

# Roswell, GA Fire Department Strategic Plan Gap Analysis

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*Senior Manager  
Fire and EMS*



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# CPSM: The Exclusive Provider of Public Safety Technical Assistance to ICMA

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- **Who we are?**
  - Created by ICMA in 2004 as “Consulting Services”, CPSM was spun off during reorganization in 2014.
  - Your team for determining answers to questions from a management perspective using experts in the disciplines.
  - Conducted more than 400 studies in 46 states and Canada
- **Services**
  - Forensic analysis of data to determine workload and tasks
  - Strategic and Public Safety Master Planning
  - Operational analysis for dispatch, police, fire, and EMS
  - Public Safety Chief Selection
  - Standard of Response Coverage Studies
  - Community Risk Assessments
  - Ongoing data assessment to monitor staffing demand

# Purpose of Gap Analysis

- Conduct an audit/gap analysis of the Roswell Fire Department (current reality and where they need to be)
- Conduct an agency evaluation
  - Staffing evaluation
  - Service Delivery and Performance
  - Future System Demand/Service Delivery
- Gap Analysis will serve as the foundation of a Strategic Plan CPSM is also developing



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# Analysis Process

- Virtual Stakeholder Meetings with RFD Senior Staff
- Analysis of Department Provided Information
- Comprehensive Response - Workload Analysis
- Comprehensive GIS/Mapping Analysis
- Community Risk and ISO Report Analysis
- CPSM Team On-Site May 2 & 3, 2022
  - Operational Line Staff Stakeholder Input
  - Facility Review
  - Fleet Review



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# Current Services

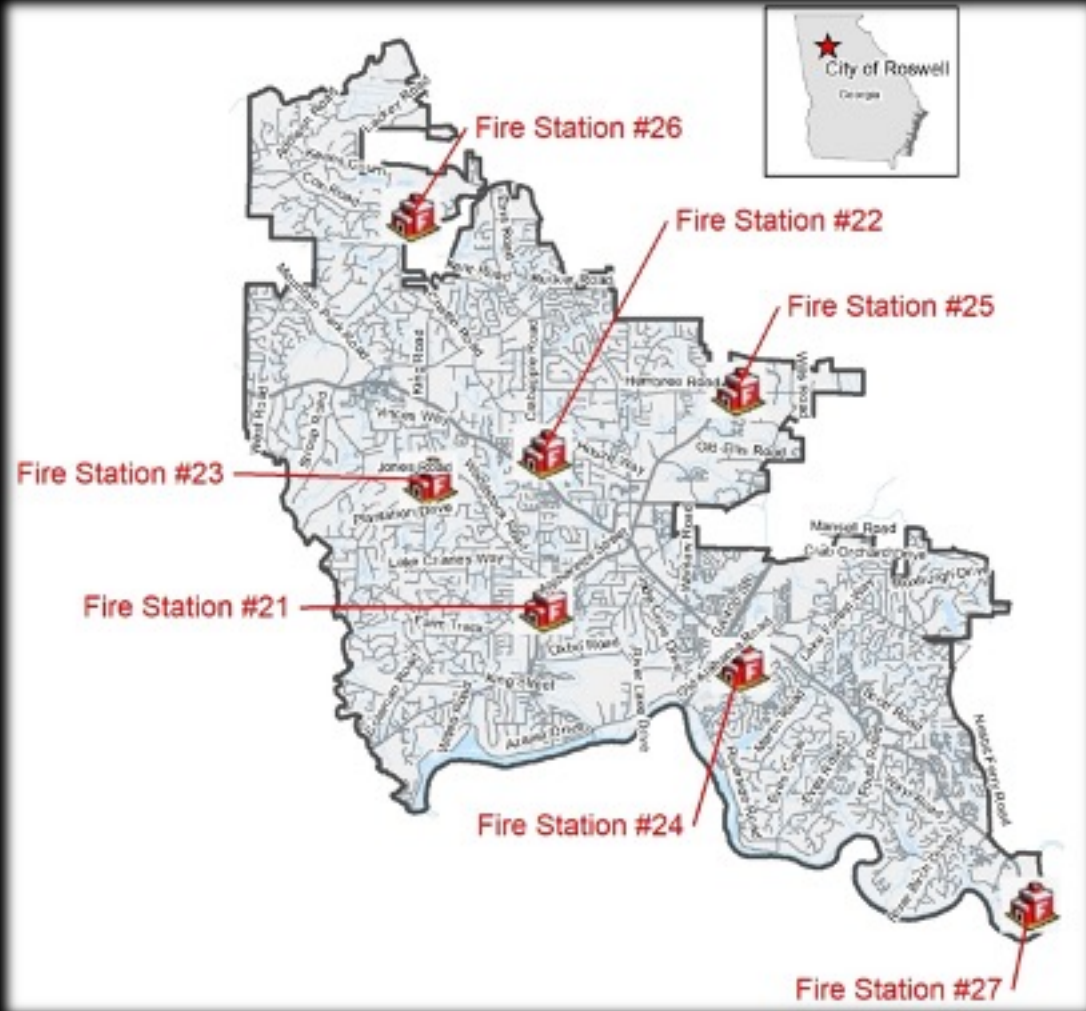
- RFD Key Elements
  - Fire Protective and Technical Rescue Services
  - EMS First-Tier response and transport when needed
  - Community Risk Reduction
  - Fire Cause and Origin Investigation
  - Emergency Management Preparation and Ops
  - Community Outreach and Education
  - Employee Education and Training
  - Fleet, facility, logistical support
  - Special Event support



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# Current Deployment Seven Stations



