



# WICHITA FIRE DEPARTMENT

March 22, 2013

Wichita Service Overview



# Wichita Fire Department (WFD)

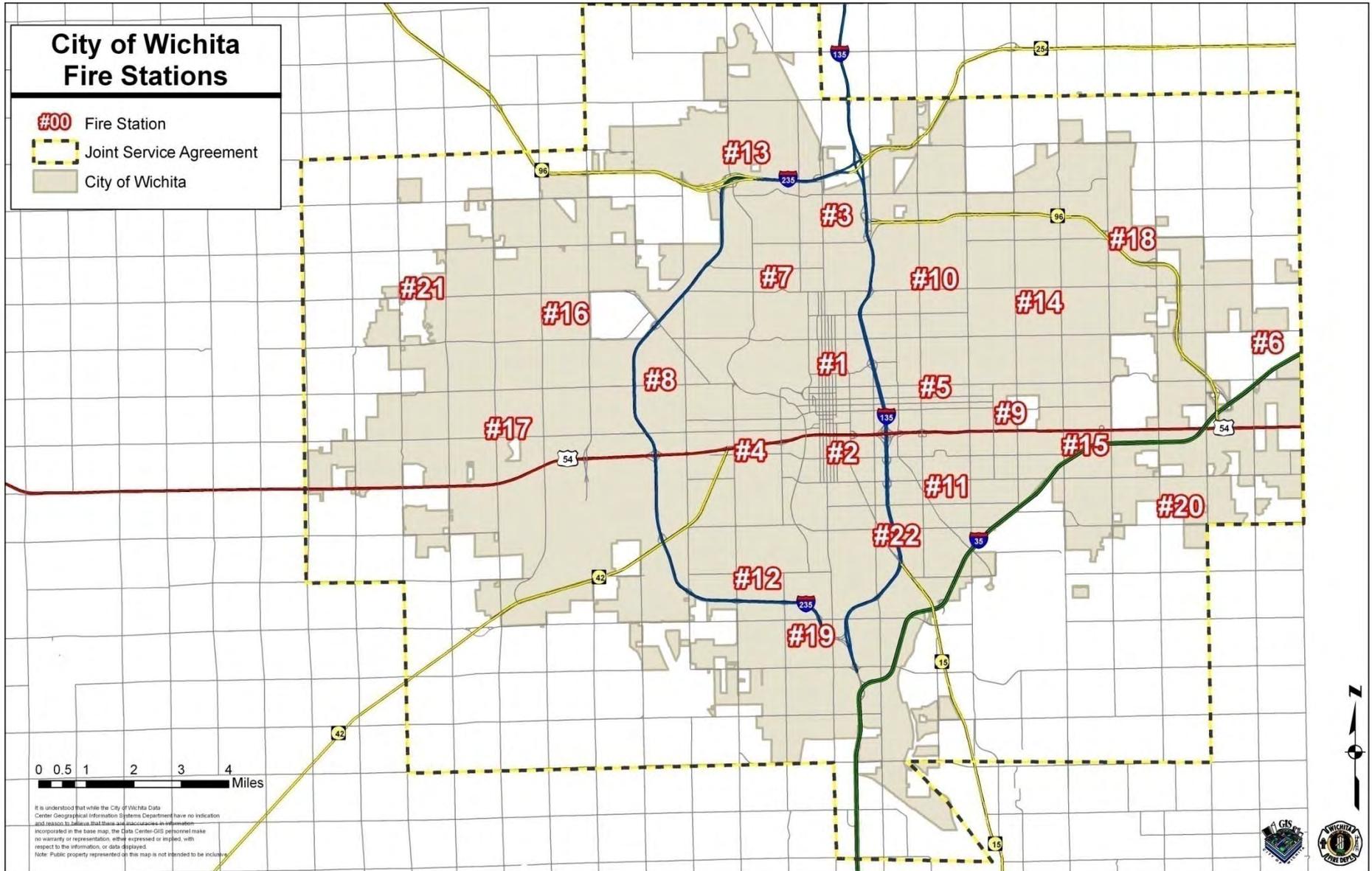


- WFD provides emergency service from 22 fire station locations strategically covering over 165 square miles.

