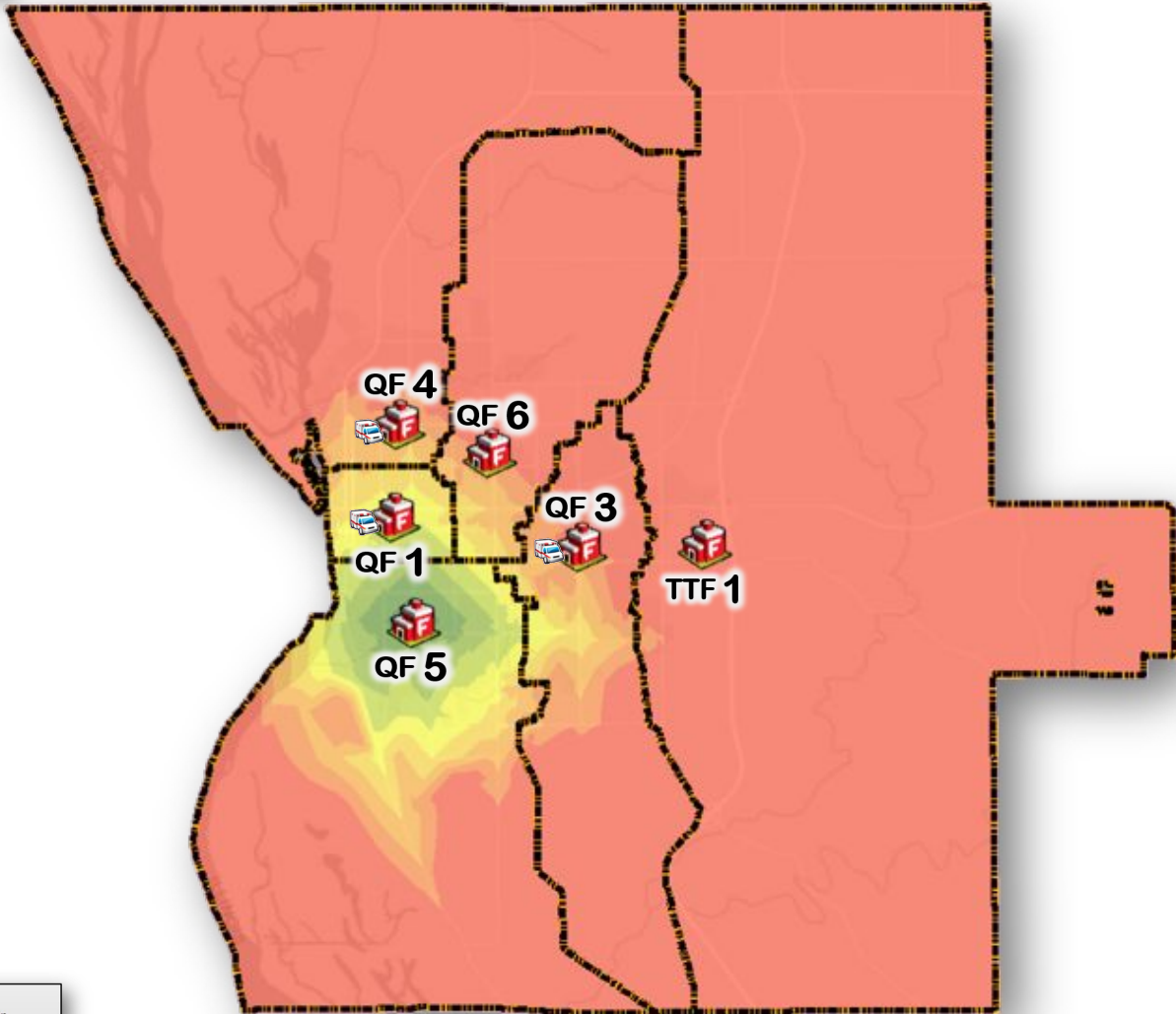
4 MINUTE COVERAGE
3.9
AREA IN SQUARE MILES


4 MINUTE COVERAGE
3%
PERCENTAGE OF TRA

8 MINUTE COVERAGE
15.5
AREA IN SQUARE MILES


8 MINUTE COVERAGE
13%
PERCENTAGE OF TRA





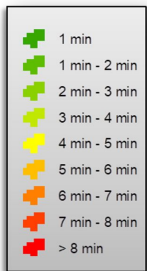
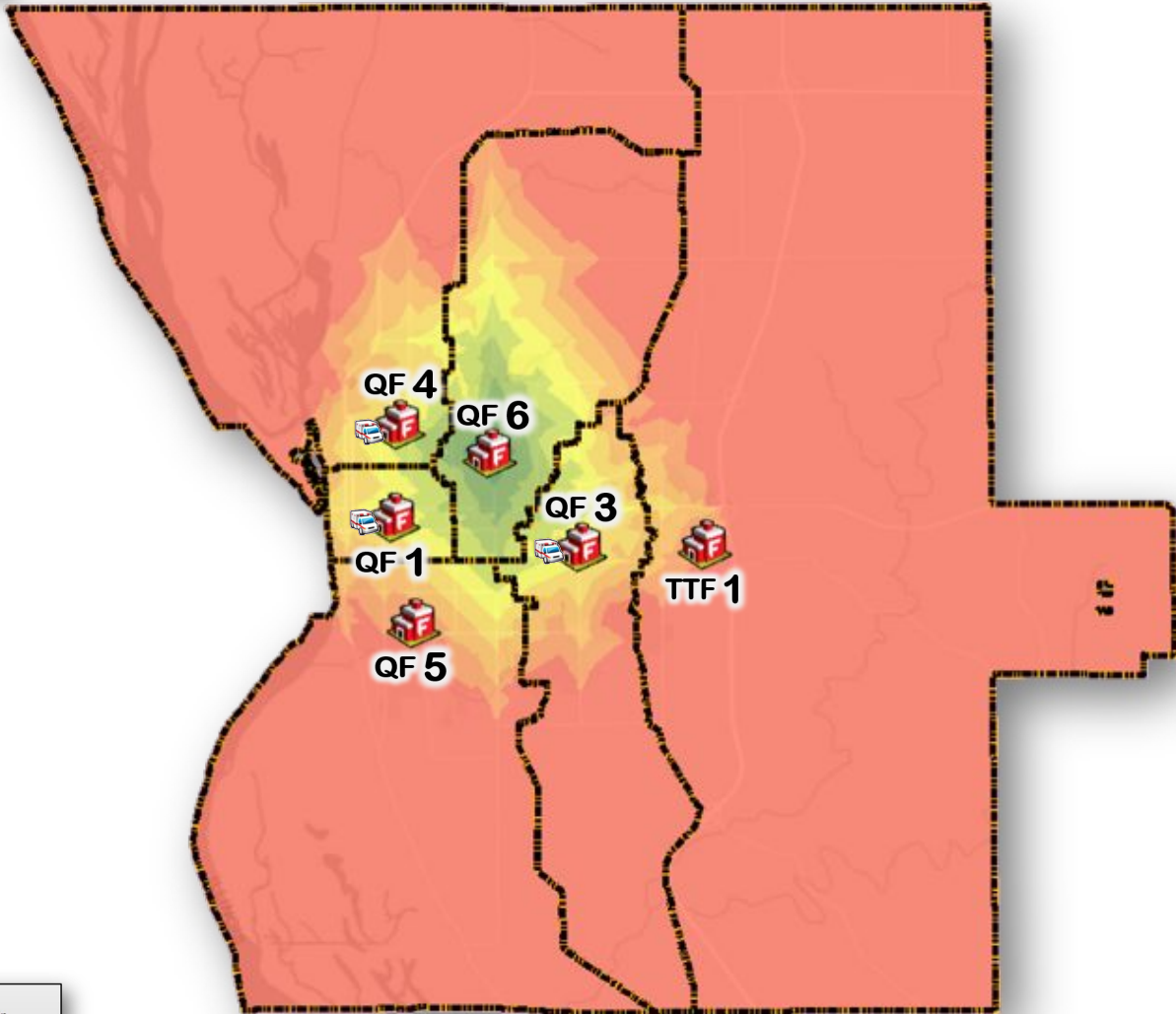
4 MINUTE COVERAGE
 **5.3**
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **21.9**
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
 **4%**
 PERCENTAGE OF TRA

