

City Council Meeting Handouts

November 4, 2024

- I. Fire Services Assessment Report - Draft
- II. Solid Waste Master Plan Update

FIRE DEPARTMENT STRATEGIC MASTER PLAN

CITY COUNCIL STRATEGIC GOAL

- Continue to explore unique opportunities to attract and retain residents and all stakeholders
- Attract, develop, and retain high-quality, innovative employees
- Promote economic development that benefits the whole city
- Value, protect, and create a positive return on city, resident, and other stakeholder investments in the City

CITY COUNCIL TACTIC

FIRE DEPARTMENT STRATEGIC MASTER PLAN

PURPOSE OF TONIGHTS BRIEFING

- Fire Department Strategic Master Plan Process
- Review the consultant's assessment of the City and Department
- Discuss “next steps”



Fire & EMS Assessment



RICHARDSON, TEXAS

CPSM[®]
Center for Public Safety Management, LLC

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The Exclusive Provider of Public Safety Technical Assistance to the International City/County Management Association

- Strategic and Public Safety Master Planning.
- Technical analysis for Police, Fire, EMS, and 911 Centers.
- Public Safety Chief Selection.
- Conducted more than 500 studies in 46 states and Canada.
- Fire and EMS team with hundreds of years experience as practitioners, middle managers and senior administrators.

Fire & EMS Assessment Report Development

- Stakeholder Input.
- Comprehensive workload, response time, and resiliency data analysis.
- Evaluation of Service Coverage.
- Analysis of Resource Allocation.
- Incident Demand Analysis.
- Community Risk Assessment.
- Future Growth and Population Assessment.
- National Benchmarking.
- Development of Strategic Initiatives.

National Benchmarking



The Insurance Services Office (ISO) is a subsidiary of Verisk Analytics, a national, not-for-profit organization that collects and evaluates information from communities across the United States regarding their capabilities to combat building fires.

The City of Richardson has achieved a Class 1 ISO-PPC community rating, which the city should be proud of and is commended for.



The National Fire Protection Association (NFPA) is a U.S.-based international nonprofit organization devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards. The association publishes over 300 consensus codes and standards to include the Fire and EMS services.

Strategic Initiatives



Strategic Initiative 1: RFD Organizational Resiliency



Strategic Initiative 2: Organizational Growth and Excellence



Strategic Initiative 3: Infrastructure



Strategic Initiative 4: Ensuring a Resilient Community



Strategic Initiative 5: Resource Optimization and Effective Deployment

Fire & EMS Assessment Gap Analysis and Key Findings



RFD Station Districts and Frontline Resources

Station 1 District: Engine 1 (4 staffing)
Ambulance 31 (2 Staffing)
Battalion Chief: (2 Staffing)
Blocker 1: (1 Staff)



Station 2 District: Engine 2 (4 staffing)
Ambulance 32 (2 Staffing)

Station 3 District: Engine 3 (4 staffing)
Ambulance 33 (2 Staffing)

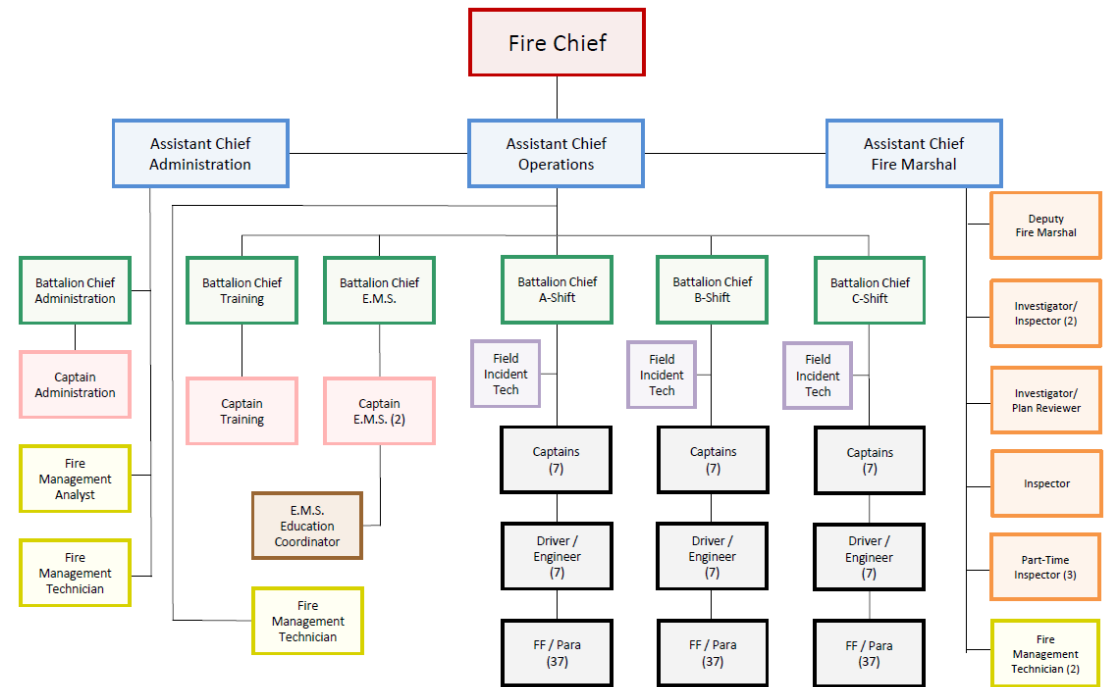
Station 4 District: Engine 4 (4 staffing)
Truck 4 (4 staffing)
Ambulance 34 (2 Staffing)
Rescue 4 (cross-staffed with Truck 4 crew)