In 2012:

- Wichita Fire Department provided over 73,000 emergency responses to nearly 47,000 calls for service.
  - ▣ The average response time was 4:32
  - ▣ 90% of the City was served in less than 7:00

# Fire Station Locations



# 2012 Call Density

per Sq Mile



#00 Fire Stations

Boundaries



183RD W 167TH W 151ST W 135TH W 119TH W MAIZE TYLER RIDGE HOOVER WEST MERIDIAN SENECA BROADWAY HYDRAULIC HILLSIDE OLIVER WOODLAWN ROCK WEBB GREENWICH 127TH E 143RD E 159TH E

85TH N  
77TH N  
69TH N  
61ST N  
53RD N  
45TH N  
37TH N  
29TH N  
21ST N  
13TH N  
CENTRAL  
KELLOGG  
HARRY  
PAWNEE  
31ST S  
MAC ARTHUR  
47TH S  
55TH S  
63RD S



It is understood that while the City of Wichita Data Center Geographical Information Systems Department have no indication and reason to believe that there are inaccuracies in information incorporated in the base map, the Data Center GIS personnel make no warranty or representation, either expressed or implied, with respect to the information, or data displayed.  
Note: Public property represented on this map is not intended to be inclusive.

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# 2012 Deployment Response Times

Areas With a Call Demand Greater Than 10 Calls per Sq Mile

## First Responder Time

Minutes

- < 7
- > 7

**#00** Fire Stations

### Boundaries

- Small Cities
- Sedgwick County
- Wichita
- Joint Service Agreement

85TH N  
77TH N  
69TH N  
61ST N  
53RD N  
45TH N  
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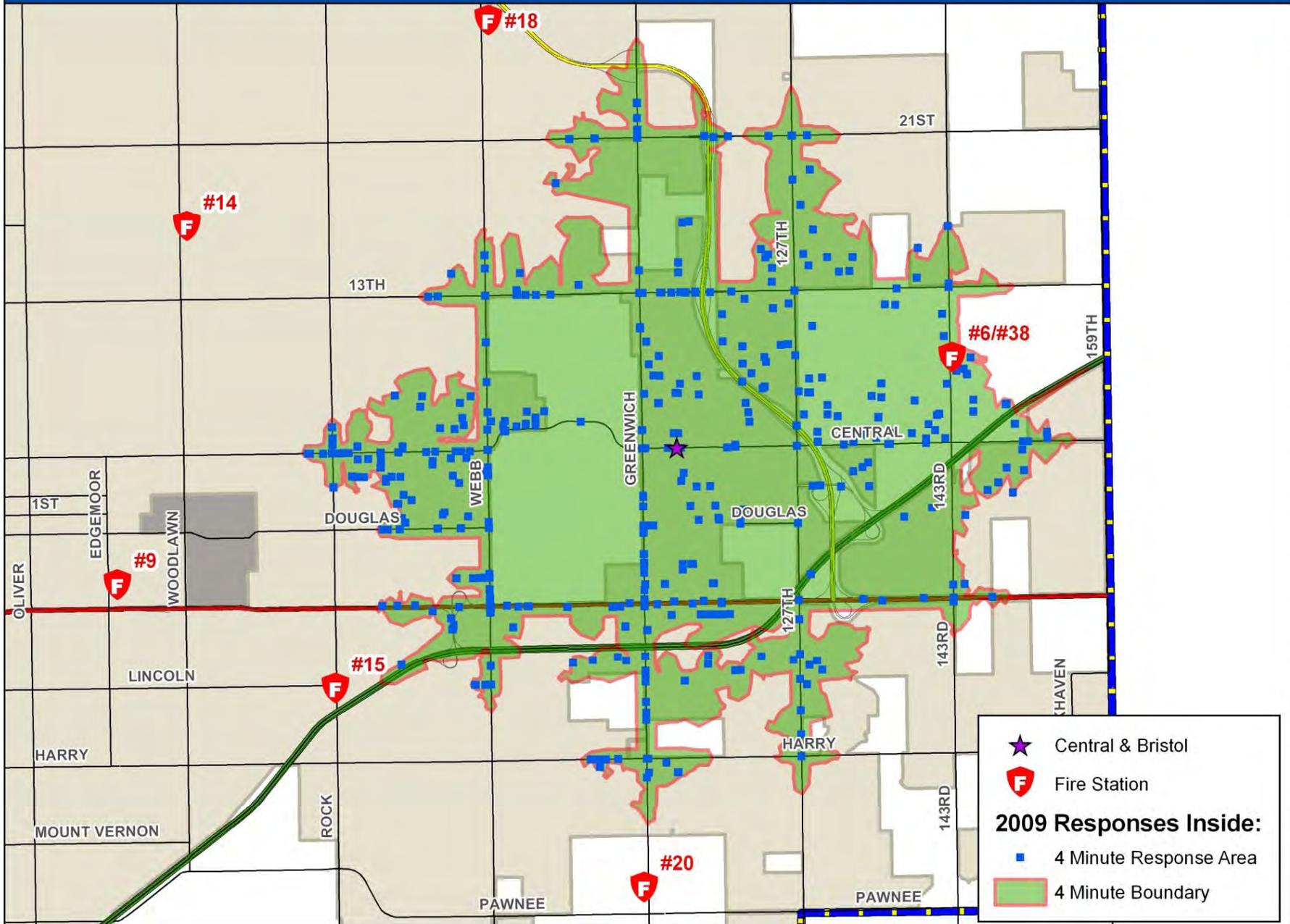


