



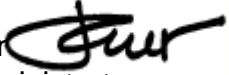
---

# MEMORANDUM

---

Date: December 16, 2024

To: The Honorable Chair and Members  
Pima County Board of Supervisors

From: Jan Leshner   
County Administrator

Re: **Fire and Emergency Medical Service Response Times in Pima County**

Pima County offices periodically receive comments and concerns about Fire and Emergency Medical Service (EMS) response in the county. Although the County does not have direct responsibility for fire service and EMS, as the public health authority it is incumbent on us to review and confirm adequate service delivery levels are being maintained.

Pima County has historically received anecdotal information on response times. To satisfactorily evaluate the comments that have been received, last summer we requested that local fire and EMS providers supply us with information that will allow the County to evaluate the adequacy of response times.

We recognized that there are varying levels of service across the county with differences in service and response time in rural areas compared to urban areas. As such, we noted that any analysis that is made will need to take into consideration the types of services that are available in that specific area as well as other relevant local considerations. It was our hope, however, when comparing similar areas, especially within the urban communities of the county, these comparisons might provide insight into the level of service each region is receiving.

After the initial communication with each Fire Chief in Pima County in which I asked for the thoughts and suggestions about how to best receive, organize and evaluate the information compiled, I received a letter from the Pima County Fire Chiefs Association Chairman Brian Delfs, which noted that response to my request in the format suggested would not only be onerous but would not paint an accurate picture as tracking systems can vary widely among agencies.

Chairman Delfs suggested that Pima County use reports already generated by other national and state agencies and recommended that Pima County access the National Fire Incident Reporting System (NFIRS) and the Arizona Department of Health Services (AZDHS) new electronic database. Chairman Delfs said that the NFIRS report could be tailored specifically for fire districts in Pima County and that the AZDHS database would provide information regarding ambulance services when it goes live.

As the County's intent is to receive timely and accurate information and not to overburden our first responders, we were happy to accept Chairman Delfs recommendation. It was also

The Honorable Chair and Members, Pima County Board of Supervisors  
Re: **Fire and Emergency Medical Service Response Times in Pima County**  
December 16, 2024  
Page 2

subsequently determined that reports would represent a cross-section of urban and rural communities and would not burden the men and women of the volunteer fire districts.

I asked then Pima County's Office of Emergency Management Director Shane Clark to work with Chairman Delfs to develop any protocols necessary to enable Pima County to access the NFIRS and AZDHS databases.

Attached please find the first report developed by former Director Clark earlier this year. I will work with Director Sandra Espinoza toward the production of semi-annual reports and updates to the Board of Supervisors.

JKL/dym

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator  
Francisco García, MD, MPH, Deputy County Administrator & Chief Medical Officer  
Steve Holmes, Deputy County Administrator  
Sandra Espinoza, Director, Office of Emergency Management



## EMERGENCY MANAGEMENT

# MEMORANDUM

To: Jan Leshner  
County Administrator

Francisco Garcia  
Deputy County Administrator

Date: August 16, 2024

From: Shane Clark  
Director

### Re: Fire Department Response Comparison

Upon your request and per your memo dated July 22, 2024 to each of the Fire Chiefs, the Office of Emergency Management (OEM) has compiled data from the National Fire Incident Reporting System (NFIRS) on eight (8) fire departments and districts. Those departments represent a cross-section of urban and rural communities and include the five (5) five cities and towns surrounding communities:

- Avra Valley Fire District serving the community of Avra Valley.
- Drexel Height Fire District serving the community of Drexel Heights.
- Golder Ranch Fire District serving the Town of Oro Valley and community of Catalina.
- Green Valley Fire District serving the community of Green Valley.
- Northwest Fire District serving the Town of Marana.
- Rincon Valley Fire District serving the community of Vail.
- Rural Metro Fire Department serving a section of unincorporated Pima County and Town of Sahuarita.
- Tucson Fire Department serving the City of Tucson.

OEM pulled data from **1/1/24 to 3/31/24**. During this time frame, the 8 departments/districts responded to 33,005 emergency calls. The criteria was to report on calls related to fire, rescue, and emergency medical services (EMS). From the list in NFIRS, it was narrowed to the following:

|   |  |
|---|--|
| Assist Invalid                                    | Fire in motor home, camper, recreational vehicle |
| Brush, or brush and grass mixture fire            | Fire in portable building, fixed location        |
| Building fires                                    | Fire, other                                      |
| Building or structure weakened or collapsed       | Fires in structures other than in a building     |
| Chimney or flue fire, confined to chimney or flue | Forest, woods or wildland fire                   |
| Commercial Compactor fire, confined to rubbish    | Garbage dump or sanitary landfill fire           |
| Cooking fire, confined to container               | Gas leak (natural gas or LPG)                    |
| Cultivated trees or nursery stock fire            | Grass fire                                       |
| EMS call, excluding vehicle accident with injury  | High angle rescue                                |
| EMS call, party transported by non-fire agency    | Mobile property (vehicle) fire, other            |
| Extrication of victim(s) from vehicle             | Motor vehicle accident with no injuries          |
| Extrication, rescue, other                        | Motor vehicle/pedestrian accident (MV Ped)       |
| False alarm or false call, other                  | Natural vegetation fire, other                   |
| Fire in mobile home used as fixed residence       | Off-road vehicle or heavy equipment fire         |
| Fire in mobile prop. used as a fixed structure    | Outside equipment fire                           |

Shane Clark, Director

Re: **Fire Department Response Comparison**

August 16, 2024

Page 2

|  |  |
|--|--|
| Outside rubbish fire, other                | Rescue, emergency medical call (EMS) call, other |
| Outside rubbish, trash or waste fire       | Road freight or transport vehicle fire           |
| Outside storage fire                       | Special outside fire, other                      |
| Passenger vehicle fire                     | Swift water rescue                               |
| Person in distress, other                  | Trash or rubbish fire, contained                 |
| Rail vehicle fire                          | Unauthorized burning                             |
| Removal of victim(s) from stalled elevator | Vehicle accident with injuries                   |

Response times were broken down into time increments of 0-10 minutes, 10-15 minutes, 15-20 minutes, 20-25 minutes, and over 25 minutes.

Below is the mission of each department, their unique response data, and a breakdown between fire and EMS calls. That will be followed by attachments with visual aid of the data, district maps and fire station locations.

The mission of the **Avra Valley Fire District (AVFD)** <https://www.avfire.org/> - “Dedicated, caring professionals committed to safely serving the community of Avra Valley by protecting life and property through education, prevention, suppression and emergency medical services”. AVFD has **4 Fire Stations** covering district boundaries in Pima and Pinal counties. AVFD responded to 334 calls and arrived on-scene within 10 minutes 75% of the time. Of those calls, 298 (89%) were emergency medical incidents.

The mission of the **Drexel Heights Fire District (DHFD)** <https://drexelfire.org/#> - “Minimize the threat to life and property due to fire, medical or other emergencies through education, prevention, preparedness, prompt response, and effective customer service”. DHFD has **4 Fire Stations**. DHFD responded to 1513 calls and arrived on-scene within 10 minutes 91% of the time. Of those calls, 1280 (85%) were emergency medical incidents.

The mission of the **Golder Ranch Fire District (GRFD)** <https://grfdaz.gov/> - “With integrity – Golder Ranch Fire District provides responsive and caring fire and life safety services that meet the emerging needs of our community through teamwork, dedication, and professionalism”. GRFD has **10 Fire Stations** covering district boundaries in Pima and Pinal counties. GRFD responded to 1138 calls and arrived on-scene within 10 minutes 97% of the time. Of those calls, 1048 (92%) were emergency medical incidents.

For this memo, the data for fire and EMS response is provided for the **Green Valley Fire District (GVFD)** which recently rebranded to the Santa Rita Fire District <https://srfdaz.gov/> with the annexation<sup>1</sup> of the Town of Sahuarita on July 1, 2024. Prior to the annexation, fire protection was provided by Rural Metro Fire Department. The mission - “Provide, Our Community, Proactive, Fire and Emergency Services, Compassion, Competence, Character, and Fiscal Responsibility. GVFD had **4 Fire Stations** at the time of the data collection. GVFD responded to 2937 calls<sup>2</sup> and arrived on-scene within 10 minutes 94% of the time. Of those calls, 2387 (81%) were emergency medical incidents.