8 MINUTE COVERAGE
 **18%**
 PERCENTAGE OF TRA





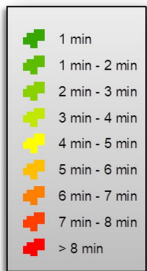
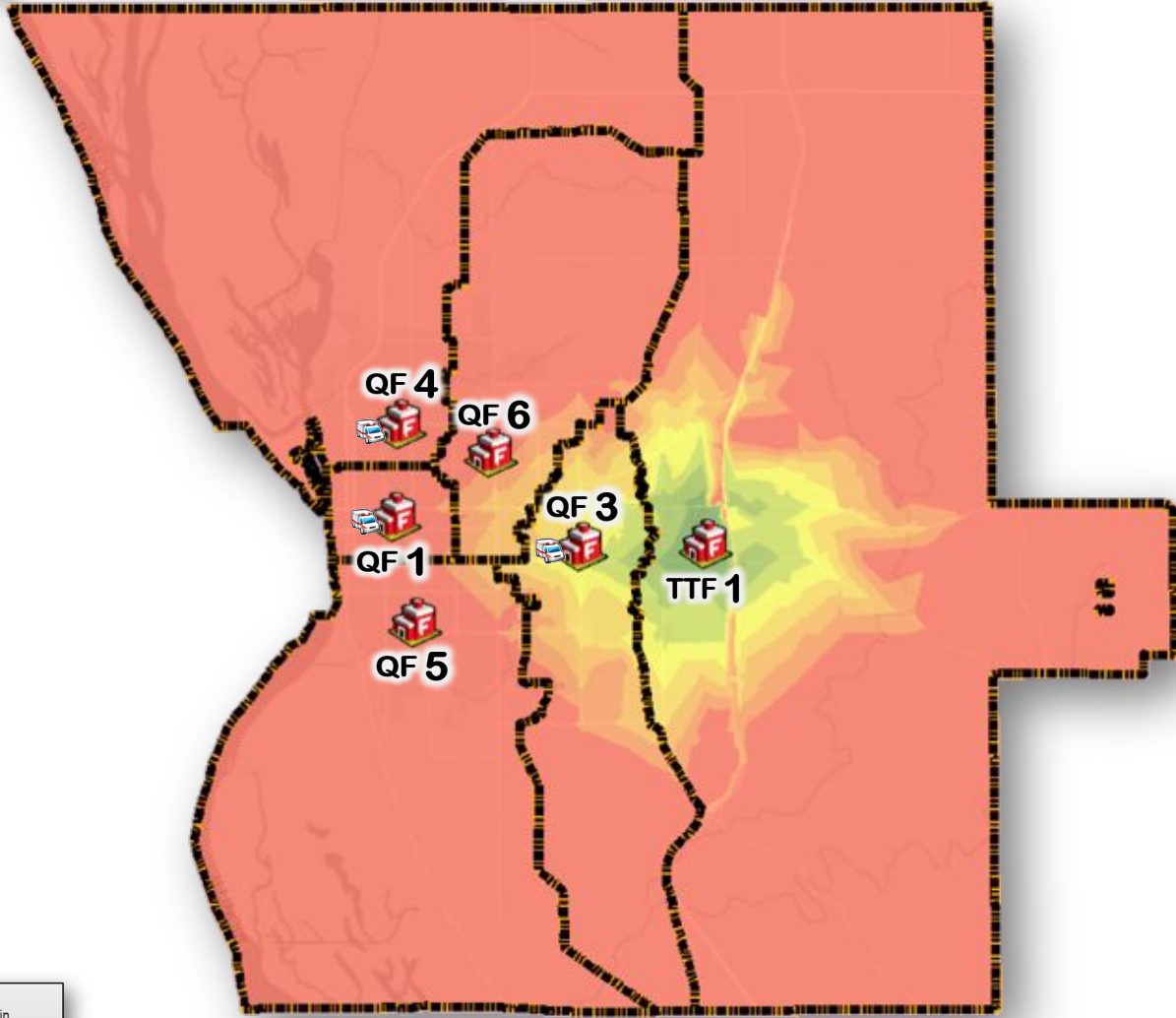
4 MINUTE COVERAGE
4.6
AREA IN SQUARE MILES


4 MINUTE COVERAGE
4%
PERCENTAGE OF TRA


8 MINUTE COVERAGE
20.0
AREA IN SQUARE MILES

8 MINUTE COVERAGE
16%
PERCENTAGE OF TRA





4 MINUTE COVERAGE
 **3.6**
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
 **3%**
 PERCENTAGE OF TRA

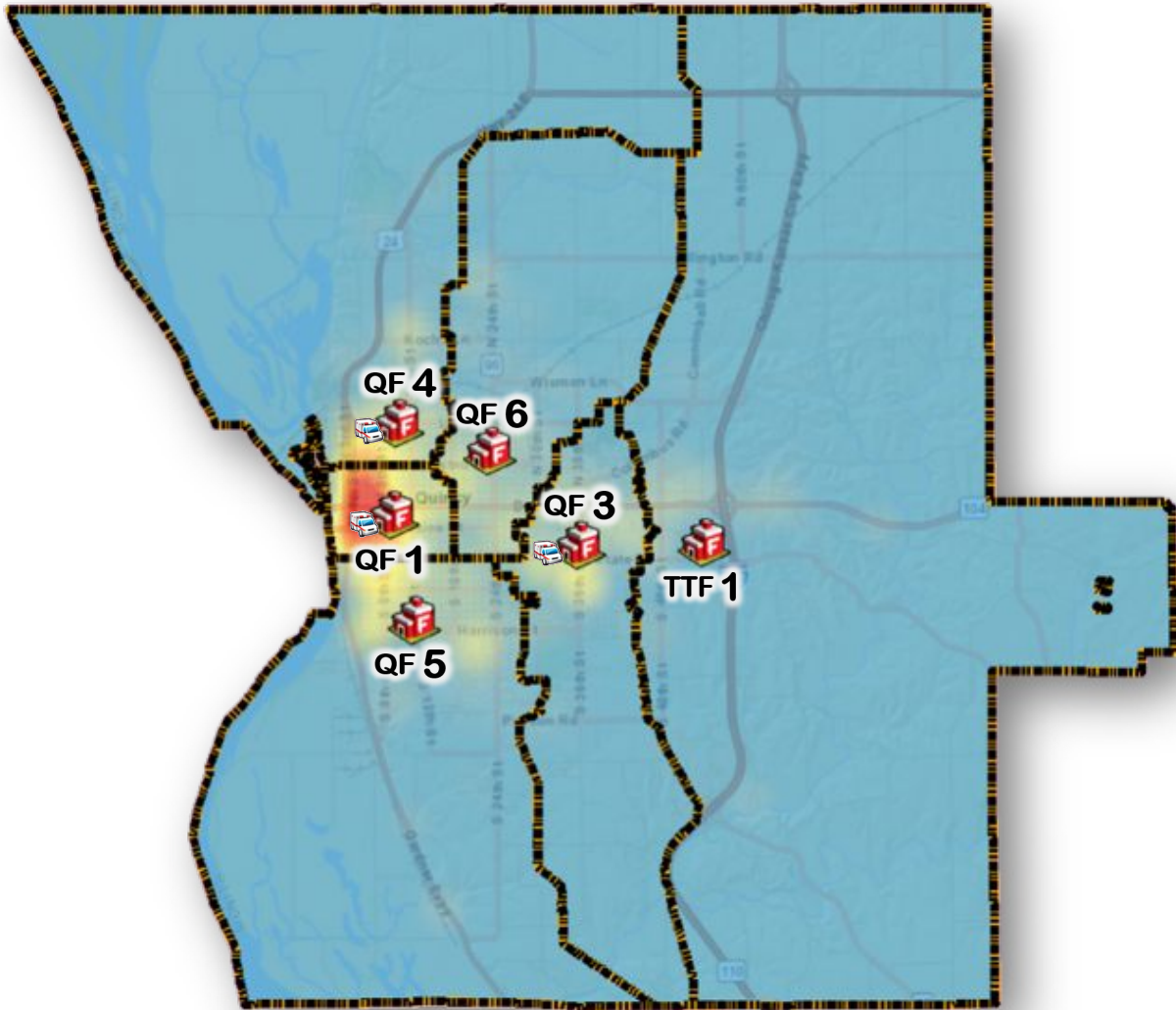
8 MINUTE COVERAGE
 **18.5**
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
 **15%**
 PERCENTAGE OF TRA