# Service Coverage

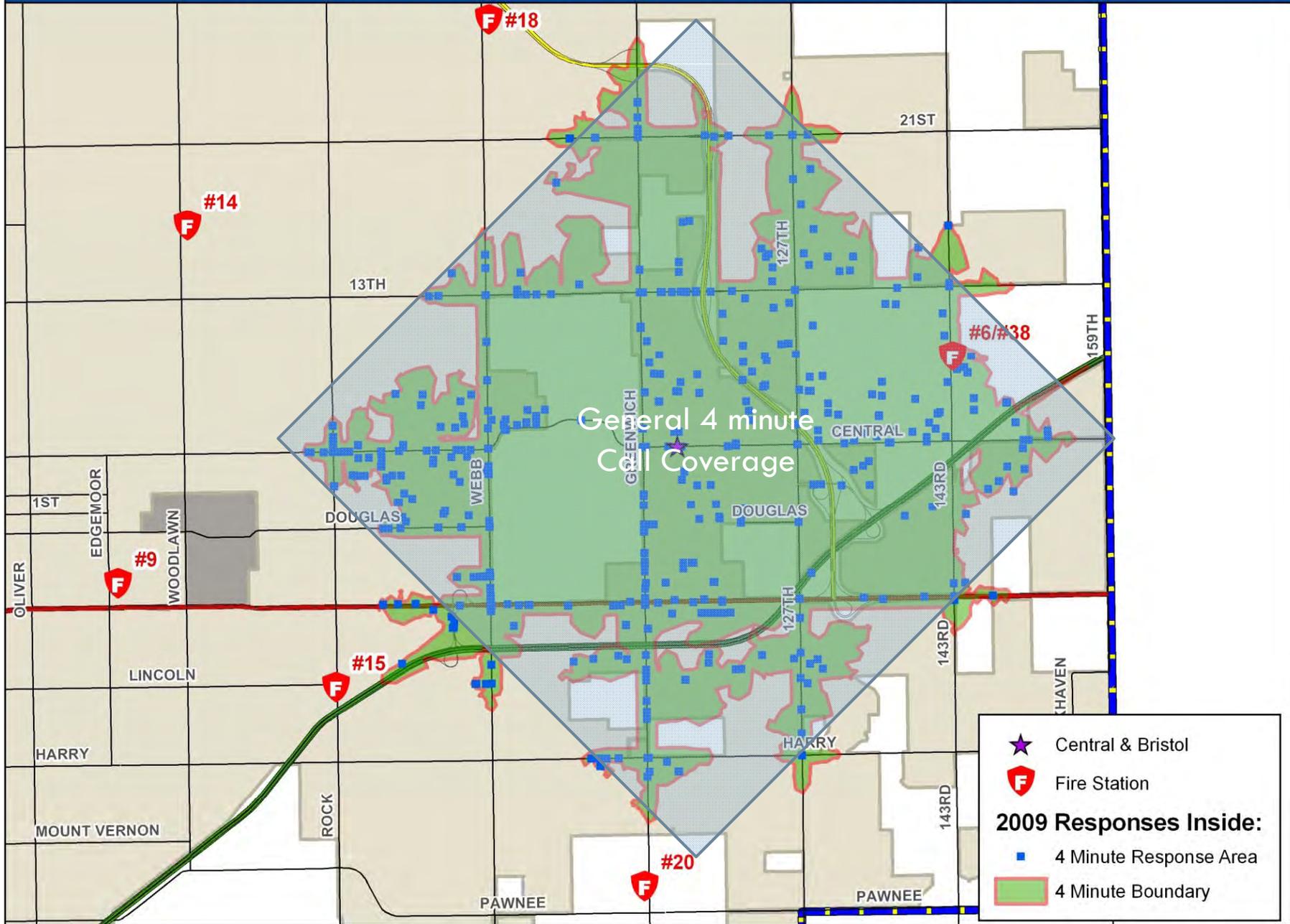


- The Department provides coverage from fixed locations
- Response coverage is evaluated for drive time based on road center speed limits.
- Geographical Information Systems (GIS) enhances service coverage assessment.
  - ▣ This can be illustrated in detail on a map created by computer models, or
  - ▣ Can be illustrated in general on a map using diamond shapes.