<sup>1</sup> ARS 48-262 District boundary changes; procedures; notice; hearing; determinations; petitions.

<sup>2</sup> GVFD calls do not include responses into the Town of Sahuarita until after 7/1/24. Those calls are included in Rural Metro data.

Shane Clark, Director

Re: **Fire Department Response Comparison**

August 16, 2024

Page 3

The mission of the **Northwest Fire District (NWFD)** <https://nwfdaz.gov/> - "Save lives, protect property, and care for our community". NWFD has **11 Fire Stations**. NWFD responded to 3866 calls and arrived on-scene within 10 minutes 96% of the time. Of those calls, 3570 (92%) were emergency medical incidents.

The mission of the **Rincon Valley Fire District (RVFD)** <https://www.rvfdaz.org/> - "Prepare, prevent, and protect our community from harm." RVFD has **2 Fire Stations**. RVFD responded to 504 calls and arrived on-scene within 10 minutes 66% of the time. Of those calls, 440 (87%) were emergency medical incidents.

The mission of the **Rural Metro Fire Department (RMFD)** <https://www.ruralmetrofire.com/> - "Provide fire protection and emergency medical services to individual homeowners and commercial property owners in unincorporated areas". RMFD had **6 Fire Stations** at the time of the data collection and included a station in the Town of Sahuarita. RMFD responded to 2417 calls and arrived on-scene within 10 minutes 71% of the time. Of those calls, 1987 (82%) were emergency medical incidents.

The mission of the **Tucson Fire Department (TFD)** <https://www.tucsonaz.gov/Departments/Fire> - "Excellent public safety professionals, compassionately providing our community an all-hazards response with integrity and courage through innovative prevention, education, and active intervention. TFD has **22 Fire Stations**. A summary of data shows TFD responded to 20,296 calls and arrived on-scene within 10 minutes 93% of the time. Of those calls, 18,627 or 92% were emergency medical incidents.

The quality of service provided is consistent with all of the departments analyzed. Each department is staffed with highly trained and dedicated professionals serving their community. Each department is staffed with certified firefighters that also hold medical certifications to the levels of emergency medical technician and paramedic (Advanced Life Support). Overall, of the 33,005 responses, departments arrived on scene within 10 minutes or 91% to the time. 29,637 (90%) of the calls were EMS. While not a subject matter expert in fire department response, there appears to be significant differences when analyzing the data. Response times changes to the relation with the number of stations and the coverage area served. There are departments that serve more urban type communities like DHFD, GRFD, GVFD, NWFD, and TFD, compared to departments that are more rural based AVFD, RVFD, and RMFD.

There are layers built of fire/EMS response that inherently lengthen response times. Most stations have only one fire apparatus and may include an ambulance. Some stations have multiple fire apparatus. Each station has a primary response coverage area. When those apparatus are dispatched to an emergency response, their coverage area becomes the responsibility of the next closest station and that can induce a ripple effect extending response times. When incidents are complex and require additional apparatus, internal resources are pulled from their other coverage areas. Additional responses may come from another department via a mutual aid request, further exasperating the ripple effect. This can occur more frequently for a district or department that have fewer resources to begin with. When multiple agencies are working together, it is a fire community helping a fire community in need. There are additional factors that can affect delayed response times. Road construction requiring detour, rains that wash out roadway infrastructure, roads blocked at railroad crossing are frequent examples. Another challenge is that many districts will respond outside their district because of the nature of the emergency, and they are the closest resource even though not obligated. These types of challenges inevitably add to long response times.

Shane Clark, Director

Re: **Fire Department Response Comparison**

August 16, 2024

Page 4

Station location is an important factor and part of a departments strategic approach and requires a balance with budget. Fire departments and districts are taxed-based, and another department is mainly subscription for service based. The more congested the population, the more revenue to build and sustain operations. This directly relates to response times, departments that have more stations and in closer proximity have the lower the response times and the opposite for other departments. There is no mandate for response times, but many departments have instituted their own response times criteria.

This concludes this memo.

SC/SE

Attachments:

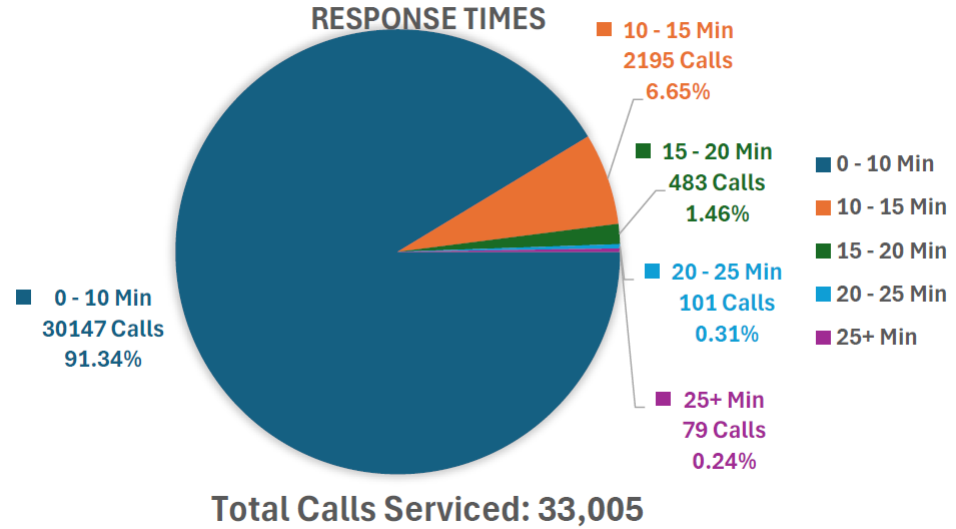
1. Fire Department Response coverage maps and data comparisons; correspondence between County Administrator and Pima County Fire Chiefs (sample to each individual fire chief) dated July 22, 2024 and from Pima County Fire Chief Association.

Shane Clark, Director  
Re: **Fire Department Response Comparison**  
August 16, 2024