 **14,091**
QFD & TTFPD INCIDENTS



Percentage of TRA Incidents

 **28%**
STATION QF 1

 **14%**
STATION QF 3

 **15%**
STATION QF 4

 **21%**
STATION QF 5

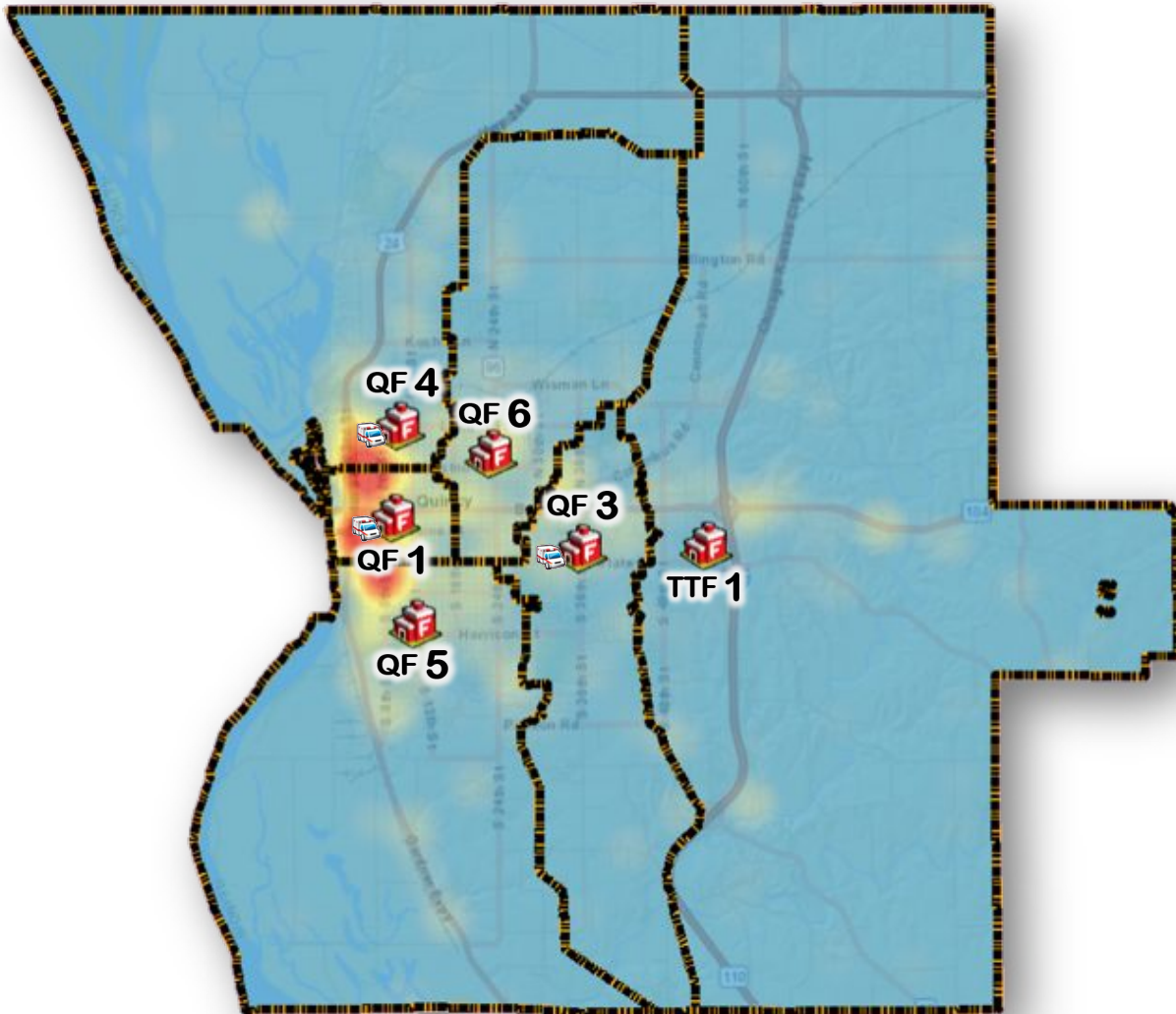
 **13%**
STATION QF 6

 **9%**
STATION TTF 1





 **713**
QFD & TTFPD INCIDENTS



Percentage of TRA Incidents

 **21%**
STATION QF 1

 **11%**
STATION QF 3

 **17%**
STATION QF 4

 **24%**
STATION QF 5

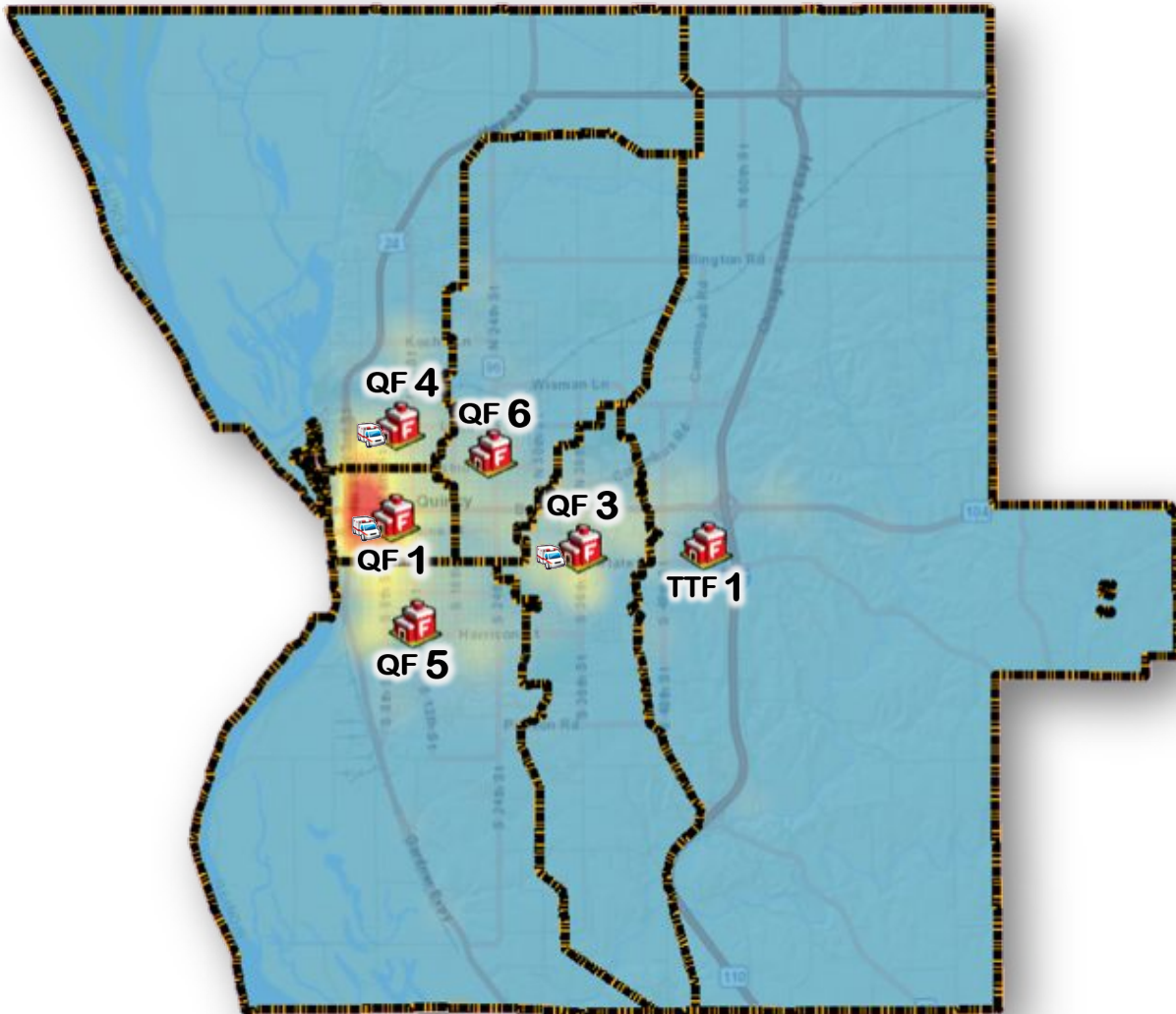
 **13%**
STATION QF 6

 **13%**
STATION TTF 1





 **8,314**
QFD & TTFPD INCIDENTS



Percentage of TRA Incidents

 **31%**
STATION QF 1

 **15%**
STATION QF 3

 **14%**
STATION QF 4

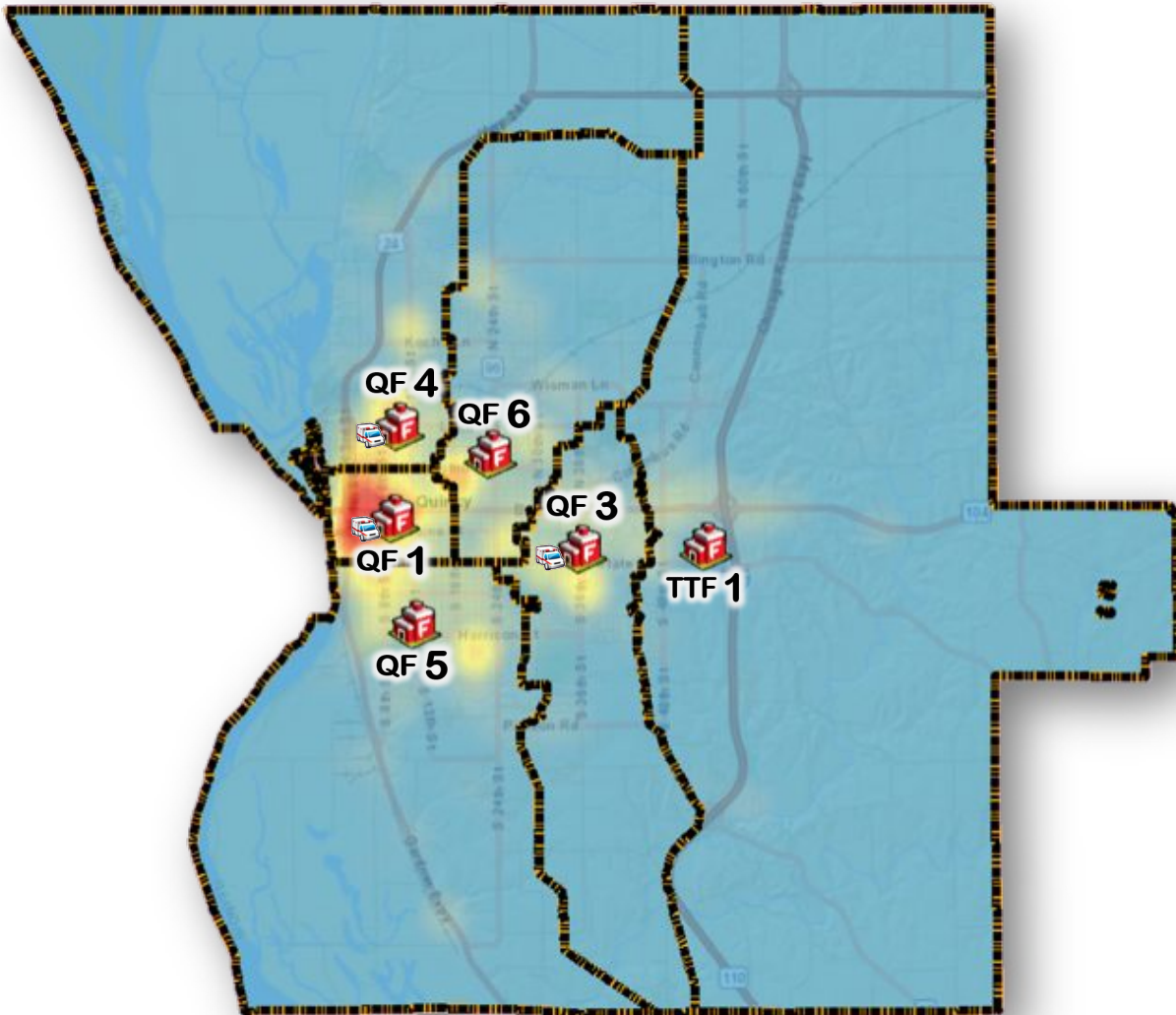
 **21%**
STATION QF 5

 **11%**
STATION QF 6

 **9%**
STATION TTF 1



 **5,064**
QFD & TTFPD INCIDENTS



Percentage of TRA Incidents

 **24%**
STATION QF 1

 **14%**
STATION QF 3

 **16%**
STATION QF 4

 **21%**
STATION QF 5

 **16%**
STATION QF 6

 **9%**
STATION TTF 1





All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:22	0:04:09	0:03:40	0:03:20	0:03:04
Current	0:07:08	0:05:16	0:04:31	0:04:03	0:03:40



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:09:28	0:06:37	0:04:51	0:04:09	0:03:44
Current	0:10:41	0:06:58	0:05:22	0:04:29	0:04:00



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:07	0:04:01	0:03:33	0:03:14	0:02:59
Current	0:06:02	0:04:46	0:04:12	0:03:48	0:03:28



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:22	0:04:13	0:03:49	0:03:24	0:03:06
Current	0:08:15	0:06:12	0:05:10	0:04:32	0:04:05



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:03:26	0:03:10	0:02:58	0:02:48	0:02:37
Current	0:05:24	0:04:38	0:04:12	0:03:51	0:03:33