# 4 Minute Drive Time from Central and Bristol



# 4 Minute Drive Time from Central and Bristol



# 2012 Deployment Response Times

Areas With a Call Demand Greater Than 10 Calls per Sq Mile

## First Responder Time

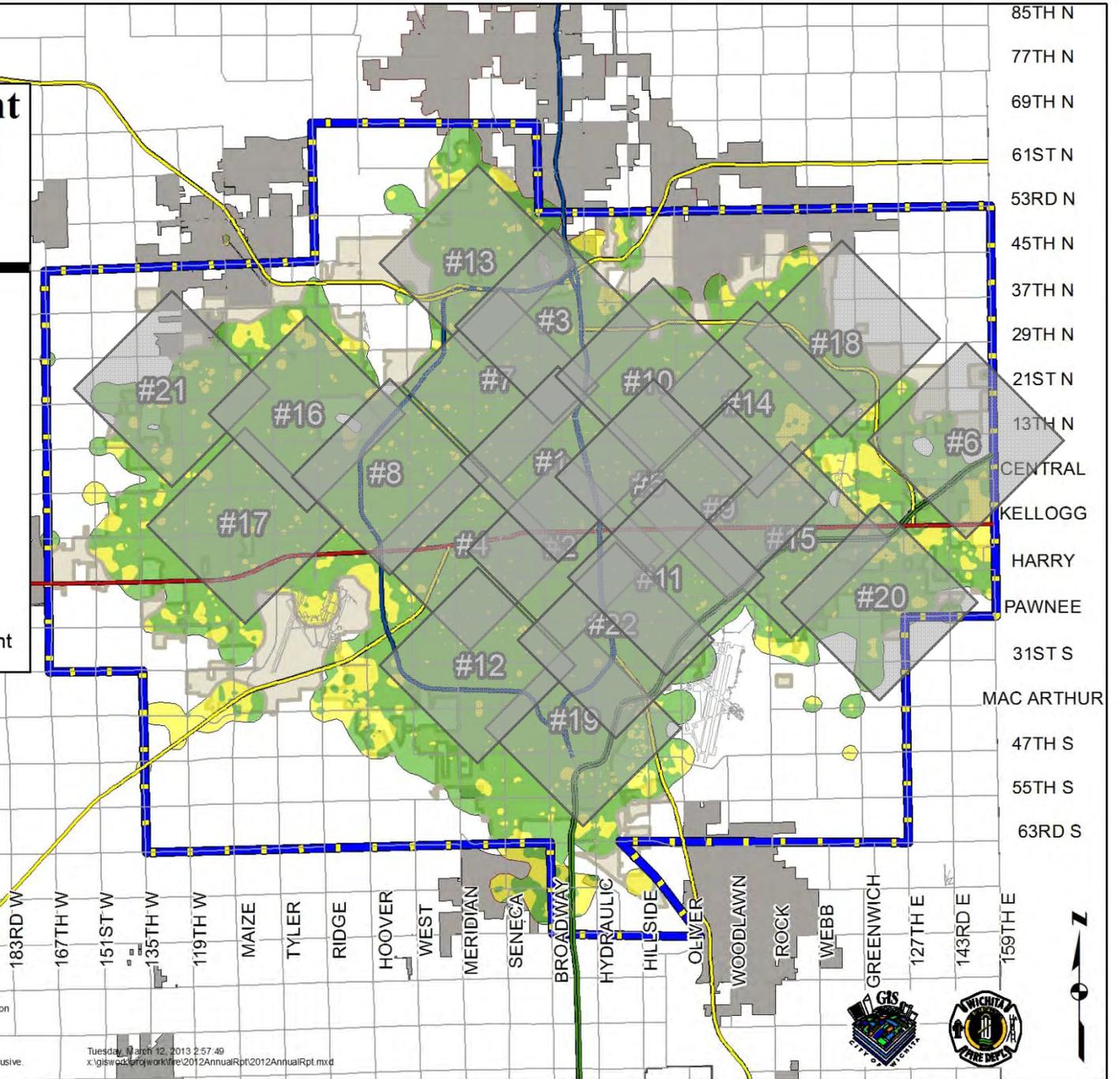
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# Service Assessment - PRA

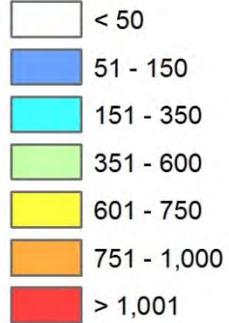
## Matching Resources with Call Demand

- Evaluation of Primary Service Areas (PRA)
  - ▣ PRA = First Due Area of a Fire Station
- First Responder Units Assigned to Station
  - ▣ Average is 2
- Response Reliability
  - ▣ The % of calls serviced by first due units
  - ▣ Average is 85.5%
- Calls Inside PRA
  - ▣ Average is 2,159
- Structure Fires Inside PRA
  - ▣ Average 22