## Primary Staffed Apparatus Assigned to Station

**Station 21:** Engine, Truck, Rescue

**Station 22:** Engine

**Station 23:** Engine, Brush

**Station 24:** Engine, Truck, Rescue, Battalion Chief

**Station 25:** Engine (75-foot Quint), Heavy Rescue

**Station 26:** Engine

**Station 27:** Engine (*Station 27 also houses Sandy Springs Engine 55*)

# Workload-CY 2021

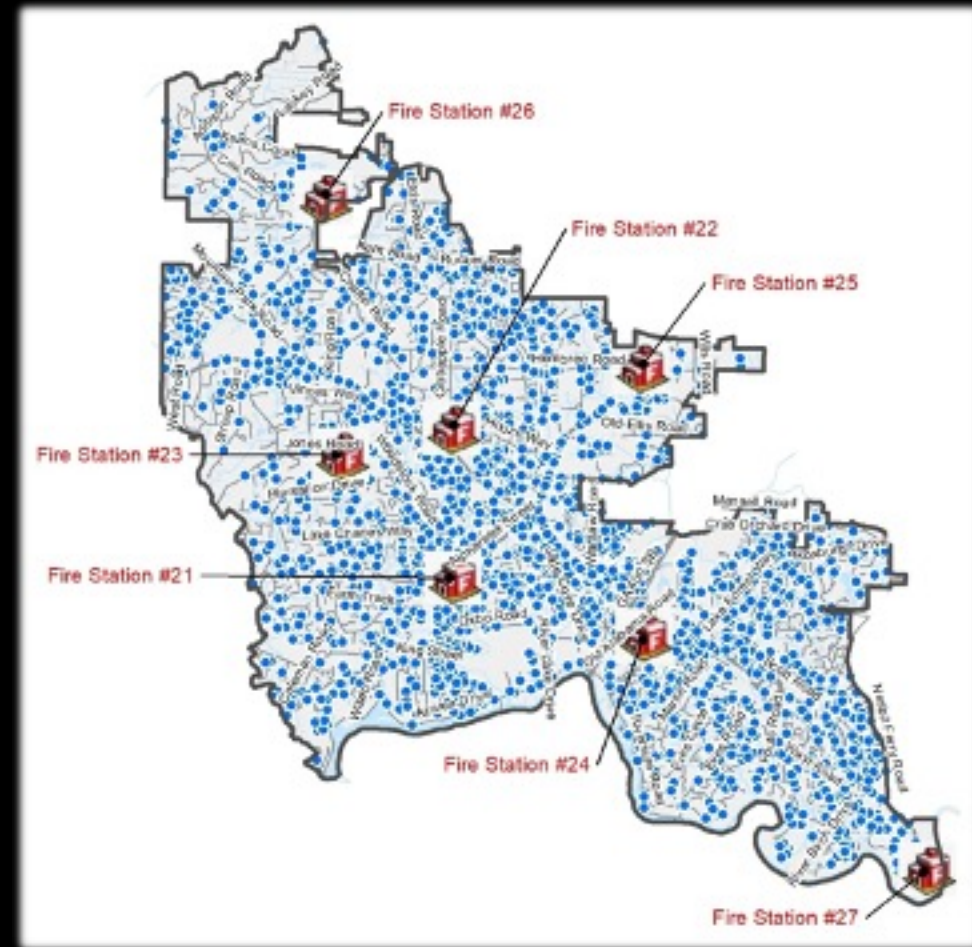
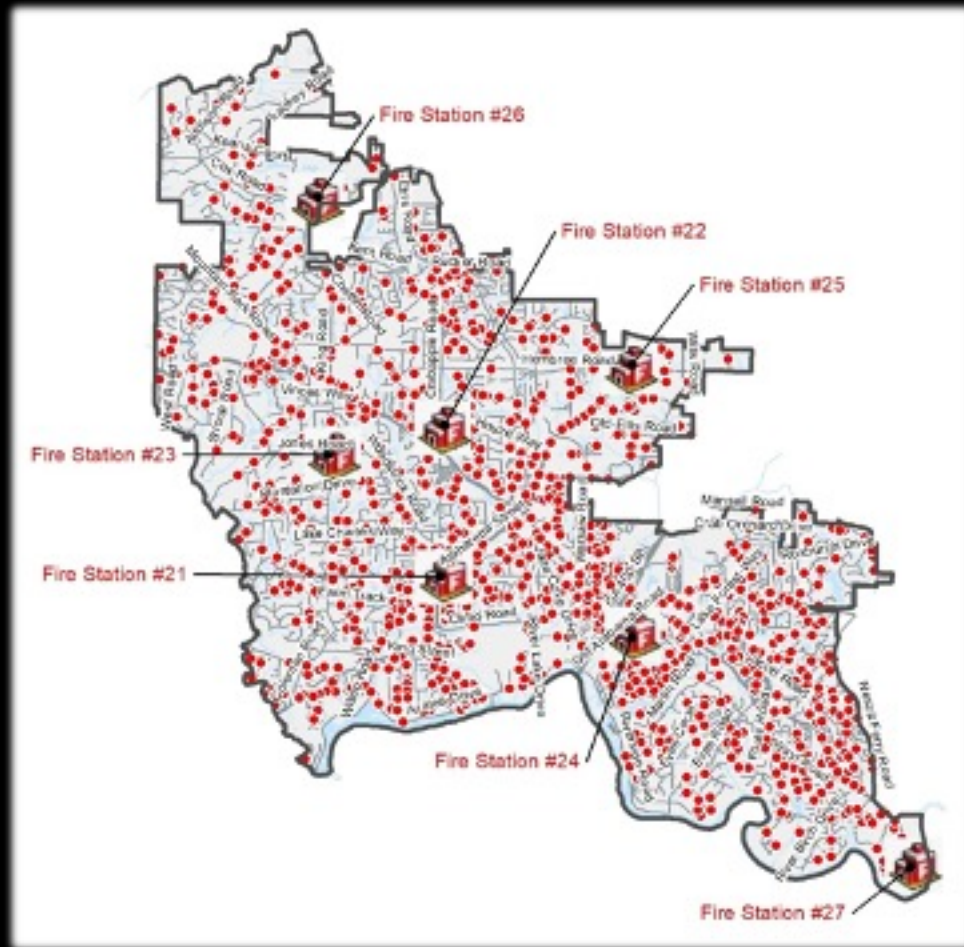
Call Type	Total Calls	Calls per Day
Fire (non-specific)	175	0.5
Fire alarm	1,008	2.8
Hazard	290	0.8
Outside fire	171	0.5
Public service	845	2.3
Structure fire	119	0.3
<b>Fire Total</b>	<b>2,608</b>	<b>7.1</b>

Call Type	Total Calls	Calls per Day
Breathing difficulty	733	2.0
Cardiac and stroke	808	2.2
Fall and injury	1,894	5.2
Illness and other	1,861	5.1
MVA	596	1.6
Overdose and psychiatric	494	1.4
Seizure and unconsciousness	747	2.0
<b>EMS Total</b>	<b>7,133</b>	<b>19.5</b>



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# Demand Analysis





# Principle Findings-Operational Staffing

- RFD Senior Staff, Community Risk Reduction, Training and Support Staff are full-time employees (there is some part-time staff)
- Operational Battalion Chiefs (3-Shift Commanders) are Full-Time Employees
- All line personnel assigned to Fire and EMS apparatus- **100% part-time staffing**
  - Drawn from 21 surrounding departments
  - Typically, staff are reporting to the RFD from their full-time job



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# Roswell FD Daily Staffing Levels