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:03:43	0:03:33	0:03:27	0:03:17	0:03:08
Current	0:05:35	0:04:43	0:04:13	0:03:56	0:03:38



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:03:23	0:03:07	0:02:56	0:02:46	0:02:35
Current	0:04:55	0:04:21	0:03:56	0:03:39	0:03:24



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:03:24	0:03:10	0:03:00	0:02:49	0:02:37
Current	0:06:48	0:05:26	0:04:50	0:04:23	0:04:00



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:04:50	0:03:47	0:03:19	0:02:55	0:02:45
Current	0:06:52	0:05:18	0:04:29	0:03:58	0:03:36



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:07:39	0:05:26	0:04:12	0:04:00	0:03:45
Current	0:08:26	0:06:38	0:04:35	0:04:14	0:03:54



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:04:47	0:03:39	0:03:17	0:02:52	0:02:42
Current	0:06:14	0:04:48	0:04:07	0:03:38	0:03:19



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:04:40	0:03:45	0:03:18	0:02:57	0:02:42
Current	0:07:47	0:05:58	0:05:06	0:04:30	0:04:03



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:24	0:04:16	0:03:37	0:03:16	0:02:58
Current	0:07:35	0:04:44	0:04:07	0:03:43	0:03:22



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:09:28	0:07:21	0:05:33	0:04:41	0:03:53
Current	0:14:06	0:11:57	0:07:14	0:04:56	0:03:53



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:00	0:04:01	0:03:30	0:03:14	0:02:59
Current	0:05:09	0:04:11	0:03:46	0:03:26	0:03:08



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:18	0:04:23	0:03:27	0:03:07	0:02:49
Current	0:09:41	0:05:40	0:04:39	0:04:09	0:03:47



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:22	0:04:38	0:04:06	0:03:51	0:03:37
Current	0:07:53	0:05:18	0:04:28	0:04:02	0:03:40