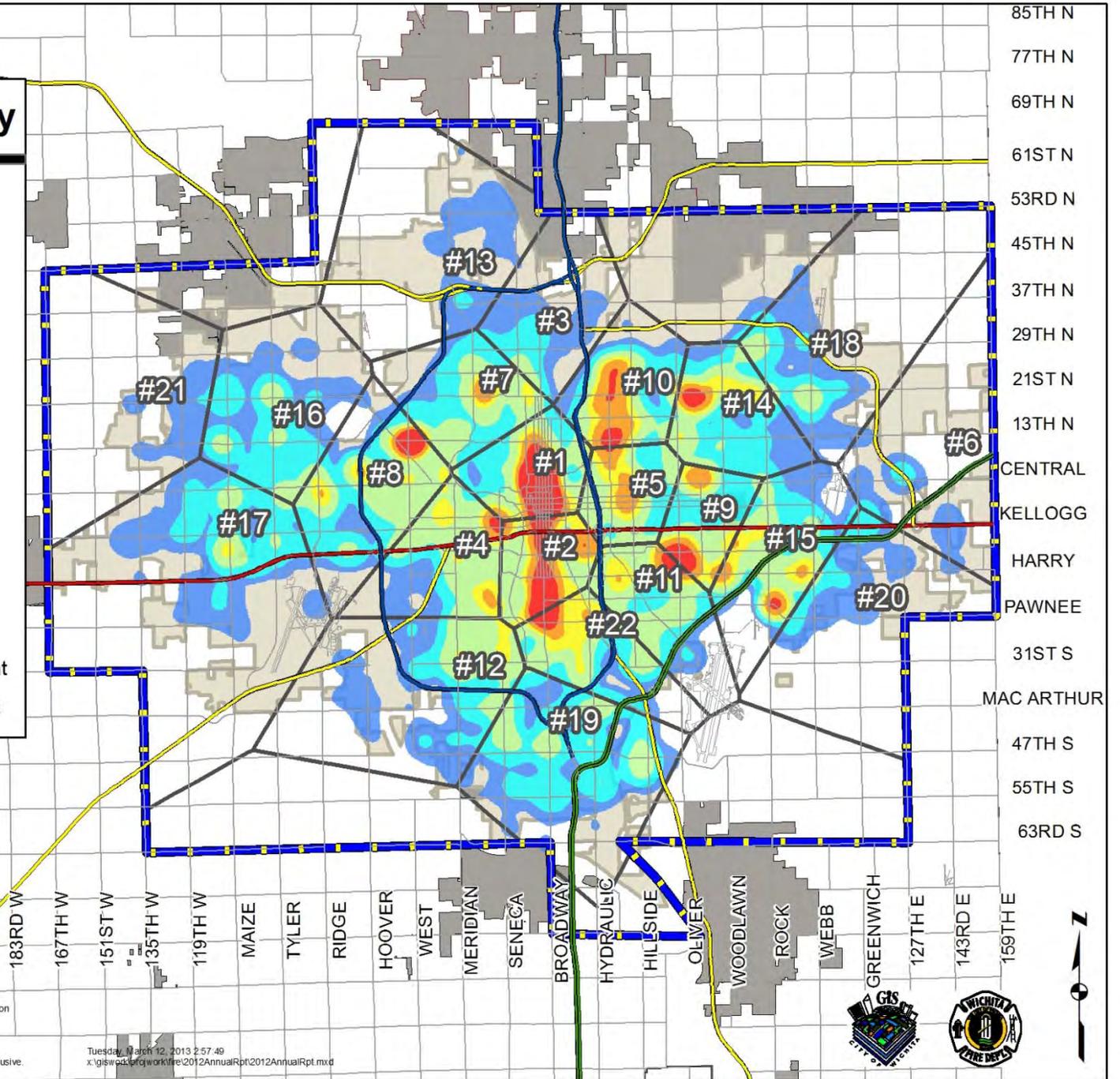
# 2012 Call Density

per Sq Mile



#00 Fire Stations

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# Primary Service Area Profile