**28**  
Minimum  
staffing



**7 X ALS Pumpers / Engines**

3 Personnel Each

One at each Fire Station



**2 X Ladder Trucks**

3 Personnel Each

Stations 21 & 24



**1 X Battalion Chief**

One Full-time Chief

Station 24

**35**

Full  
staffing



**1 X Heavy Rescue**

3 Personnel

Station 25



**2 X Rescues**

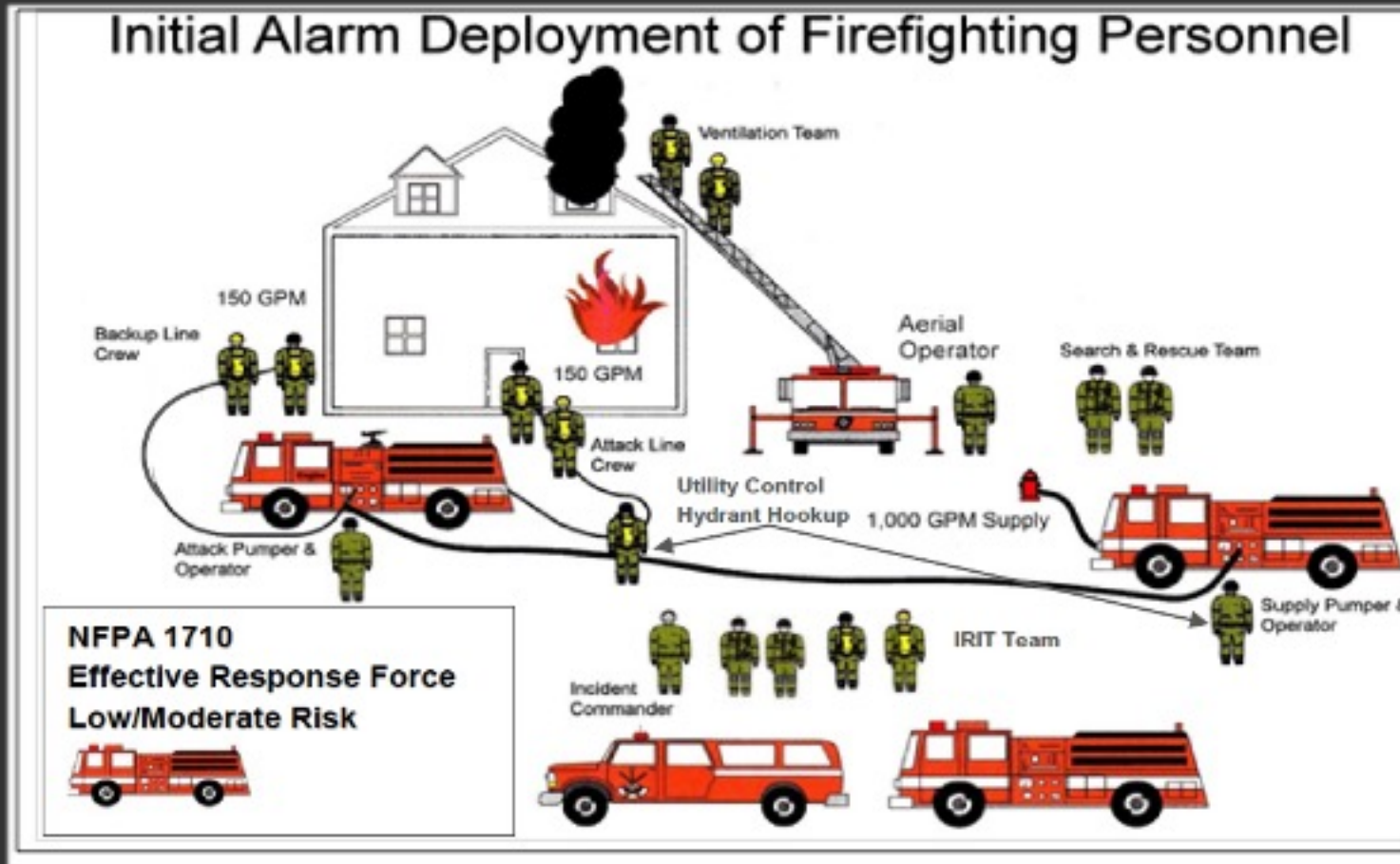
2 Personnel Each

Stations 21 & 24



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# Roswell FD Daily Staffing Levels and Effective Response Force



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# *Principle Findings-Issues with Part-Time Operational Staffing*

- When a regional emergency is occurring such as an extreme weather event or a pandemic, part-time staff may be bound to their home departments, thus leaving the City of Roswell with the potential of a severely understaffed department to respond to the same regional emergency.
- When part-time staff reports from their full-time job, fatigue during their 12- or 24-hour shift with the RFD is highly probable.
- Staggered shift start-times based on where firefighters are coming from (home department) causes problems with accountability at the station and on the fireground during shift change as the RFD does not know who is still at work. On many mornings part-time staff report to work beyond the normal shift start time of 8:00 a.m. due to travel from their home department station or mandatory overtime/hold over.



# *Principle Findings-Issues with Part-Time Operational Staffing*

- Equipment utilized in the RFD may not be the same as the employee's home department.
- Inconsistent staffing with the same crew members disables the ability to form a cohesive team that routinely works and trains together.
- Different policies, protocols, procedures, and mission and vision statements in the home department than in the RFD create a situation where part-time staff must adapt when working in the RFD. This can lead to inefficiencies in and around the station and apparatus, and on an emergency incident, which reduces effectiveness.
- There is no regular full-time supervision (company officer level) in each fire station, which leads to lack of upkeep and maintenance of the facility and the apparatus.
- The RFD tends to lose part-time staff when overtime opportunities at their full-time job increase.



# Principle Findings-Issues with Part-Time Operational Staffing

- High attrition rate. The RFD lost 31 part-time staff in 2021 and has lost 25 in 2022 (as of June 1, 2022). This requires dedicating copious administrative staff time recruiting, outfitting, and onboarding new firefighters.
- Operating and maintenance costs per employee are higher for 225 part time positions as each requires uniforms, custom-fitted structural gear ensemble, etc. A full-time department is estimated at 135, which would reduce these costs.
- Difficult to implement department-wide training, health and safety, employee relations, and other fundamental fire and EMS programs due to inconsistent staffing schedules of personnel.
- Difficult to implement succession planning, particularly at the first-line and middle-manager levels (Captain and Battalion Chief).
- Any transfer, promotion, FMLA, or worker's comp injury/illness that occurs in the part-time staff's full-time department affects staffing with the RFD.