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:08:05	0:05:29	0:04:53	0:04:21	0:04:09
Current	0:12:22	0:06:28	0:04:48	0:04:16	0:03:58



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:16	0:04:31	0:04:02	0:03:49	0:03:29
Current	0:06:16	0:04:48	0:04:11	0:03:47	0:03:28



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:21	0:04:40	0:04:08	0:03:57	0:03:49
Current	0:10:11	0:06:18	0:05:09	0:04:28	0:04:02



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:48	0:04:38	0:03:56	0:03:46	0:03:27
Current	0:08:17	0:05:54	0:04:47	0:04:12	0:03:43



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:07:15	0:05:33	0:04:34	0:03:56	0:03:44
Current	0:08:14	0:06:07	0:05:02	0:04:13	0:03:38



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:42	0:04:31	0:03:51	0:03:34	0:03:13
Current	0:07:29	0:05:00	0:04:20	0:03:52	0:03:29



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:05:35	0:04:30	0:03:59	0:03:51	0:03:43
Current	0:08:48	0:07:03	0:05:39	0:04:42	0:04:10



All Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:11:24	0:08:19	0:07:20	0:05:32	0:04:49
Current	0:09:08	0:07:25	0:06:19	0:05:44	0:05:12



Fire Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:15:12	0:13:03	0:11:30	0:09:39	0:07:40
Current	0:10:21	0:09:38	0:08:28	0:06:58	0:06:24



EMS Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:11:02	0:08:12	0:06:52	0:05:24	0:04:46
Current	0:08:19	0:06:51	0:06:00	0:05:22	0:04:54



Other Incidents Response Time (h:mm:ss)

	90th %	80th %	70th %	60th %	50th %
Proposed	0:11:10	0:08:14	0:06:28	0:05:22	0:04:25
Current	0:09:23	0:07:59	0:06:57	0:05:58	0:05:25



GLOSSARY	
TERM	DEFINITION
Alarm Processing Time	The time interval from the point at which a request or alarm is received and transmitted to emergency responders. The benchmark is 60 seconds.
All Incidents	All incidents regardless of NFIRS group codes.
American Heart Association (AHA)	The American Heart Association is a national voluntary health agency whose mission is to reduce disability and death from cardiovascular diseases and stroke.
AOR	Area of Responsibility
Automatic Aid	Planned first alarm response of engine and/or ladder-service companies between two or more jurisdictions by prior agreement, so that each department operates substantially as one department.
AW	Area workload is the percentage of a given time frame in which there is a demand for service within a station’s AoR.
Built-Up Area	A built-up area shall include city blocks on which 25% of the building lots are built-up, and street front sections 200' back from the road on which a minimum of 25% of the building lots are built-on. However, when hydrants are available, and where lot sizes are large or irregular, a reasonable method of determining built-up area for the purpose of determining fire department response district size, is to count the hydrants and use that count as a representative “size” in other areas having hydrants.
Catchment	A geographical area based on travel time.
Center for Public Safety Excellence (CPSE)	The CPSE is a non-profit organization dedicated to the improvement of fire and emergency service agencies through self-assessment and accreditation.
Concentration	The spacing of multiple resources arranged so that an initial “effective response force” can arrive on scene within sufficient time frames to mobilize and likely stop the escalation of an emergency in a specific risk category.
Construction Class	Six categories of building construction determined by exterior walls, floors, roof or the structural frame.





Creditable Water Supply	A water system capable of delivering 250 gpm or more for a period of 2 hours or more, plus domestic consumption at the maximum daily rate.
Demand Zone	An area used to define or limit the management of a risk situation.
Distribution	The station and resource locations needed to assure rapid response deployment to minimize and terminate emergencies.
Drive Time	The time measured from fire company en-route to fire company on scene.
Effective Response Force (ERF)	An effective response force is defined as the minimum number of firefighters and equipment that must reach a specific emergency incident location within a maximum prescribed travel [driving] time. The maximum prescribed travel time acts as one indicator of resource deployment efficiency.
EMS Incidents	Incidents in the NFIRS group codes 300's.
Engine Company	A fire engine (pumper) with equipment and personnel, which may be paid or volunteer.
Fire Incidents	Incidents in the NFIRS group codes 100's.
Fire Flow	The amount of water required to control the emergency, which is based on contents and combustible materials.
First Due Response	That distance prescribed: for an engine company, 1½ distance miles; for a ladder company, 2½ miles.
Flash Over	A critical stage of fire growth where the likelihood of survival and the chance of saving lives drops dramatically. In this stage, greater amounts of water are needed to reduce burning material below its ignition temperature.
Functional Consolidation	A model under which two or more (fire) organizations merge into one large organization at an operational level - response sharing, equipment, personnel and resources without combining organization under a single governance structure..
Full Consolidation	A model under which two or more (fire) organizations merge into one large organization with its own governance structure, budget, personnel, equipment and operational framework.
Get Out or Turnout Time	The time point at which responding units acknowledge receipt of the call from the dispatch center. Total get out time begins at this point and ends at the beginning of travel time. For staffed fire stations the benchmark is 60 seconds.



Historical	Incidents that have happened in the past. Data that has been collected in the past.
Hotspots	A representation of an area with a statistical higher density than its surrounding area.
Initiation of Action	The point at which operations to mitigate the event begins.
Insurance Services Office(ISO)	ISO is a leading source of information about risk. The organization supplies data, analytics, and decision-support services for professionals in many fields, including insurance, finance, real estate, health services, government, and human resources. Their products help customers measure, manage, and reduce risk.
Ladder Company	A ladder truck with equipment and personnel assigned.
Ladder Truck	Fire apparatus with numerous ladders of varying lengths and types, forcible entry tools and salvage equipment. It may have a hydraulic aerial ladder or elevating platform, generally following NFPA 1901 specifications.
National Fire Protection Association (NFPA)	Established in 1896, NFPA serves as the world's leading advocate of fire prevention and is an authoritative source on public safety. The mission of the NFPA is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating scientifically-based consensus codes and standards, research, training, and education.
National Incident Reporting System (NIFRS)	a system established by the National Fire Data Center to collect and analyze fire and casualty incident data in the U.S.
Occupancy Risk	An assessment of the relative risk to life and property resulting from a fire inherent in a specific occupancy or in generic occupancy class.
On-Scene Time	The point at which the responding units arrive on the scene.
Operational Consolidation	A model which embraces a unified operations framework under which the “closet unit responds” regardless of municipal or district boundaries, but which retains the each organization as separate entities with independent personnel, vehicles and governance.
Other Incidents	Incidents in the NIFRS group codes 200’s, and 400’s through 900’s.



Projected	The results that may happen in the future based on analysis
Pumper (Engine)	Fire apparatus used to deliver water to a fire at pressures necessary for good fire streams; having a pump, equipment and hose; and usually conforming to NFPA 1901 specifications.
Quint	Quint apparatus are equipped with the following five (5) components: water tank, hose, multiple ground ladders, a fire pump and an aerial device such as a ladder or platform.
Response Time	The time measured from fire company notification to fire company on scene.
Required Fire Flow	The estimated flow of water in gallons per minute that may be considered a reasonable rate necessary to fight a major fire in an unsprinklered building under most conditions.
Service Area	A geographical area where service is provided or demanded.
Service / Squad Truck	Fire apparatus carrying ground ladders, tools, and equipment required for a service / squad truck.
Standard Response District	A Standard Response District is a built-upon area which is within satisfactory response travel distance. (See first due response distance).
Standards of Cover	Those adopted written policies and procedures that determine the distribution, concentration, and reliability of fixed and mobile response forces for fire, emergency medical services, hazardous materials, and other forces of technical response.
Total Response Time	CPSE definition: <i>Alarm Processing Time + Turnout time + Travel Time = Total Response Time.</i> NFPA definition: <i>Get Out Time + Travel Time = Total Response Time.</i>
TRA	The complete geographical area in which a fire agency is responsible to provide service.
Travel Time	The point at which units are in route to the call through when units arrive on the scene. Travel time is based on 38 mph or 55.7 feet per second.
Turnout Time	The time point at which responding units acknowledge receipt of the call from the dispatch center through the point that the apparatus goes in service. The benchmark is 60 seconds for EMS response and 80 seconds for FIRE response.