FR Unit Count	Station Location	Response Reliability %	Ave. Resp. Time	90th % Resp. Time	Calls Inside PRA	Fire = 111
3	Station 1	89.39%	0:03:35	0:05:31	3,957	36
3	Station 2	85.64%	0:03:48	0:05:52	3,448	42
2	Station 3	92.27%	0:04:24	0:06:46	1,177	11
2	Station 4	77.91%	0:04:48	0:07:05	3,300	36
2	Station 5	84.35%	0:04:02	0:06:05	2,255	30
1	Station 6	89.05%	0:05:55	0:08:48	347	1
2	Station 7	85.98%	0:04:47	0:06:55	2,097	10
2	Station 8	83.07%	0:04:56	0:07:19	3,484	31
2	Station 9	81.01%	0:04:29	0:06:18	1,843	16
2	Station 10	86.50%	0:04:00	0:05:56	2,964	32
2	Station 11	85.37%	0:04:12	0:06:03	2,461	31
2	Station 12	86.02%	0:04:46	0:07:09	2,483	26
1	Station 13	78.57%	0:05:18	0:07:31	462	4
2	Station 14	85.50%	0:04:41	0:06:47	2,220	22
2	Station 15	85.04%	0:04:47	0:07:15	2,908	31
2	Station 16	89.18%	0:04:25	0:06:37	1,497	17
2	Station 17	92.68%	0:04:43	0:07:08	1,885	7
1	Station 18	78.44%	0:05:15	0:07:48	1,285	12
2	Station 19	89.00%	0:04:57	0:07:27	2,081	22
1	Station 20	80.53%	0:05:43	0:07:57	647	15
1	Station 21	79.62%	0:05:24	0:07:20	471	2
1	Station 22	72.06%	0:04:18	0:06:38	2,262	25