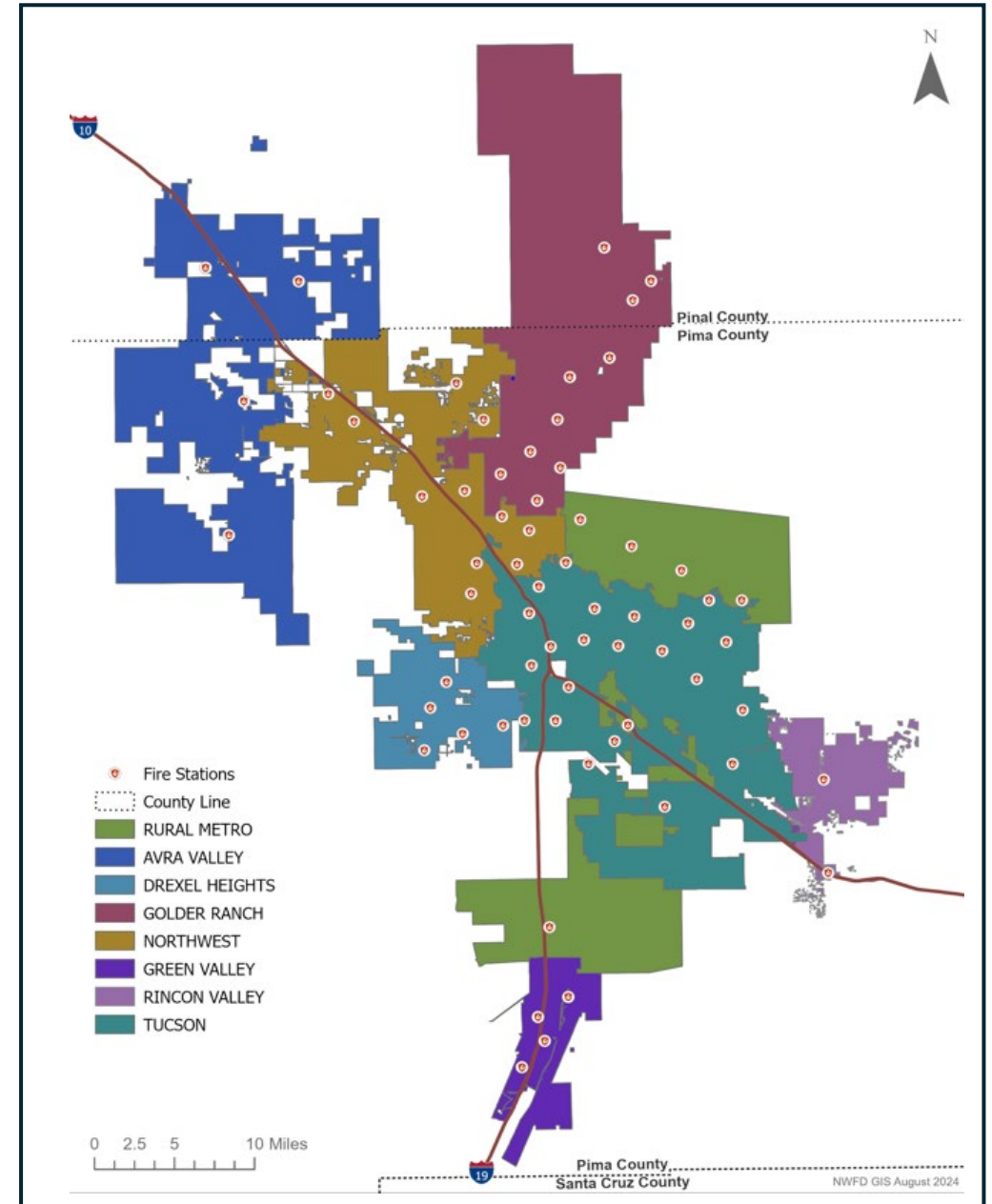
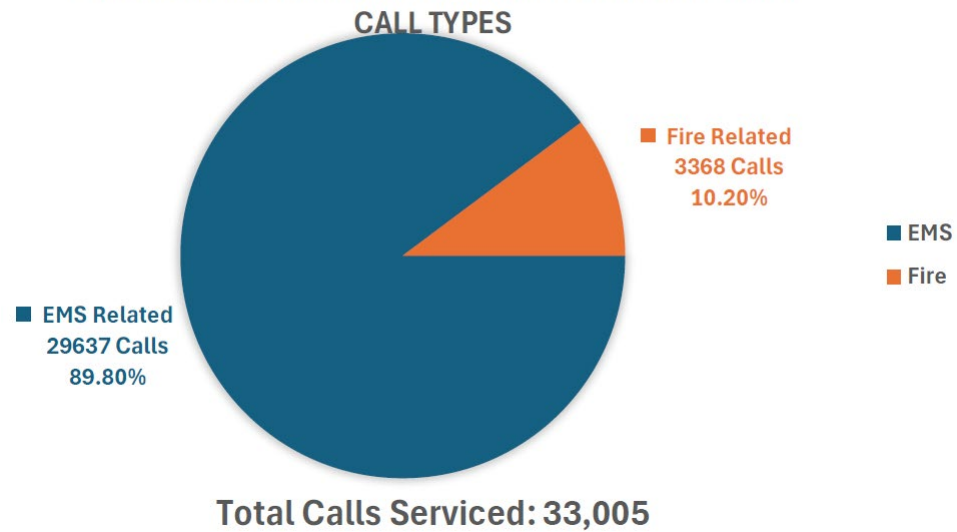
# ATTACHMENT 1

# Overall Response Times for AVFD, DHFD, GRFD, GVFD, NWFD, RVFD, RMFD, and TFD

FIRE COMPARISON DATA - 8 SELECTED DEPARTMENTS

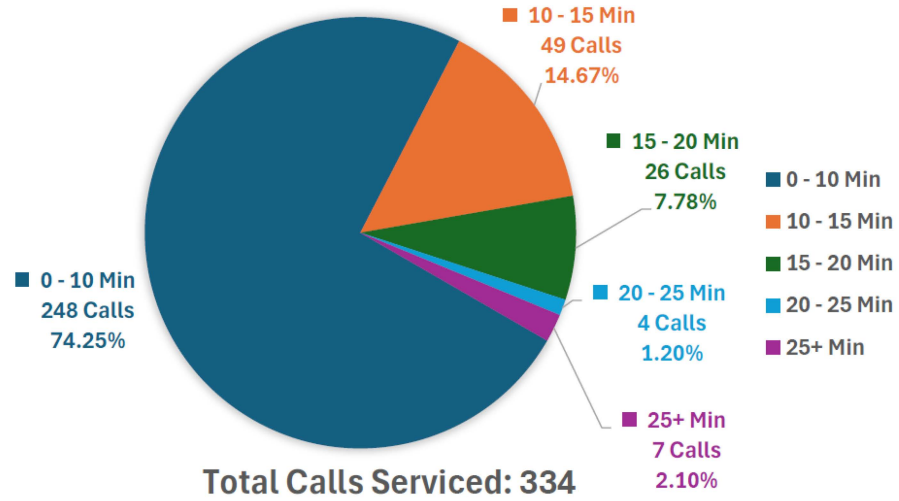


FIRE COMPARISON DATA - 8 SELECTED DEPARTMENTS

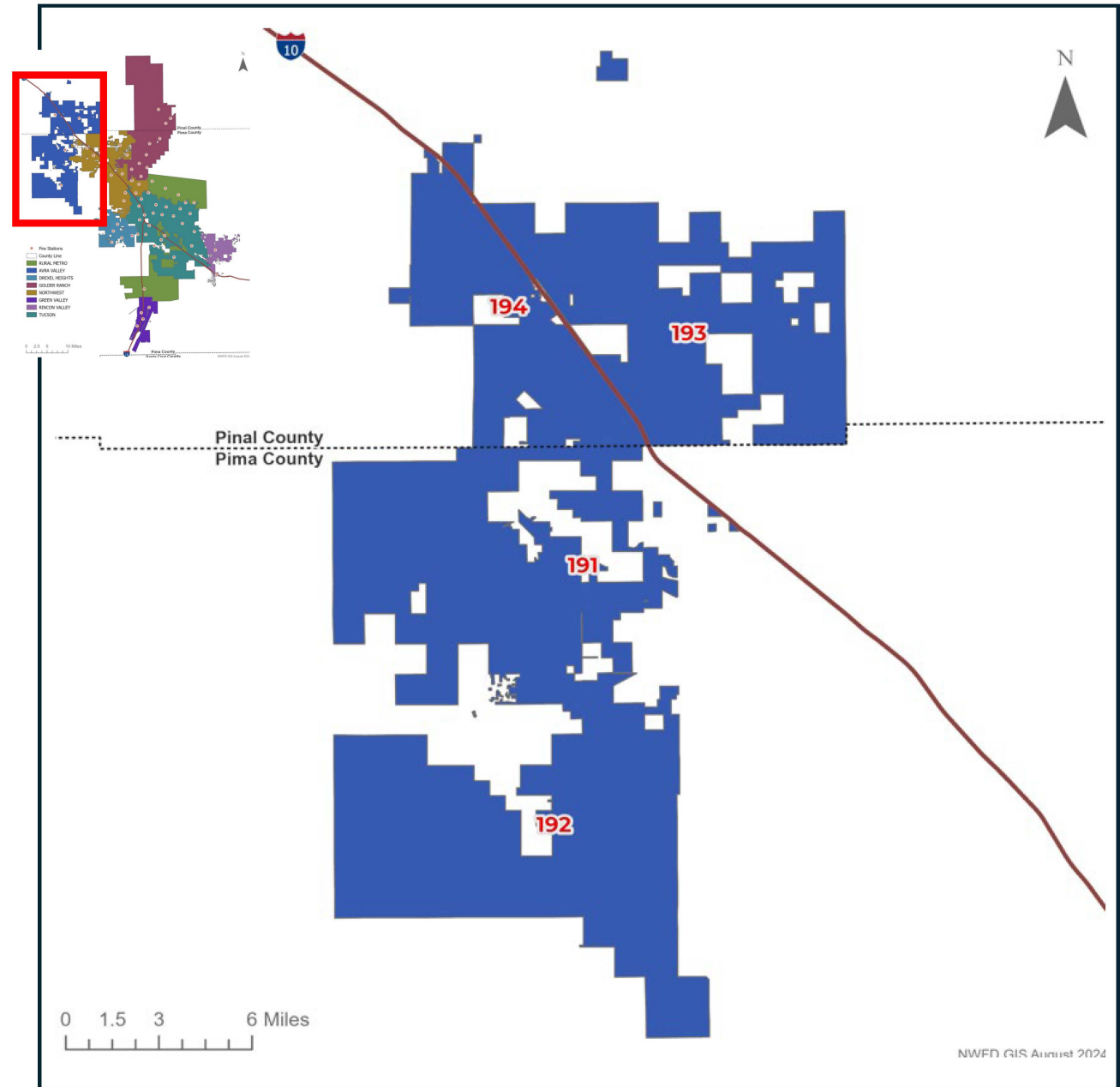
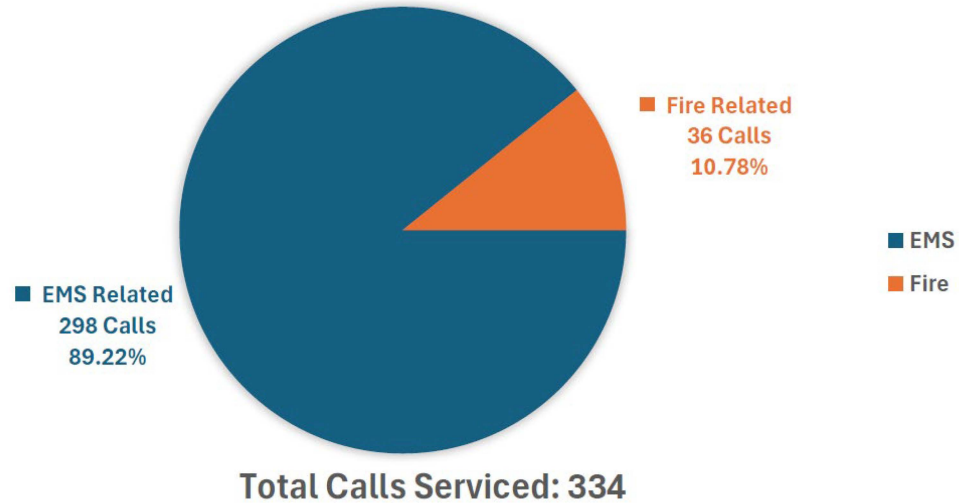