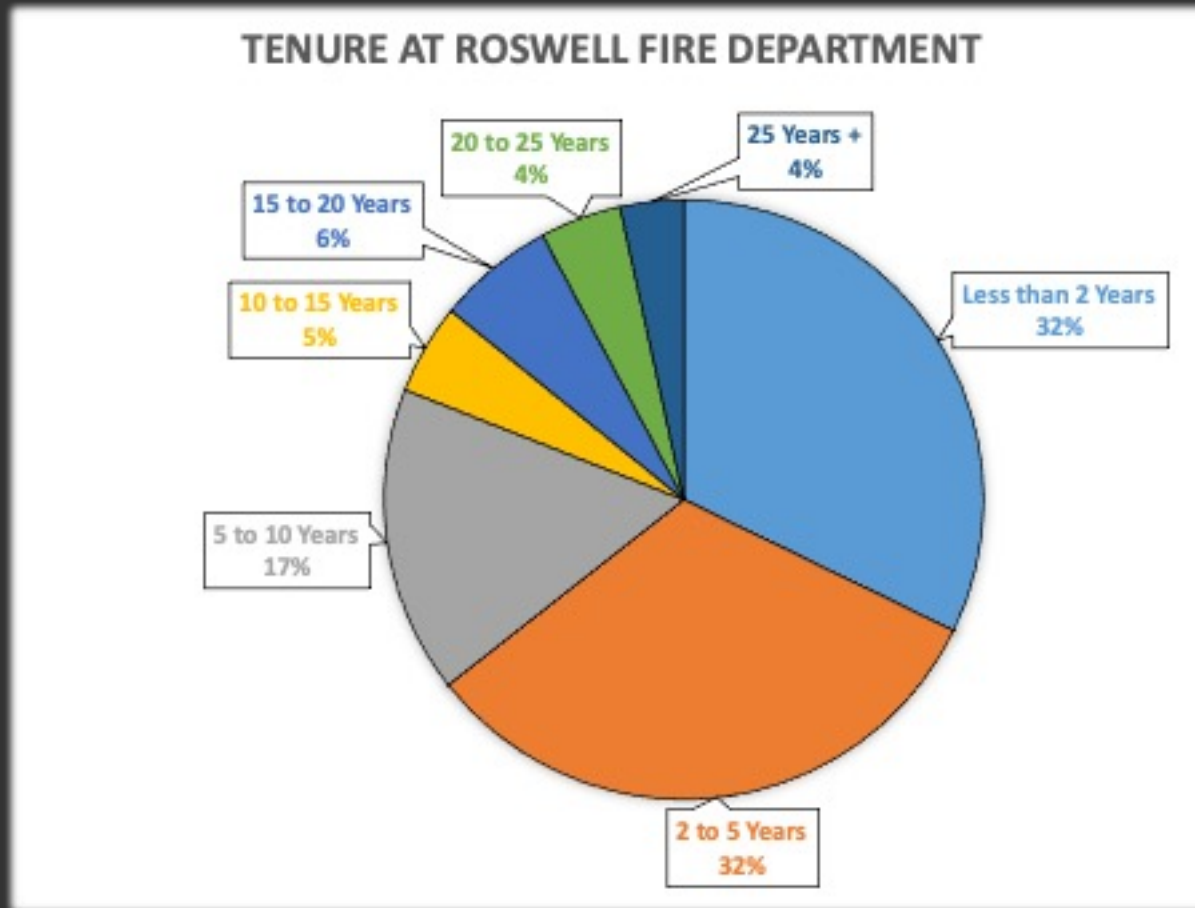


# *Principle Findings-Issues with Part-Time Operational Staffing*

- For any given emergency to which RFD responds, there are critical tasks that must be completed.
- These tasks can range from the immediate rescue of trapped occupants within a burning structure to vehicle accidents with entrapment, to hazardous materials leaks and spills when needed.
- The department's inconsistent staffing levels has an impact on its ability to handle a moderate risk structure fire effectively and safely. Although the use of automatic and mutual aid from surrounding departments can help bridge this gap, this assistance will have built-in and at times delayed response time considerations.



# Principle Findings-Issues with Part-Time Operational Staffing



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# *Principle Findings-Issues with Part-Time Operational Staffing*

- Heavy Rescue 25 is out of service when staffing drops to 33 according to the staffing matrix. In 2021, 51% of the day shifts had less than 34 personnel.
- Rescue 24 is out of service when staffing drops to 31. In 2021, 34.5% of the day shifts had less than 32 personnel.
- Rescue 21 is out of service when staffing drops to 29. In 2021, 21.6% of the day shifts had less than 30 personnel.
- Truck 21's staffing is reduced to 2 when staffing drops to 27 and is out of service when staffing drops to 26. In 2021, 10.1% of the day shifts had less than 28 personnel and 5.2% had less than 27.



# Recommendation-Part-Time Operational Staffing

- Develop strategic planning goals and objectives, and a funding plan that transitions the RFD from a part-time field operations department over a one- to five-year period in this order.:

- 21 Captains-near term (Year 1)
- 3 additional Field Battalion Chiefs (Year 2)
- 9 Lieutenants (Year 2)
- 30 Engineers & 72 Firefighters (Years 2-5)

Firefighter level to include Firefighter/Paramedic

135 Total



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# Service Delivery and Performance

## 90th Percentile Response Time of First Arriving Unit

Call Type	Time in Minutes					Number of Calls
	Dispatch	Turnout	Travel	Turnout & Travel	Total Response	
Breathing difficulty	1.3	<b>3.5</b>	<b>8.1</b>	10.3	10.9	538
Cardiac and stroke	1.2	<b>3.4</b>	<b>8.0</b>	10.3	10.9	588
Fall and injury	1.5	<b>3.5</b>	<b>7.8</b>	9.7	10.8	933
Illness and other	1.5	<b>3.5</b>	<b>8.2</b>	10.5	11.3	957
MVA	1.9	<b>2.8</b>	<b>6.4</b>	8.3	9.3	362
Overdose and psychiatric	1.4	<b>3.8</b>	<b>8.4</b>	10.9	11.7	207
Seizure and unconsciousness	1.4	<b>3.1</b>	<b>7.9</b>	10.0	10.8	542
EMS Total	1.5	<b>3.4</b>	<b>7.9</b>	10.1	10.9	4,127
Fire (non-specific)	4.2	<b>3.8</b>	<b>5.3</b>	7.2	10.3	8
Fire alarm	4.2	<b>3.3</b>	<b>7.5</b>	9.8	12.9	548
Hazard	4.7	<b>3.7</b>	<b>7.6</b>	9.8	13.0	173
Outside fire	4.9	<b>3.6</b>	<b>8.2</b>	10.8	14.3	90
Public service	5.3	<b>3.3</b>	<b>7.2</b>	9.7	14.4	66
Structure fire	4.2	<b>4.1</b>	<b>5.6</b>	7.9	11.0	80
Fire Total	4.4	<b>3.4</b>	<b>7.4</b>	9.8	13.0	965
Total	2.9	<b>3.4</b>	<b>7.8</b>	10.1	11.5	5,092