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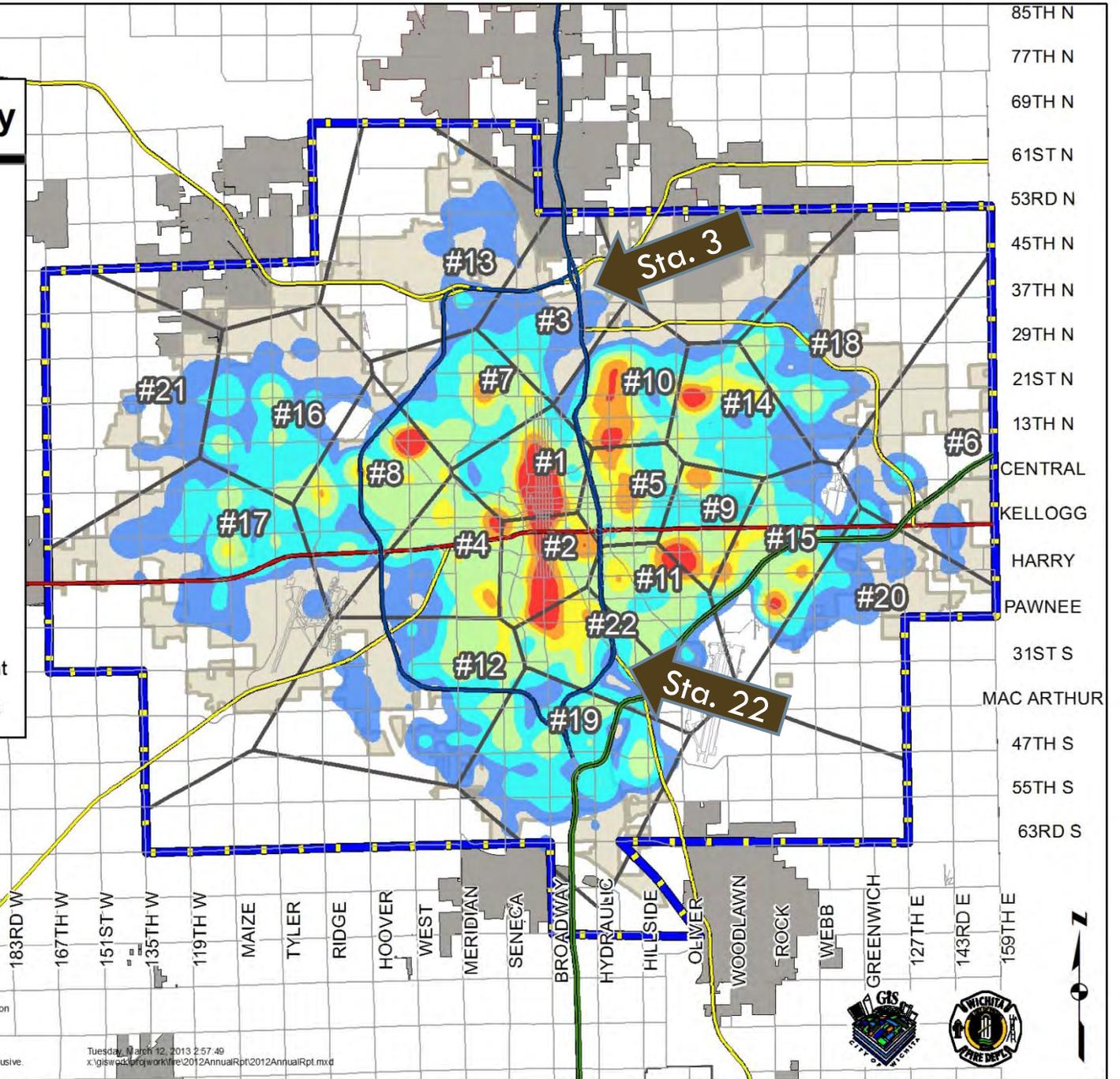
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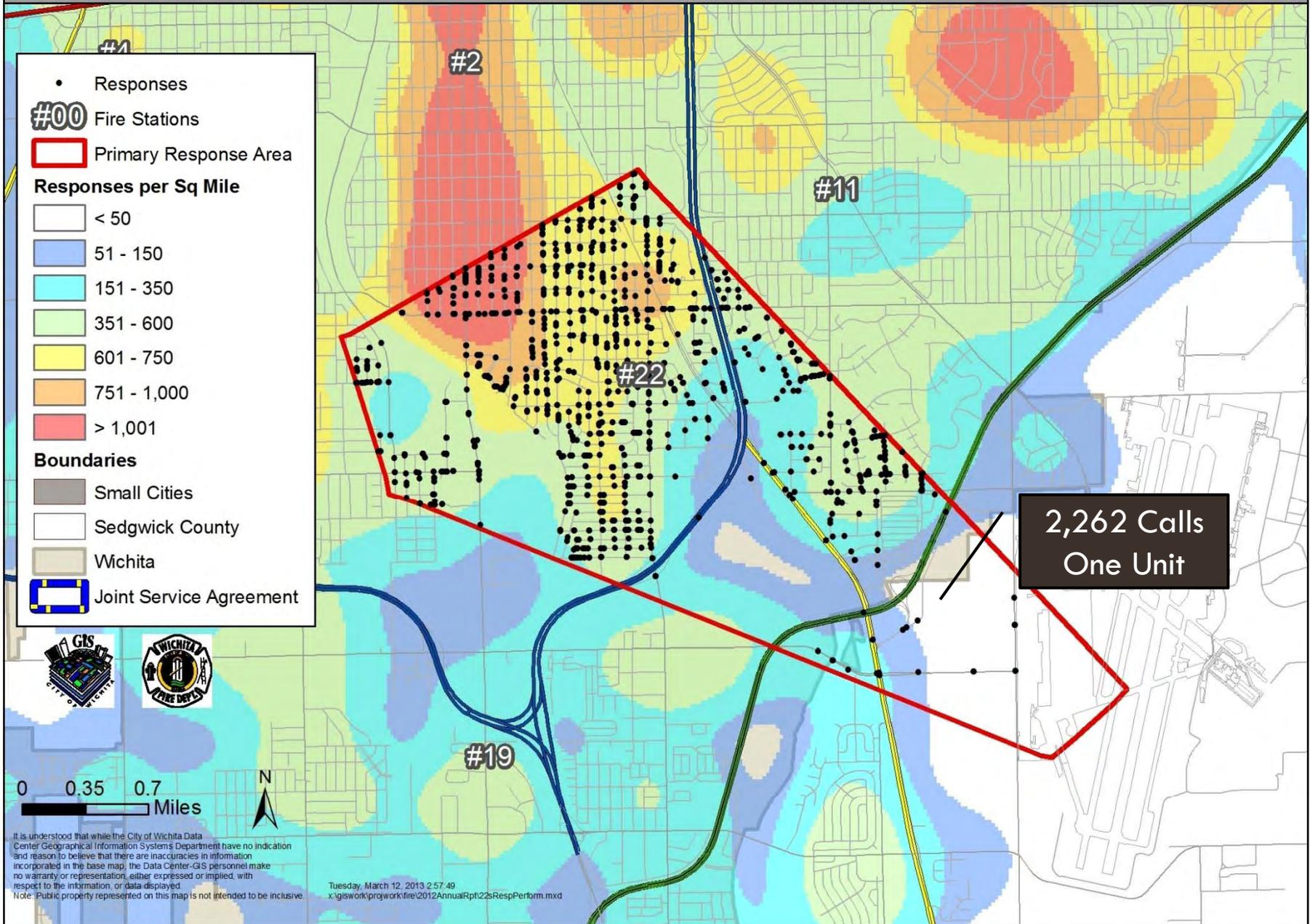
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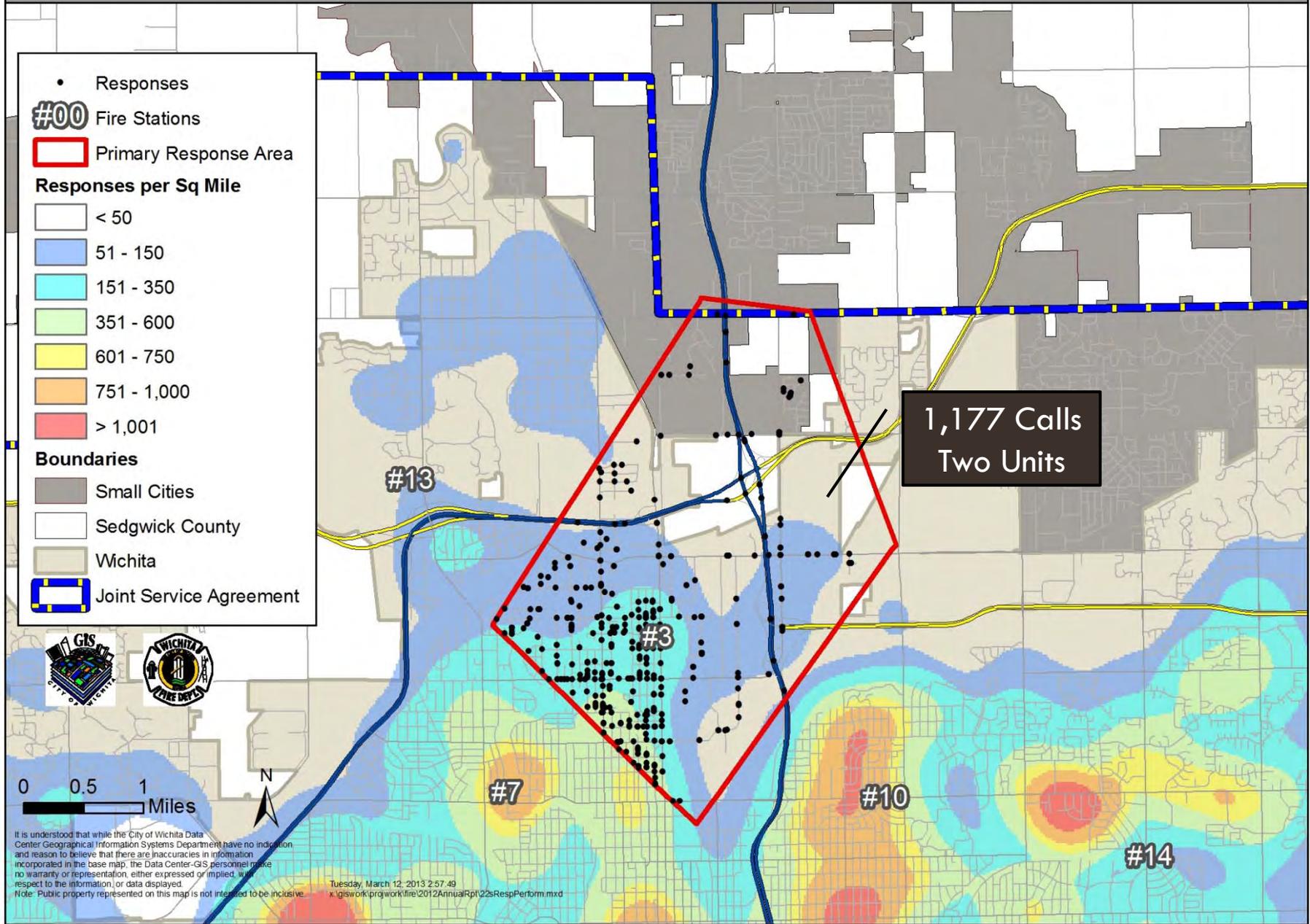
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# 2012 Call Response for Station 22 within Primary Response Area



# 2012 Call Response for Station 3 within Primary Response Area





# Primary Service - Sta. 3 & 22



- Station 22 is a new station added during the last 2 years.
- Changing the number of units assigned to a station will influence response reliability.
- If changes in this example result in the citywide median:
  - ▣ Unit workload balance will improve.
  - ▣ Service will improve.

FR Unit Count	Station Location	Response Reliability %	Ave. Resp. Time	90th % Resp. Time	Calls Inside PRA	Fire = 111	Change Comp. w/h Median	Potential Change +/-
2	Station 3	92.27%	0:04:24	0:06:46	1,177	11	-6.83%	-80
1	Station 22	72.06%	0:04:18	0:06:38	2,262	25	13.37%	303
	All Med.	85.43%	0:04:41	0:06:55	2,159	22		222



# Discussion



## Questions/Comments?

"Try to forget yourself in the service of others. For when we think too much of ourselves and our own interests, we easily become despondent. But when we work for others, our efforts return to bless us."

-Sidney Powell