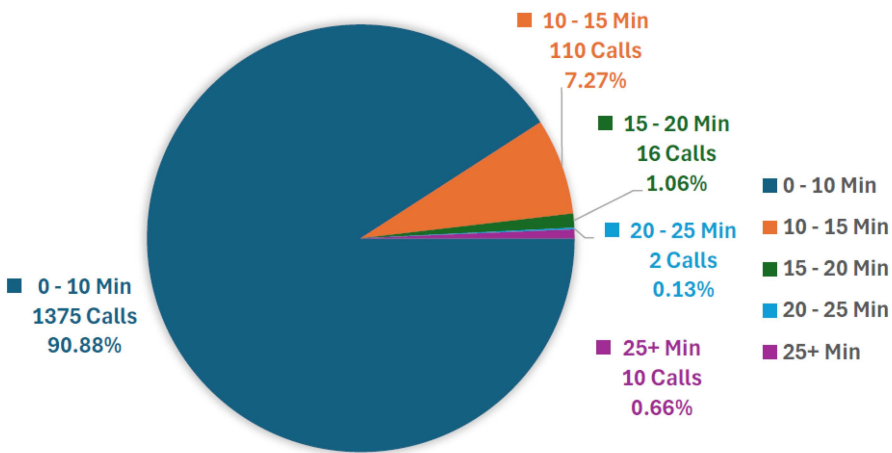
### AVRA VALLEY FIRE DISTRICT RESPONSE TIMES