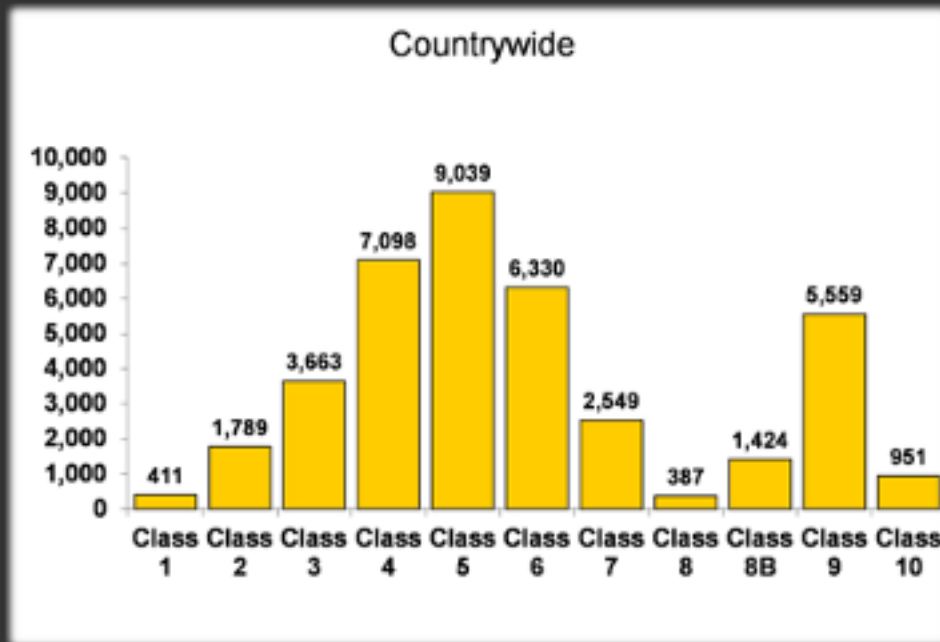


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# Service Delivery and Performance

## ISO-Public Protection Classification Rating

The City of Roswell has an ISO rating of **Class 02**, the **second-highest rating achievable**



- **Emergency Communications** (10 percent of the evaluation).
- **Fire Department** (50 percent of the evaluation).
- **Water Supply** (40 percent of the evaluation).



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# Service Delivery and Performance

## ISO-Public Protection Classification Rating Fire Department Analysis

	Earned Credit	Credit Available
513. Credit for Engine Companies	6.00	6.00
523. Credit for Reserve Pumpers	0.50	0.50
532. Credit for Pumper Capacity	3.00	3.00
549. Credit for Ladder Service	3.95	4.00
553. Credit for Reserve Ladder and Service Trucks	0.48	0.50
561. Credit for Deployment Analysis	<b>6.39</b>	<b>10.00</b>
571. Credit for Company Personnel	<b>8.70</b>	<b>15.00</b>
581. Credit for Training	<b>5.44</b>	<b>9.00</b>
730. Credit for Operational Considerations	2.00	2.00
Item 590. Credit for Fire Department	36.46	50.00



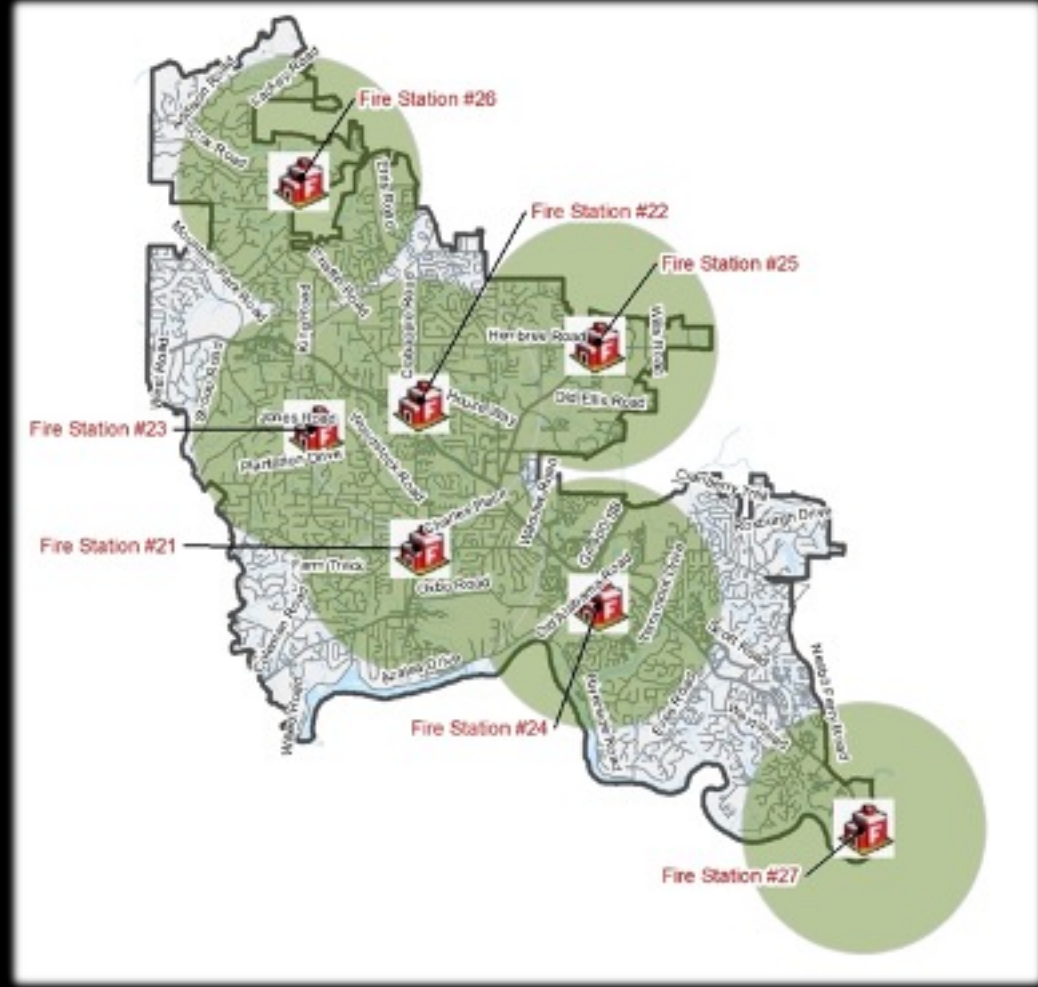
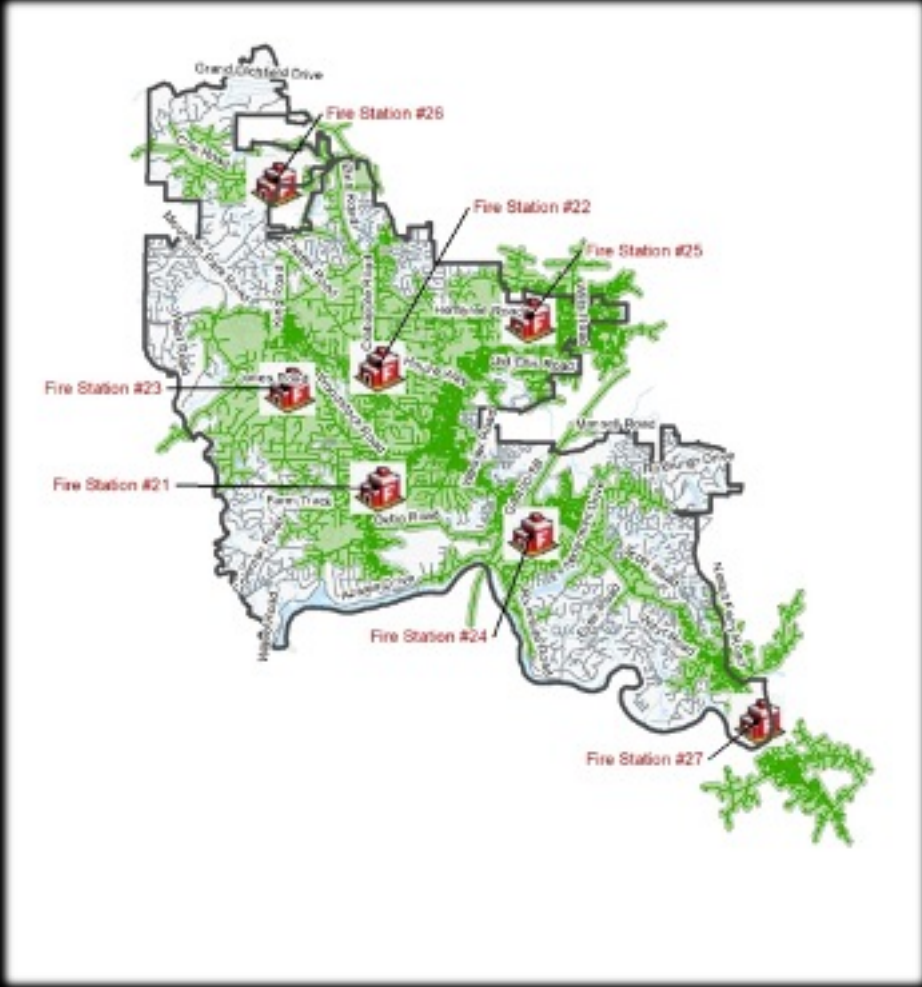
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# Service Delivery and Performance