INDUSTRY RESOURCE LIST

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The following link will provide you with several pages of that reference the industry standards used in this report. These can be viewed at your pleasure and convenience.

Thank you, the IFCA Team

Please click [HERE](#) for access to the document

or

Copy the following link and paste it into your browser:

<https://us.awp.autotask.net/1/filelink/cqosi-coyhuge-65gu5npd>





5 Station TRA

5 Station TRA Incident Hotspots - All
5 Station - Area Served by Drive Time

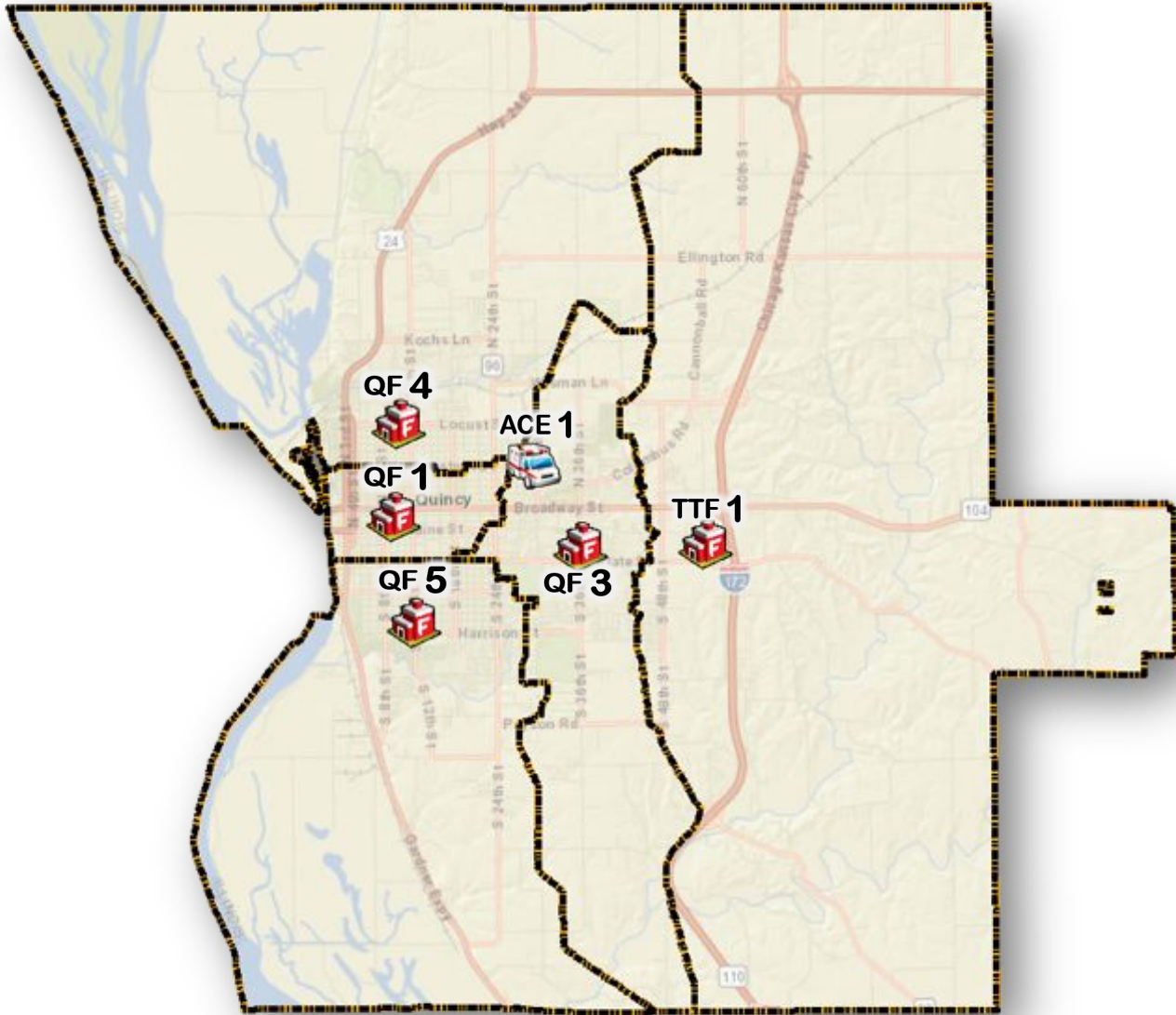
4 Station TRA

4 Station TRA Incident Hotspots - All
4 Station - Area Served by Drive Time



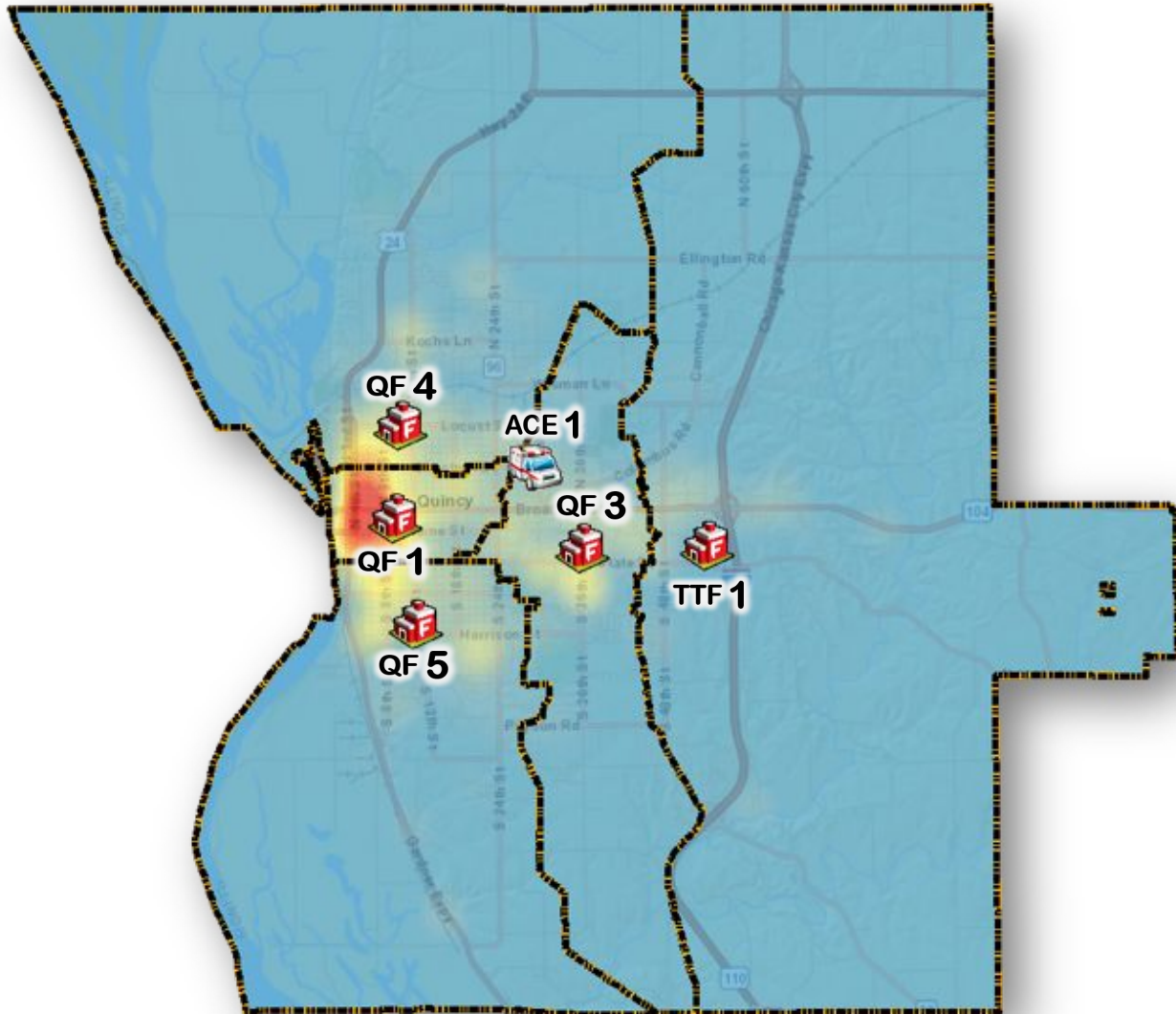
INC PERCENTAGE
 **84.8%**
WITHIN 4 MINUTES
TRAVEL TIME