### AVRA VALLEY FIRE DISTRICT CALL TYPES

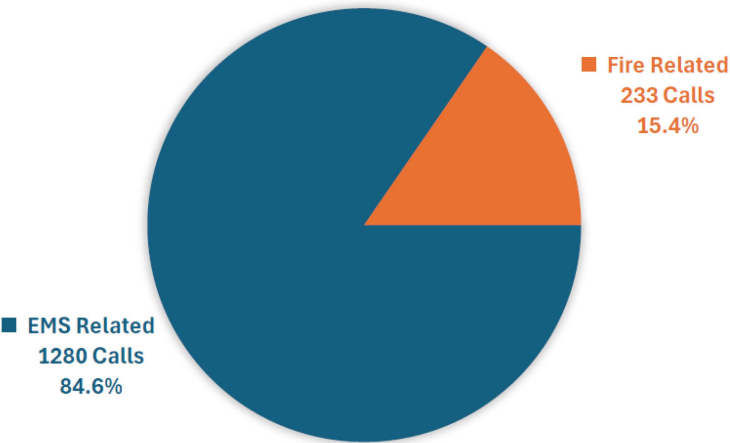


DREXEL HEIGHTS FIRE DISTRICT RESPONSE TIMES

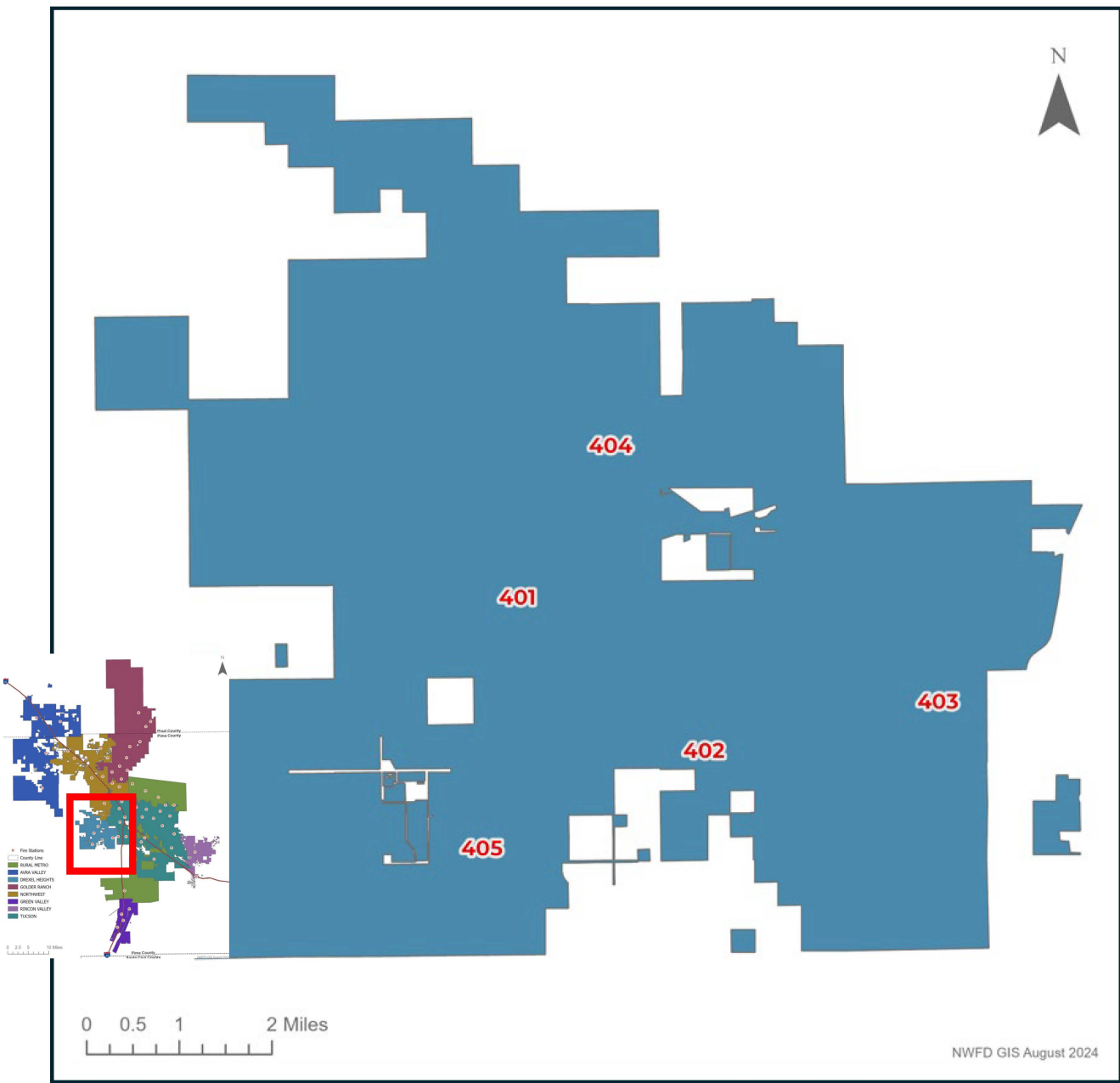


Total Calls Serviced: 1,513

DREXEL HEIGHTS FIRE DISTRICT CALL TYPES



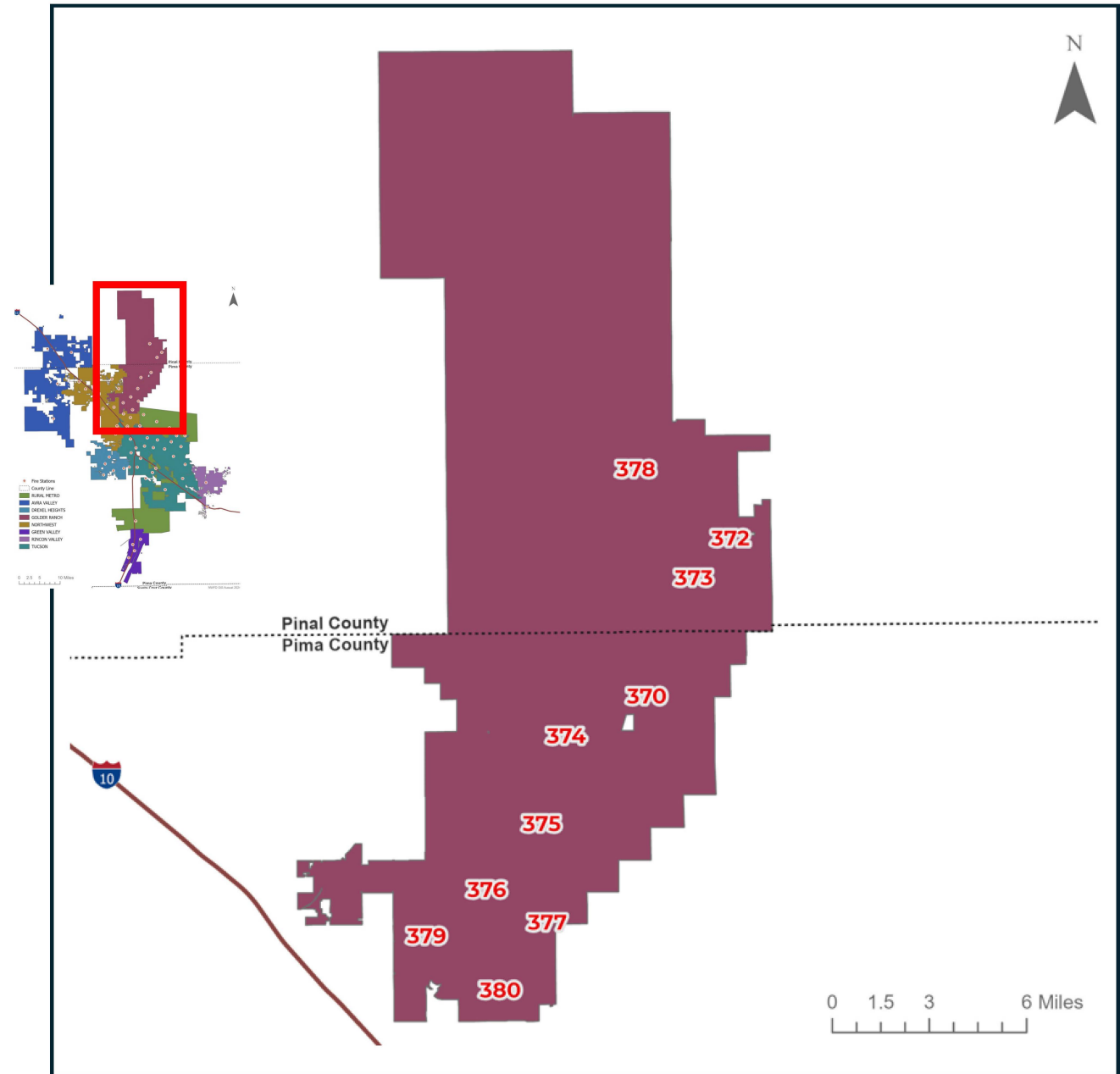
Total Calls Serviced: 1,513



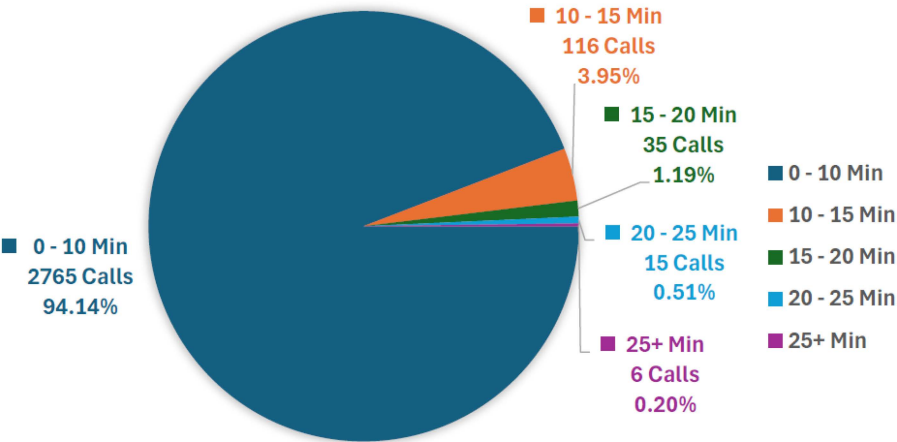
| Call Duration | Number of Calls | Percentage |
|---------------|-----------------|------------|
| 0 - 10 Min    | 1099            | 96.57%     |
| 10 - 15 Min   | 26              | 2.28%      |
| 15 - 20 Min   | 9               | 0.79%      |
| 20 - 25 Min   | 1               | 0.09%      |
| 25+ Min       | 3               | 0.26%      |

A pie chart illustrating the distribution of calls by type. The chart is divided into two segments: a large blue segment representing EMS calls and a smaller orange segment representing Fire calls. The EMS segment is labeled with '90 Calls' and '7.91%', while the Fire segment is labeled with '48 Calls' and '2.09%'. A legend on the right side of the chart identifies the colors: blue for EMS and orange for Fire.

| Call Type | Number of Calls | Percentage |
|-----------|-----------------|------------|
| EMS       | 90              | 7.91%      |
| Fire      | 48              | 2.09%      |