240 Second NFA 1710 Standard

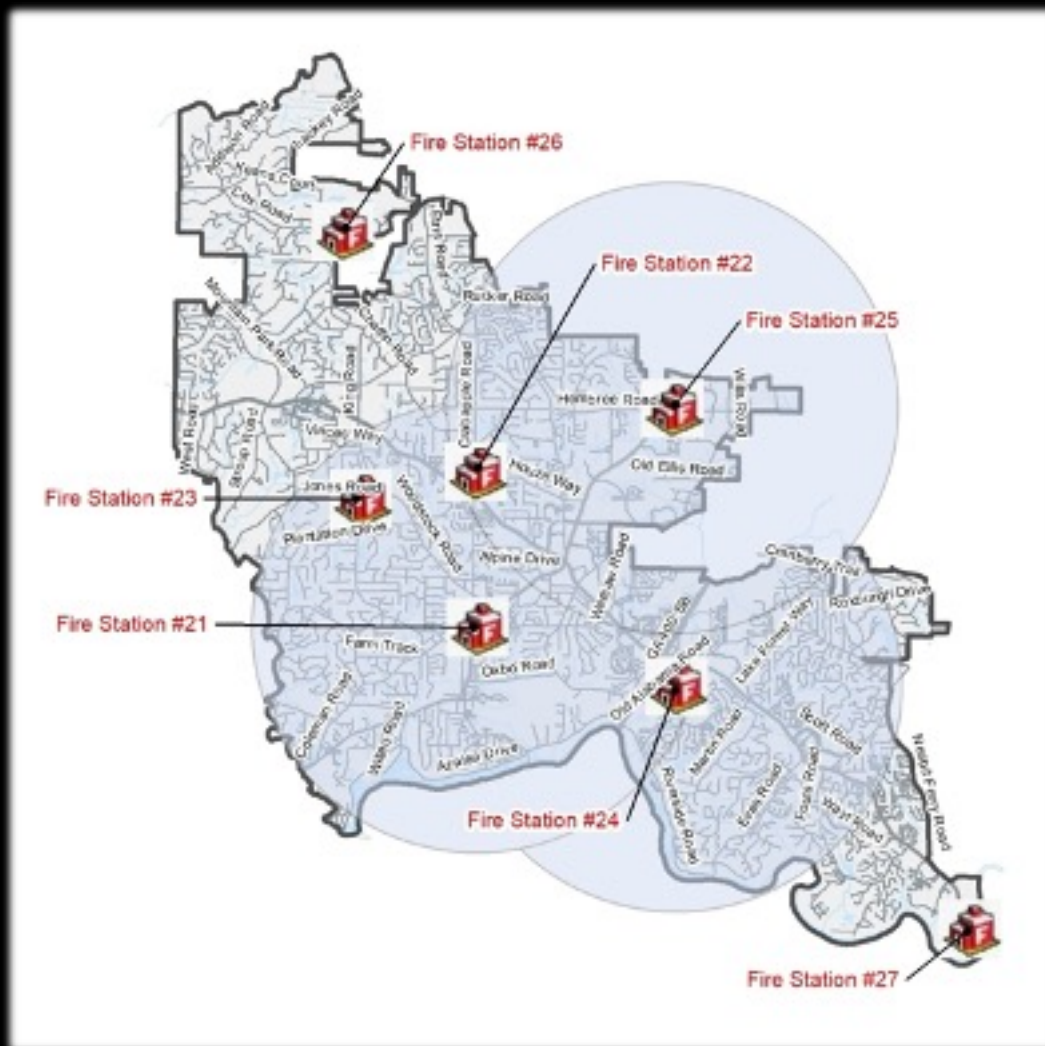
ISO 1.5 Mile Engine Coverage Standard



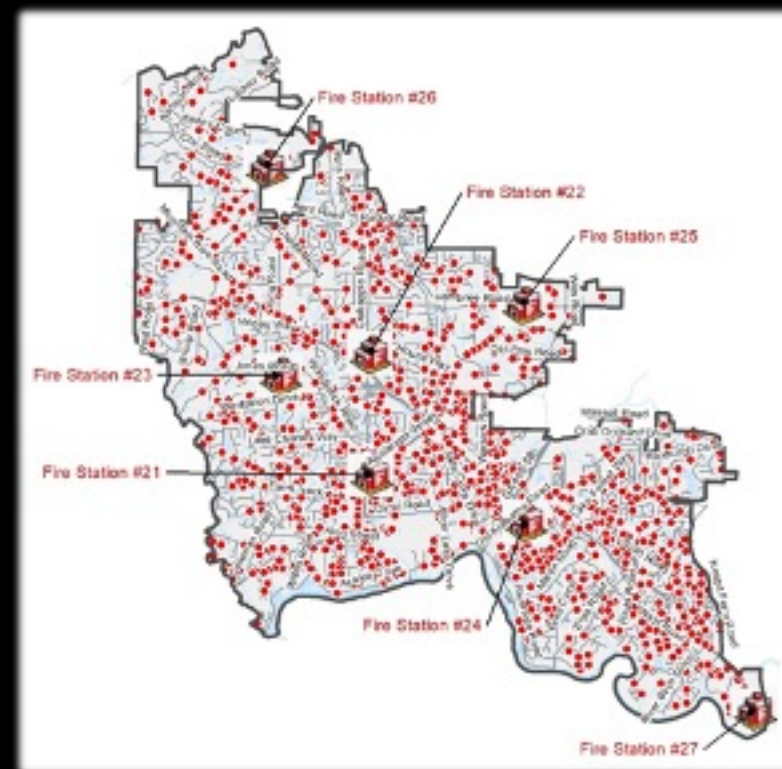


# Service Delivery and Performance

ISO 2.5 Mile Ladder Coverage Standard



Fire Demand



# Recommendation-Service Delivery and Performance

- Develop strategic planning goals and objectives, and a funding plan that:
  - Addresses the 240-second (NFPA benchmark) travel time gaps and the ISO 1.5-mile engine company coverage benchmark in the southeast, southwest, and northwest areas of the city
    - Realign Stations 21, 22, 27 (22-short to mid term)  