 **5**
ORIGINAL STATIONS





 **14,091**
QFD & TTFPD INCIDENTS



Percentage of TRA Incidents

 **31%**
STATION QF 1

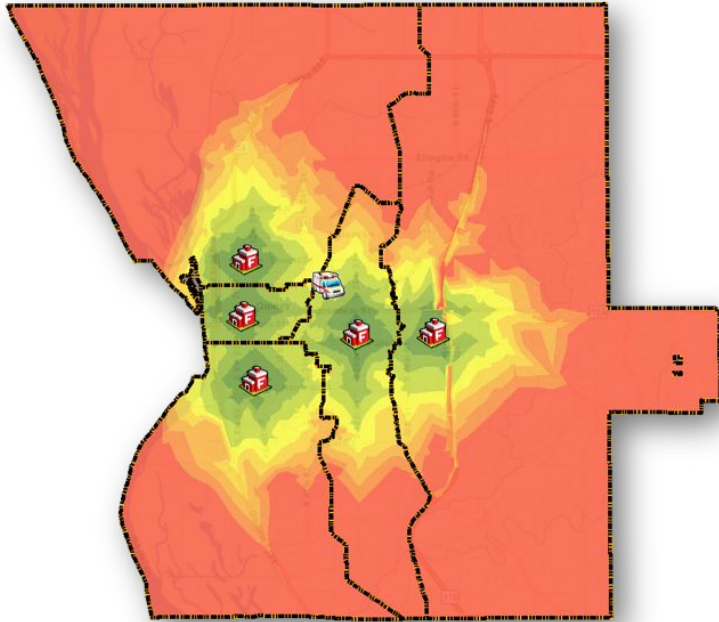
 **18%**
STATION QF 3

 **21%**
STATION QF 4

 **21%**
STATION QF 5

 **9%**
STATION TTF 1



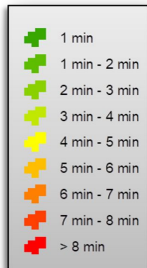


4 MINUTE COVERAGE
17.4
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
14%
 PERCENTAGE OF TRA

4 MINUTE COVERAGE
87%
 PERCENTAGE OF Incidents

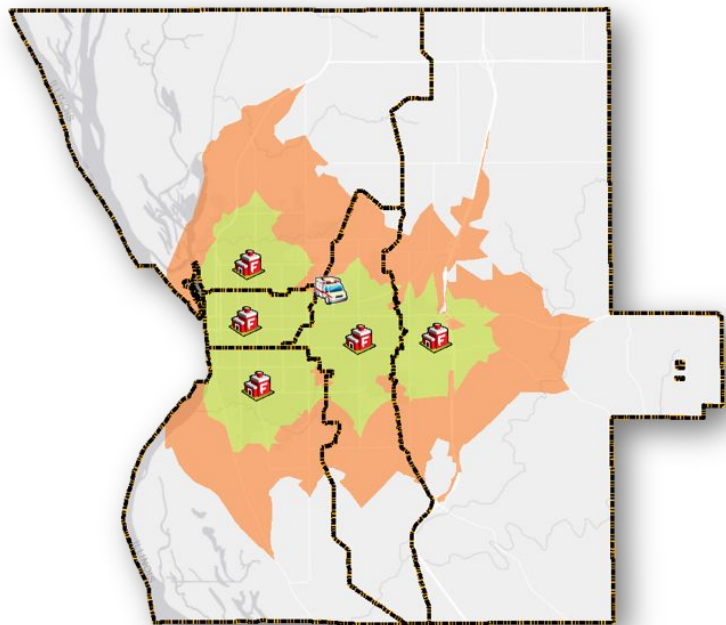
One-minute catchment increments..



8 MINUTE COVERAGE
41.9
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
34%
 PERCENTAGE OF TRA

8 MINUTE COVERAGE
97%
 PERCENTAGE OF Incidents



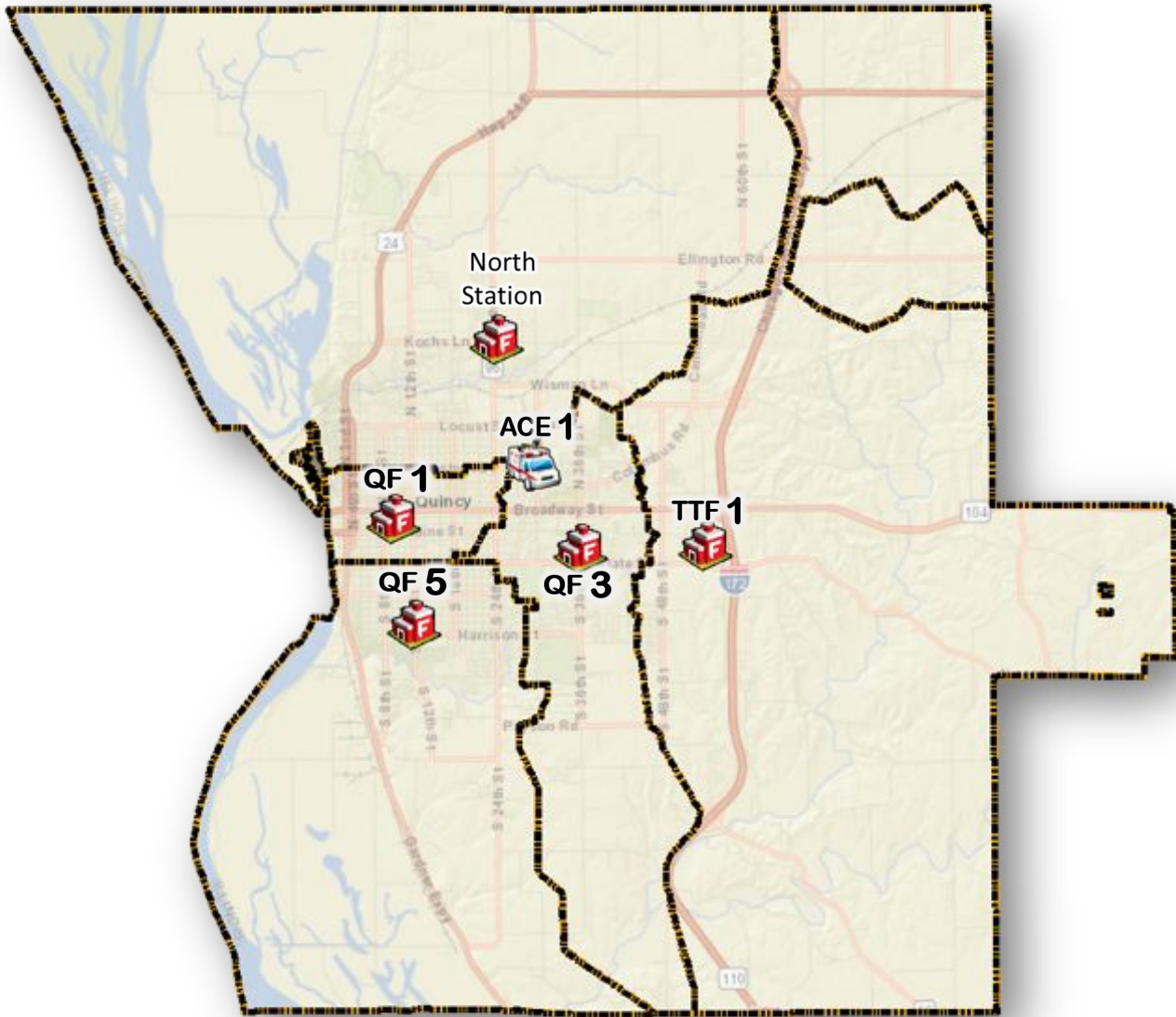
Four-minute and eight-minute catchments.