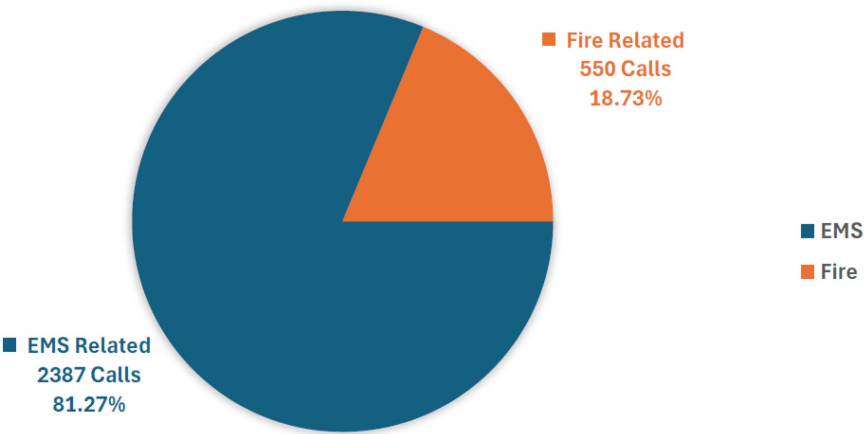


GREEN VALLEY FIRE DISTRICT RESPONSE TIMES

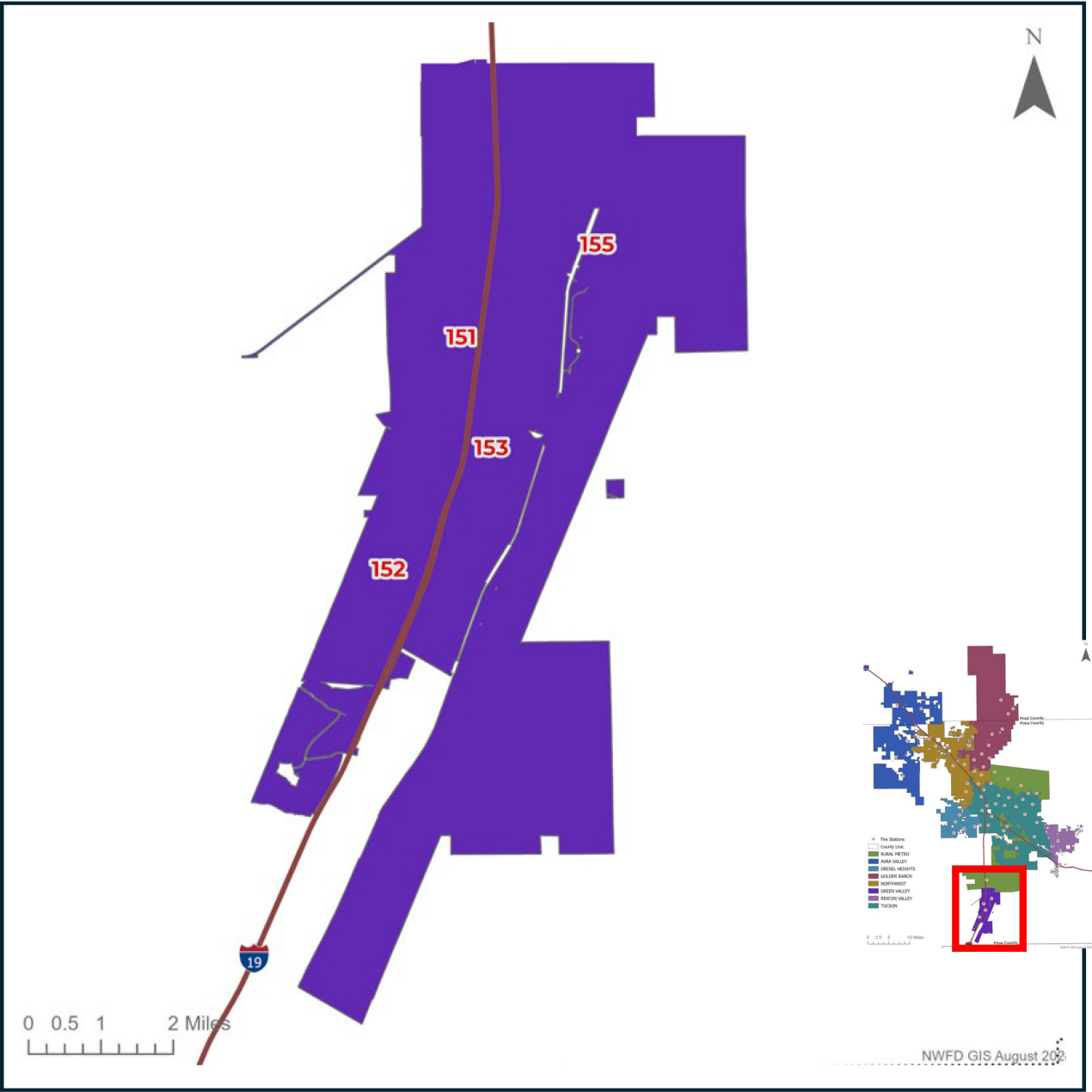


Total Calls Serviced: 2,937

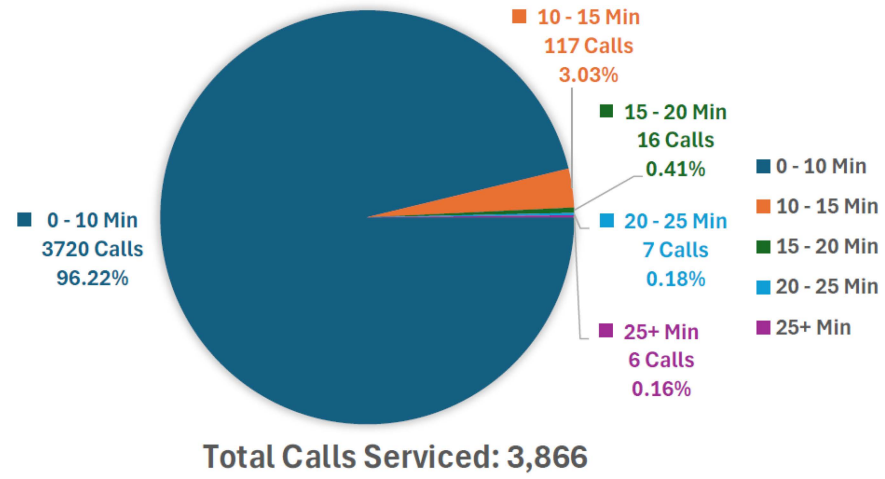
GREEN VALLEY FIRE DISTRICT CALL TYPES



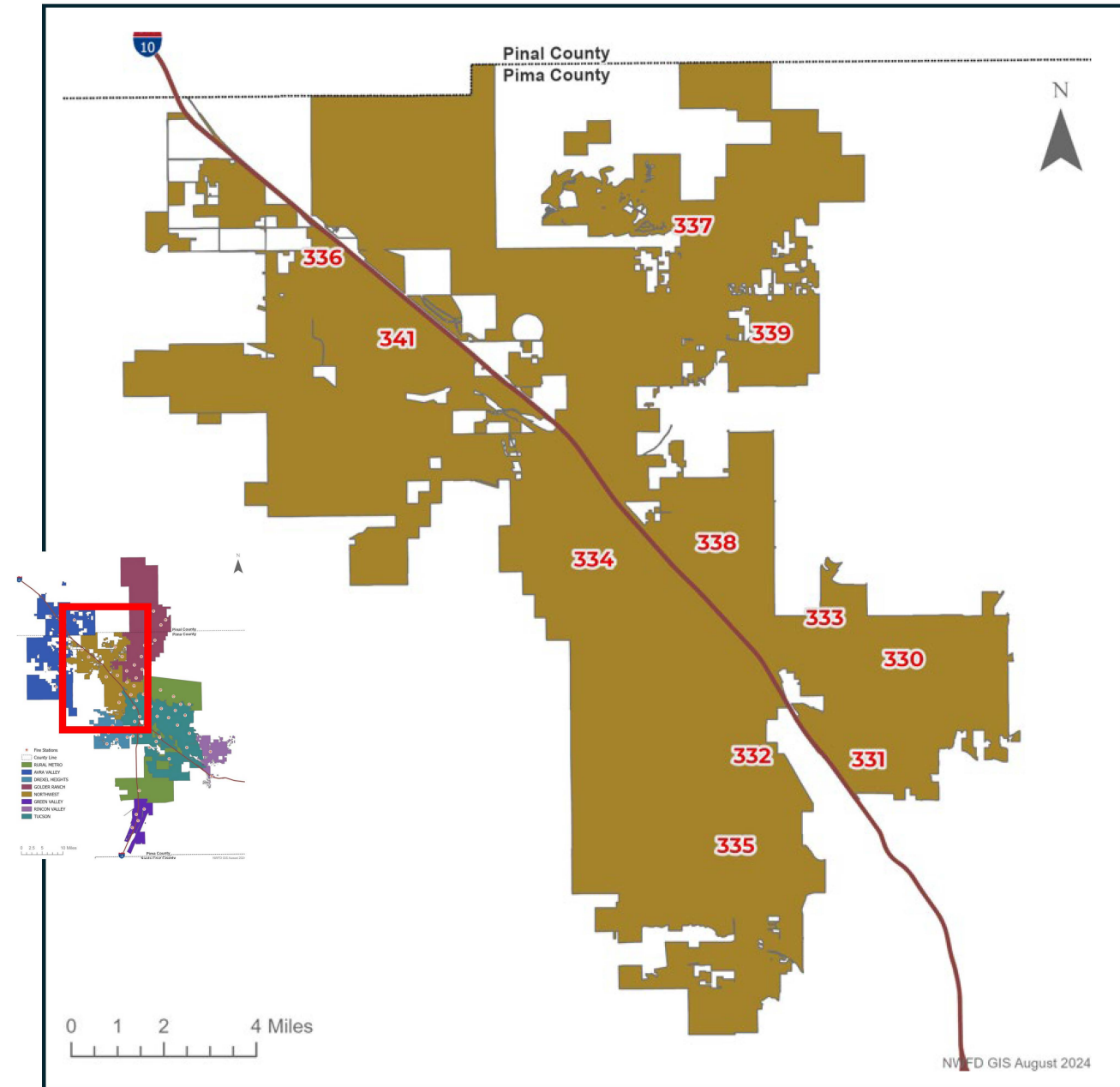
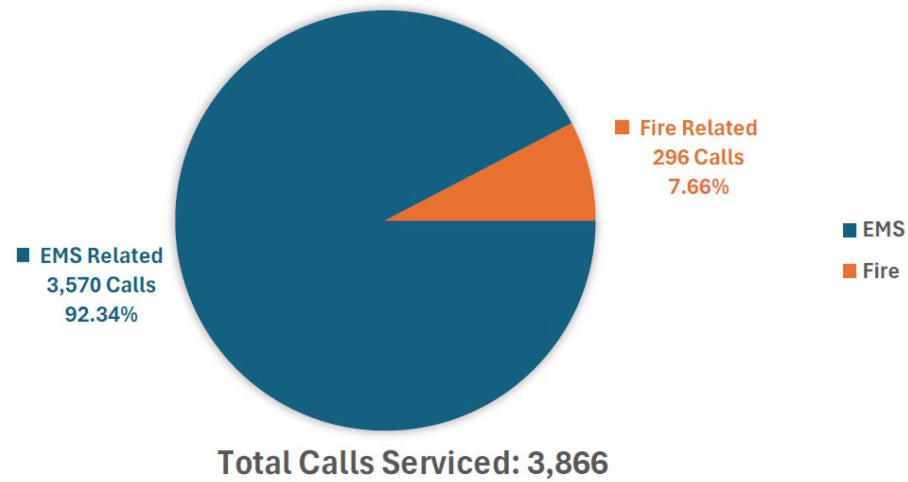
Total Calls Serviced: 2,937