(21, 27-mid to long term)
    - Construct and staff Station 28 (mid to long term)





# *Recommendation-Service Delivery and Performance*

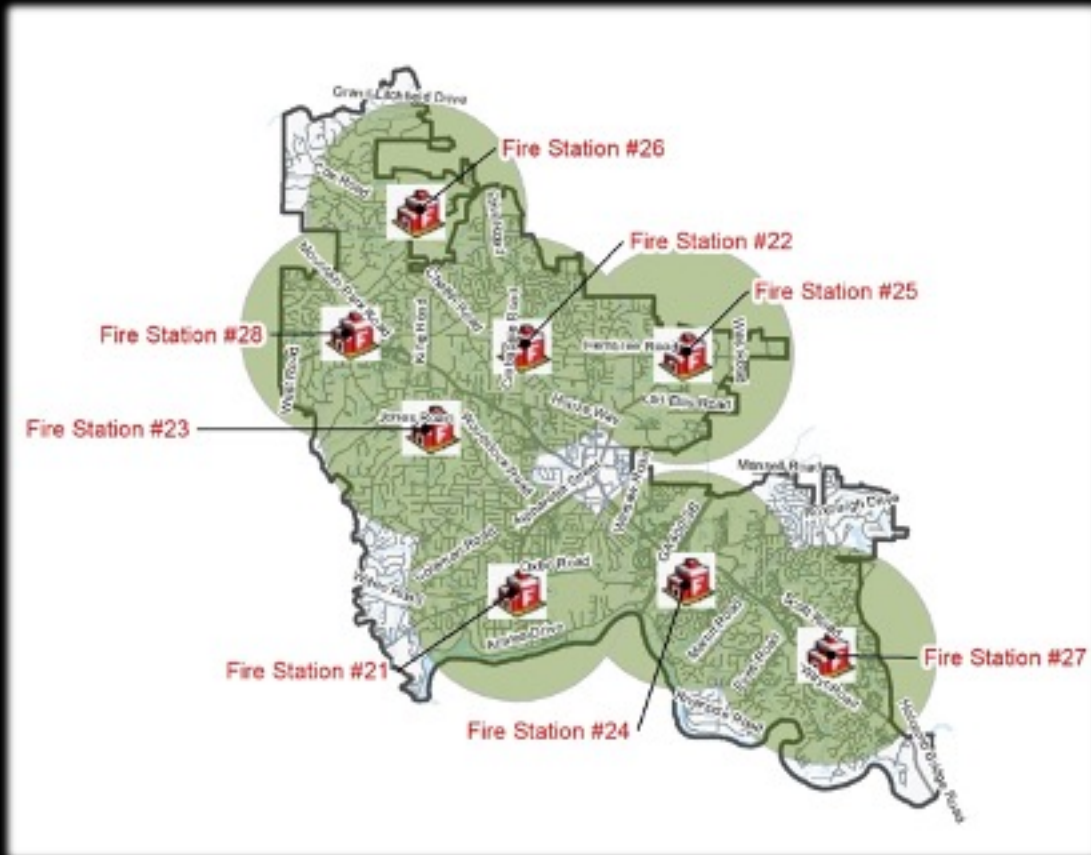
- Develop strategic planning goals and objectives, and a funding plan that:
  - Place a staffed ladder (or quint) in the north/northwest area of the city (Station 26) to address the 2.5-mile ladder company deficiency (near term)



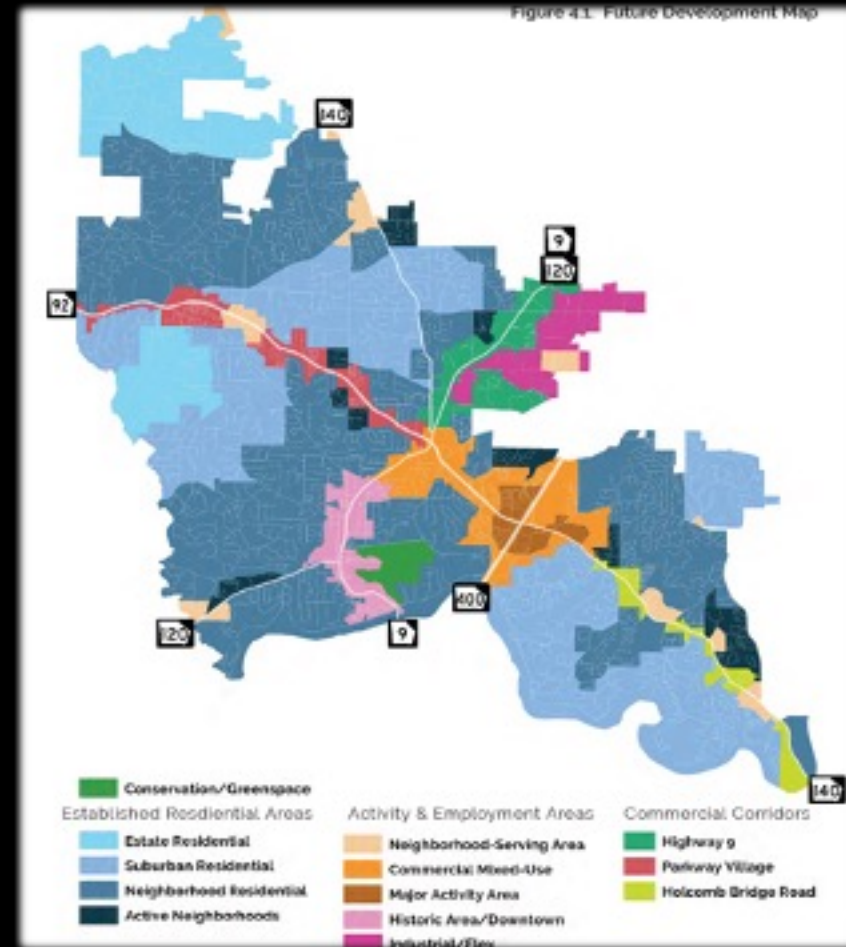
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# Recommendations-Service Delivery and Performance