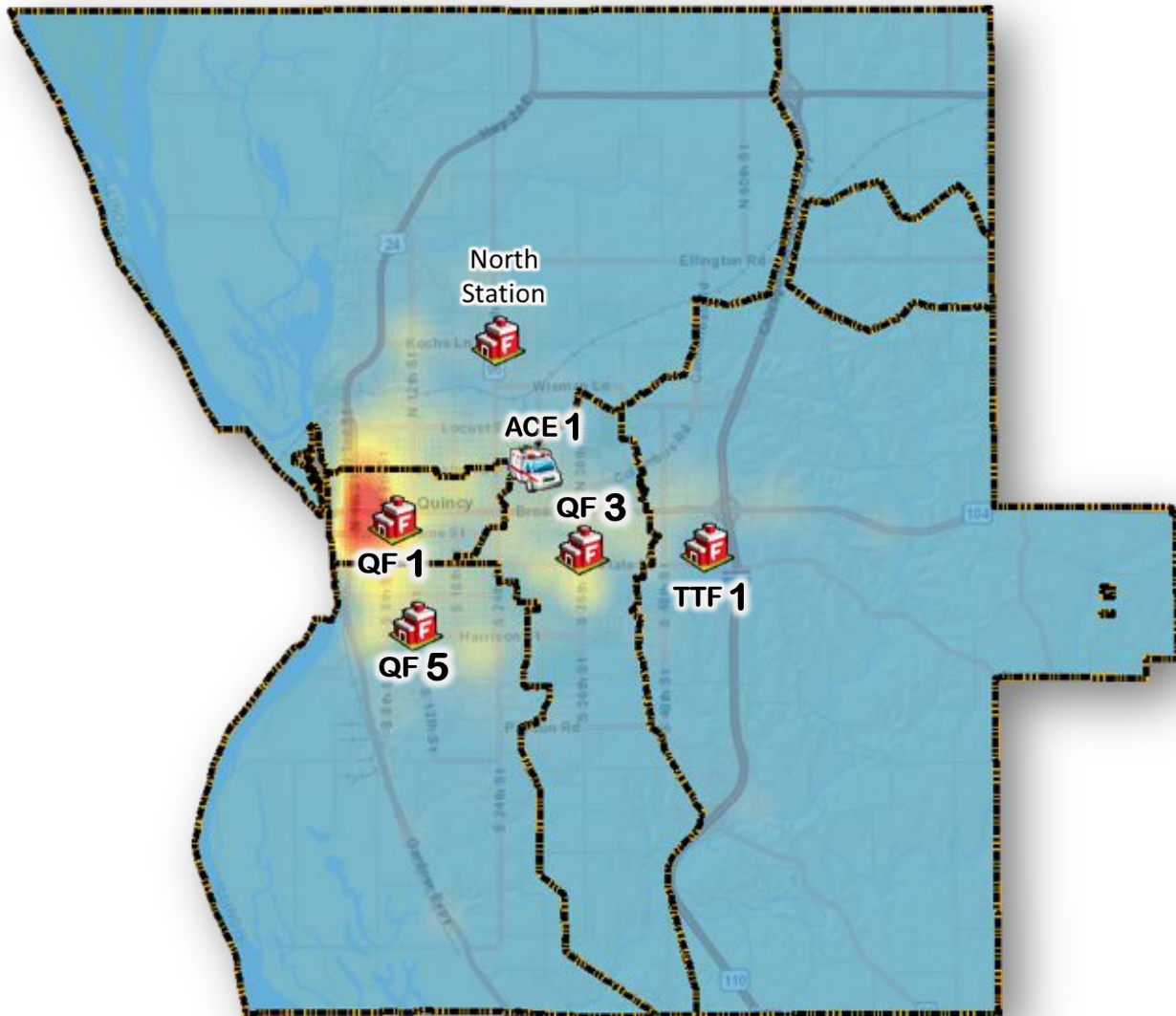
INC PERCENTAGE
 **84.3%**
WITHIN **4** MINUTES
TRAVEL TIME

 **4**
ORIGINAL STATIONS





 **14,091**
QFD & TTFPD INCIDENTS



Percentage of TRA Incidents

 **31%**
STATION QF 1

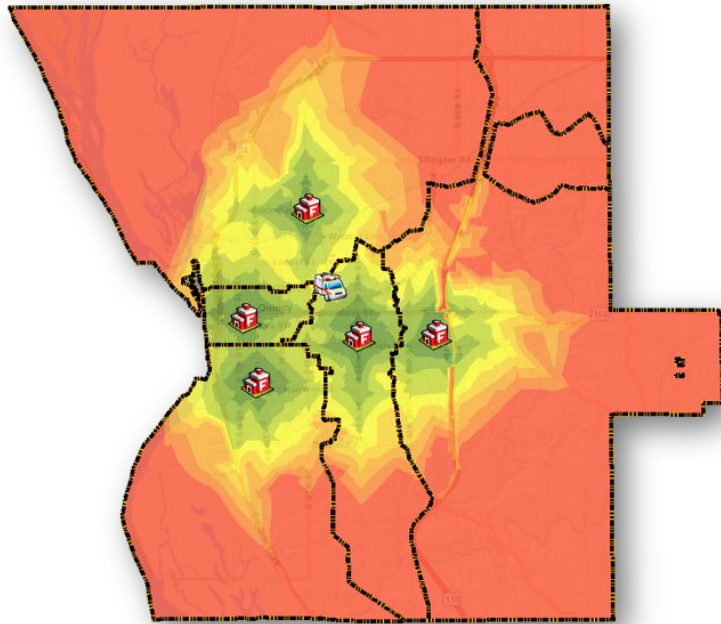
 **18%**
STATION QF 3

 **22%**
STATION QF 4

 **21%**
NORTH STATION

 **9%**
STATION TTF 1



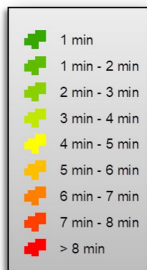


4 MINUTE COVERAGE
30.1
 AREA IN SQUARE MILES

4 MINUTE COVERAGE
14%
 PERCENTAGE OF TRA

4 MINUTE COVERAGE
84.3%
 PERCENTAGE OF Incidents

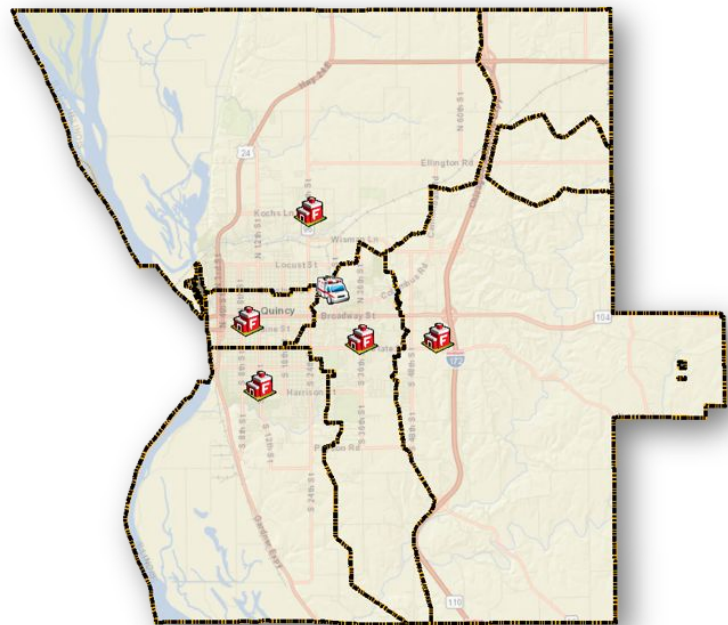
One-minute catchment increments..



8 MINUTE COVERAGE
78.4
 AREA IN SQUARE MILES

8 MINUTE COVERAGE
38%
 PERCENTAGE OF TRA

8 MINUTE COVERAGE
97.2%
 PERCENTAGE OF Incidents



Four-minute and eight-minute catchments.