## NORTHWEST FIRE DISTRICT RESPONSE TIMES

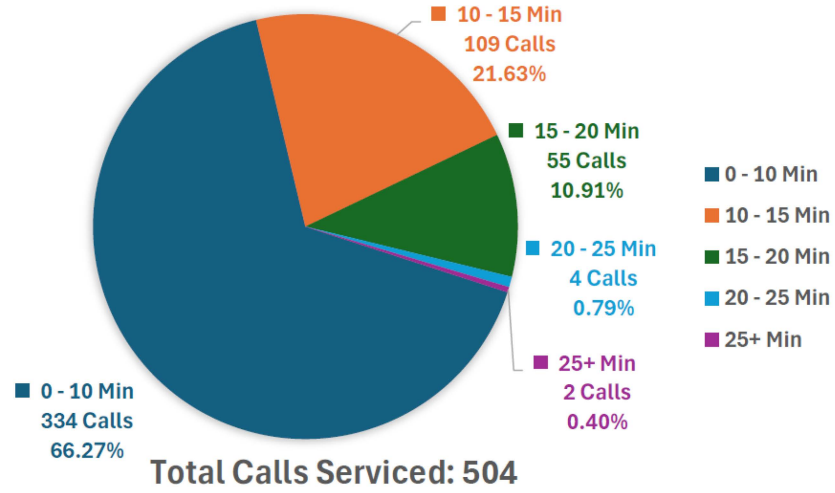


## NORTHWEST FIRE DISTRICT CALL TYPES

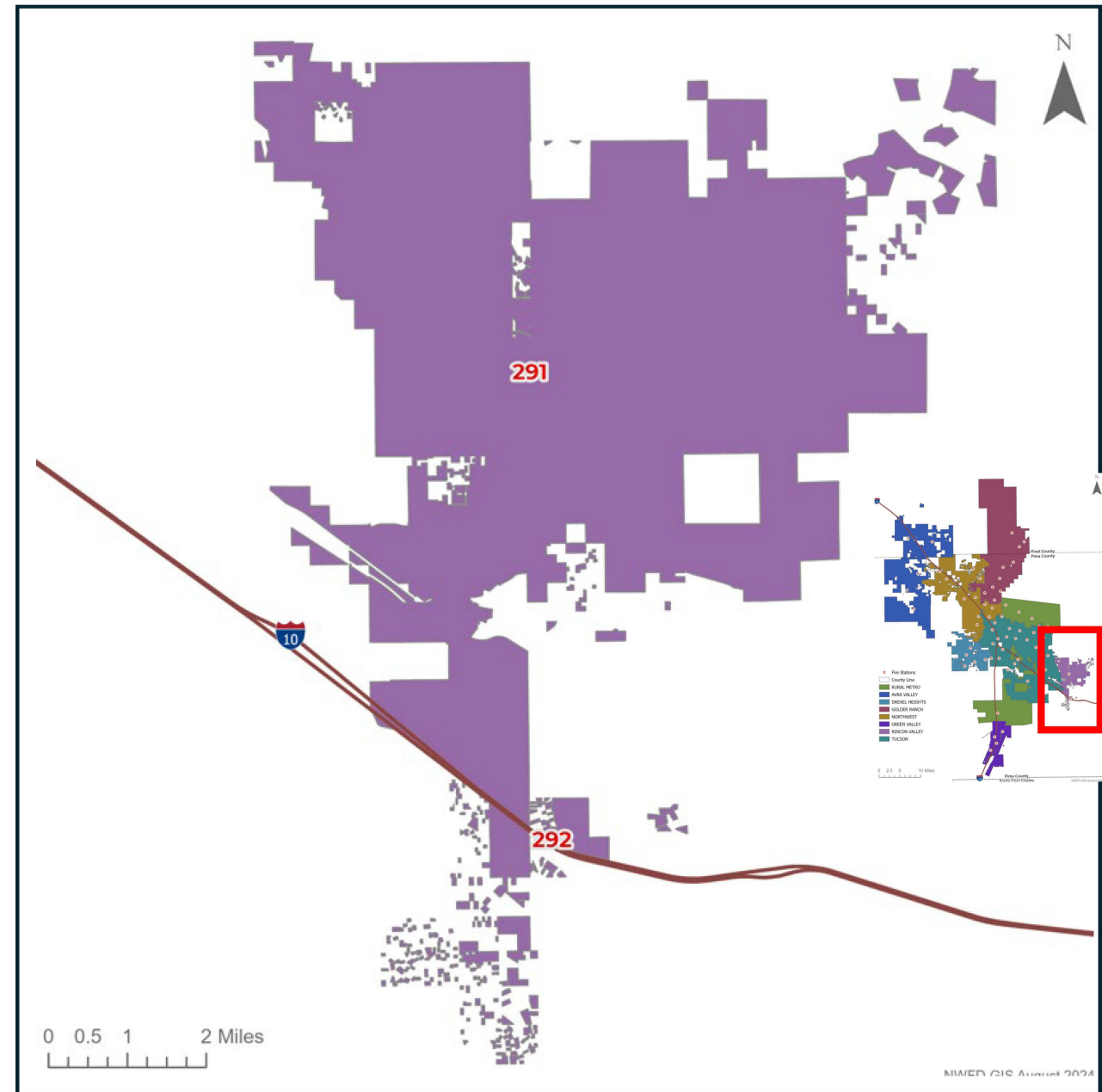
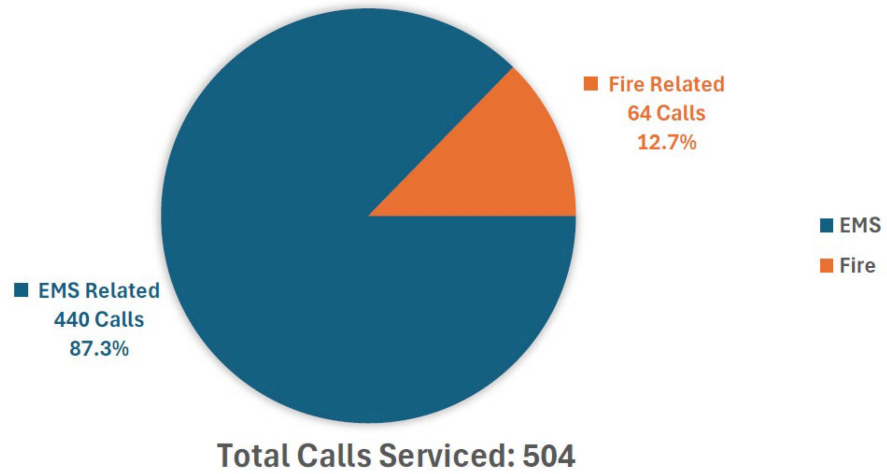