## Improve ISO 1.5 Mile Engine Coverage



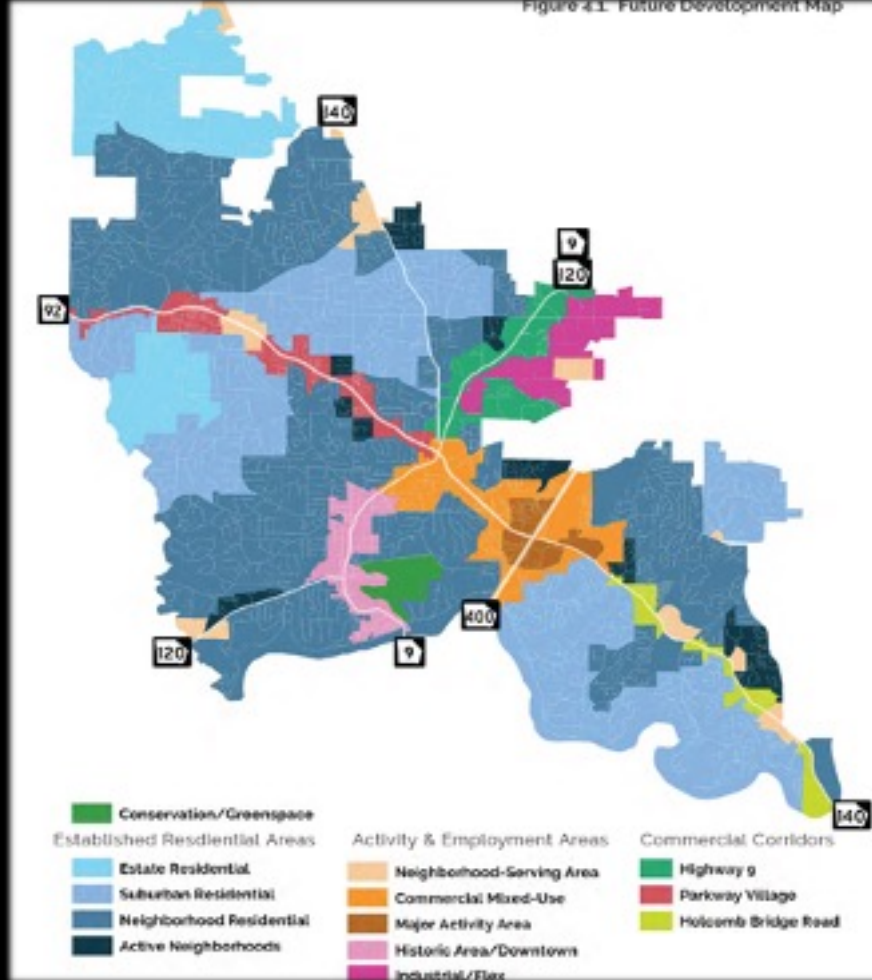
## Roswell 2040 Comp Plan Development



# Recommendations-Service Delivery and Performance

Improve ISO 2.5 Mile Ladder Coverage

Roswell 2040 Comp Plan Development



Alternative Ladder Placement



# Recommendations-Strategic Planning

- Review/update RFD Mission Statement.
- Develop/update RFD Vision Statement.
- Develop/update RFD Values Statements.
- The RFD should develop strategic planning goals and objectives that address its ability to meet the NFPA 1710 Effective Response Force benchmark either as a department or with automatic aid for:
  - Open-air strip mall/commercial building fire responses
  - Apartment building fire responses



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# Recommendations-Strategic Planning

- All current and planned building risks should be contemplated during RFD staffing and deployment strategic planning sessions.
- All current and planned transportation risks to include roads, bicycle and walking paths, golf cart transportation allowance, and mass transit expansion should be contemplated during RFD staffing and deployment strategic planning sessions.



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# Recommendations-Strategic Planning

- The RFD should develop strategic planning goals and objectives that maintain staffing levels in the Fire Marshal division.

Specifically, as the workload for fire code inspections, plan reviews, life safety education activities, and fire investigations increase as the city grows, this division, due to its importance in the prevention of fire and life safety through code enforcement, should be properly staffed to meet the workload increase. This includes the plans review activity.



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# Recommendations-Strategic Planning

- The RFD should develop strategic planning goals and objectives that address the training and education aspects of transitioning from a part-time field operations department to a full-time field operations department. This should include officer development, recruit and incumbent officer, driver-operator, and firefighter level initial and continuing education.

Training and education platforms should include web-based, digital, in-person, live fire training, multi-unit drills, and regional, state, and national training (National Fire Academy and Emergency Management Institute).



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# Recommendations-Strategic Planning

- The RFD should develop strategic planning goals and objectives that address fleet replacement parameters, specifically alignment with NFPA 1901 and NFPA 1917.
- The RFD should develop strategic planning goals and objectives that addresses capital improvements for Stations 22 and 23 (replacement and relocation of Station 22). Additionally, the RFD and city should give strong planning consideration for a new public safety complex to include the RPD and RFD headquarters, an Emergency Operations Center, and the 911 Center. This would enable public safety agencies to work more cohesively and provide an opportunity to share infrastructure costs such as redundant communications systems, backup generators, etc.



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# Recommendations-Strategic Planning

## Capital Projects Planning Goals

- Public Safety Complex: short to mid term
- Station 22 Relocation: short to mid term
- Station 23: short to mid term
- Station 21 Relocation: mid to long term
- Station 27 Relocation: mid to long term
- Station 28: mid to long term



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***Thank You!***

**Questions  
and  
Discussion**



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