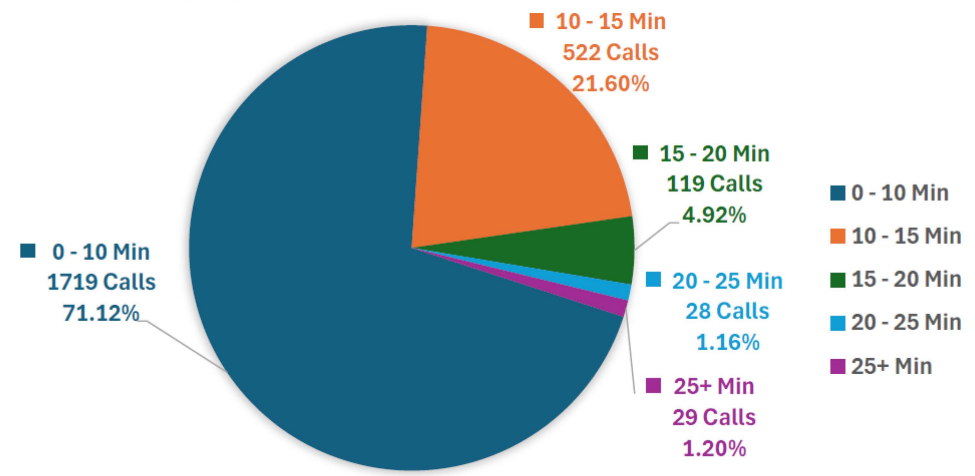
### RINCON VALLEY FIRE RESPONSE TIMES



### RINCON VALLEY FIRE DISTRICT CALL TYPES

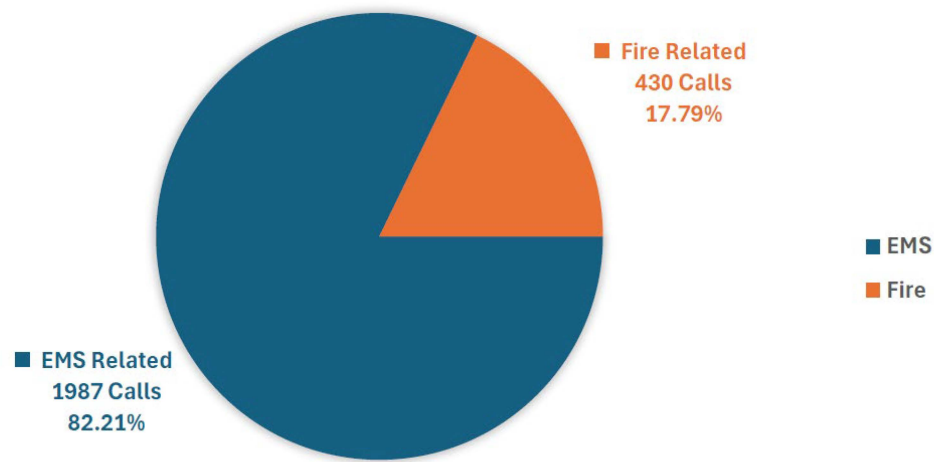


### RURAL METRO TUCSON RESPONSE TIMES

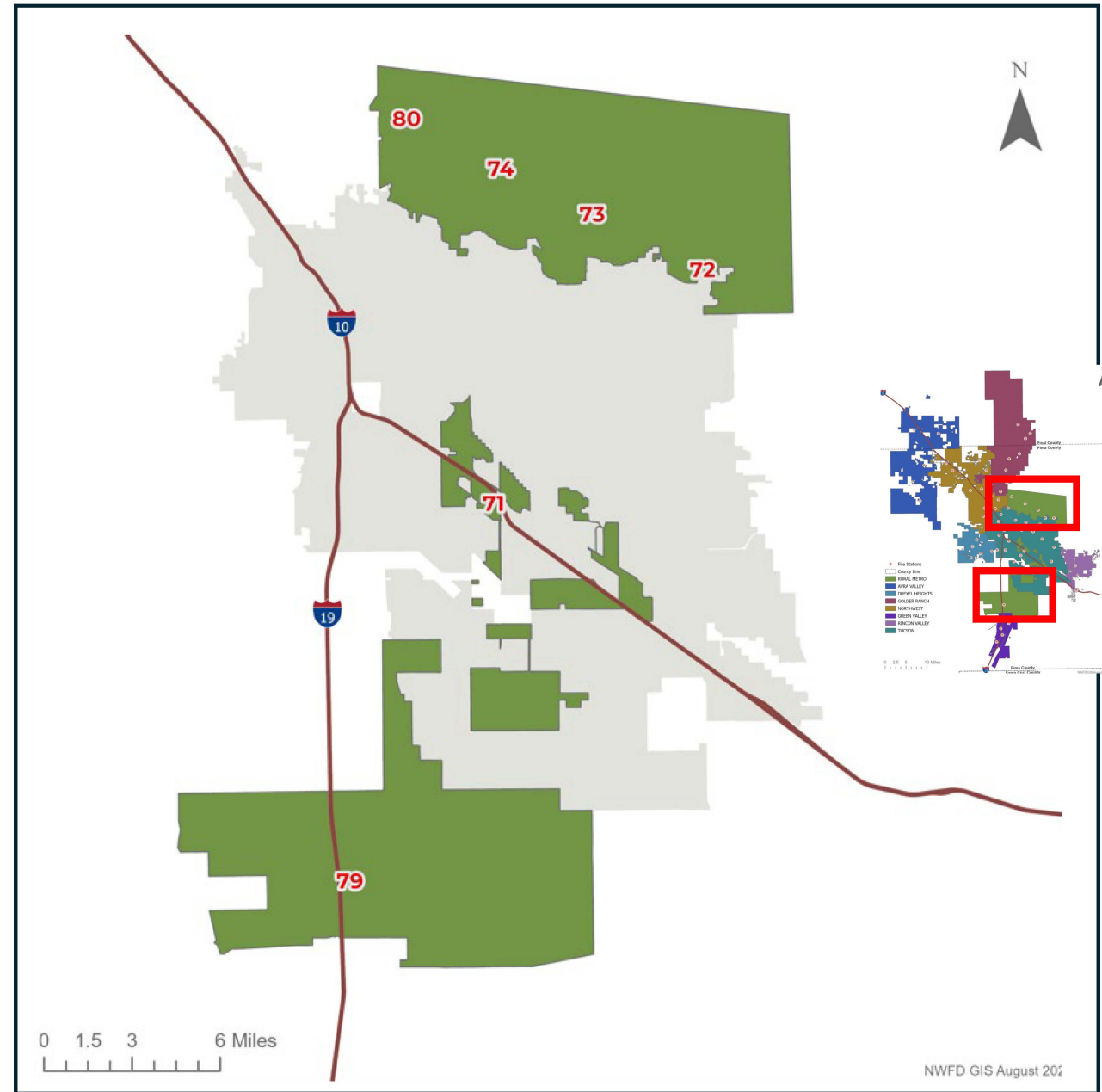


Total Calls Serviced: 2,417

### RURAL METRO TUCSON CALL TYPES



Total Calls Serviced: 2,417



**Total Calls Serviced: 20,296**

| Duration    | Calls | Percentage |
|-------------|-------|------------|
| 0 - 10 Min  | 18887 | 93.06%     |
| 10 - 15 Min | 1146  | 5.65%      |
| 15 - 20 Min | 207   | 1.02%      |
| 20 - 25 Min | 40    | 0.20%      |
| 25+ Min     | 16    | 0.08%      |

A pie chart illustrating the distribution of calls by type. The chart is divided into two segments: a large blue segment representing EMS Related calls (91.78%) and a smaller orange segment representing Fire Related calls (8.22%). The total number of calls serviced is 20,296. A legend on the right identifies the colors: blue for EMS and orange for Fire.

| Call Type                   | Number of Calls | Percentage |
|-----------------------------|-----------------|------------|
| EMS Related                 | 18,627          | 91.78%     |
| Fire Related                | 1,669           | 8.22%      |
| <b>Total Calls Serviced</b> | <b>20,296</b>   |            |

**Total Calls Serviced: 20,296**