Station 5 District: Engine 5 (4 staffing)
Ambulance 35 (2 staffing)
Hazmat 5 (cross-staffed with Engine 5 crew)
Spill 5 (cross-staffed with Engine 5 crew)



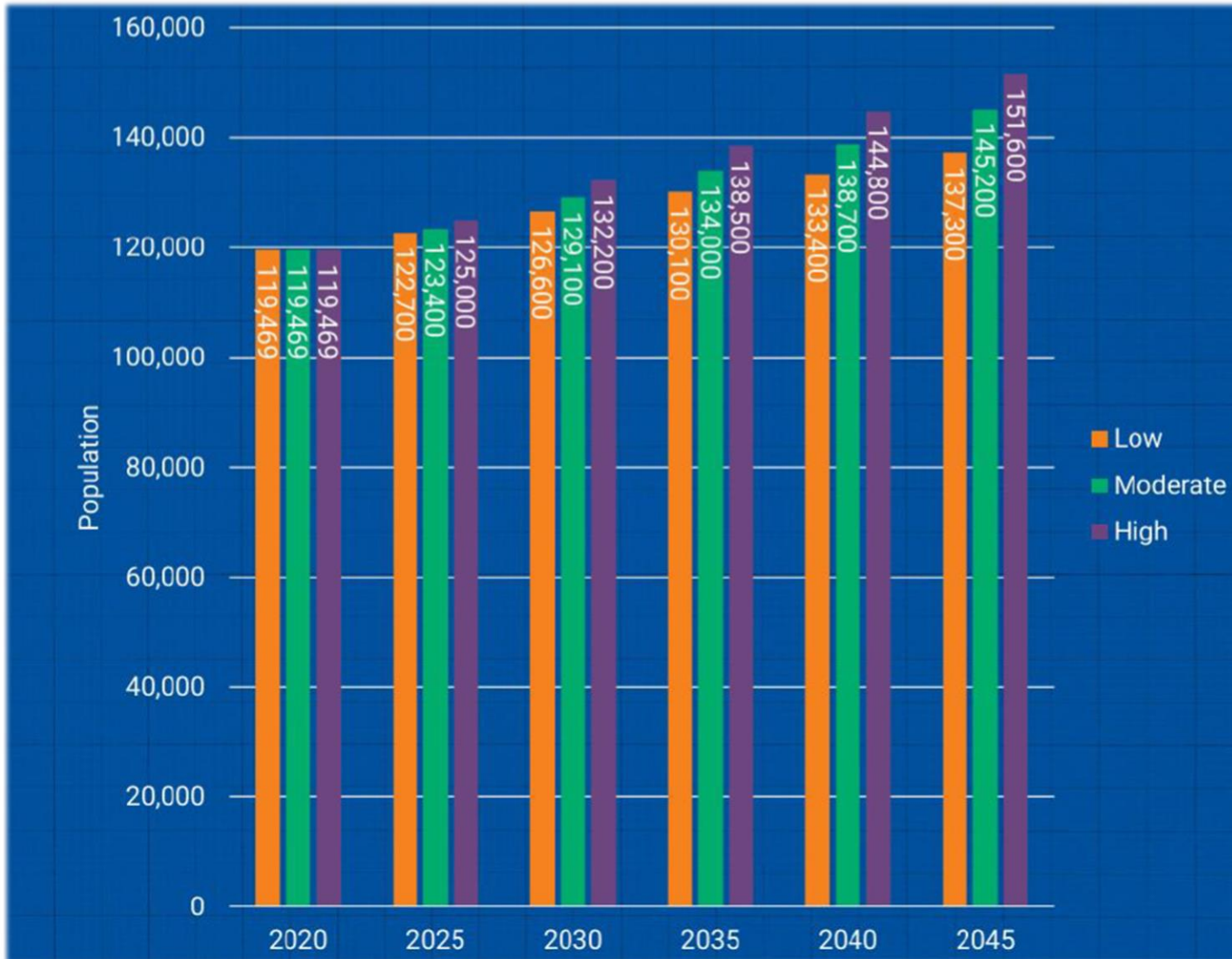
Station 6 District: Engine 6 (4 staffing)
Ambulance 36 (2 staffing)
Brush 6 (cross-staffed with Engine 6 crew)



Richardson Fire Department

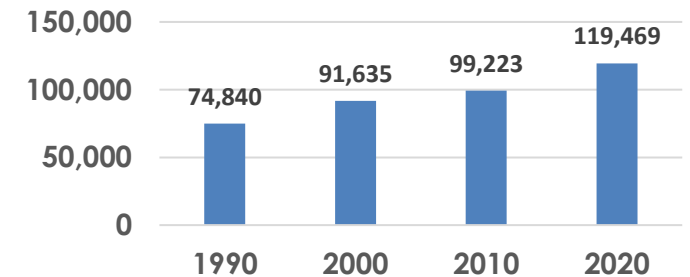
Cross staffing includes personnel moving from one unit to another. When one unit responds the other is not available.

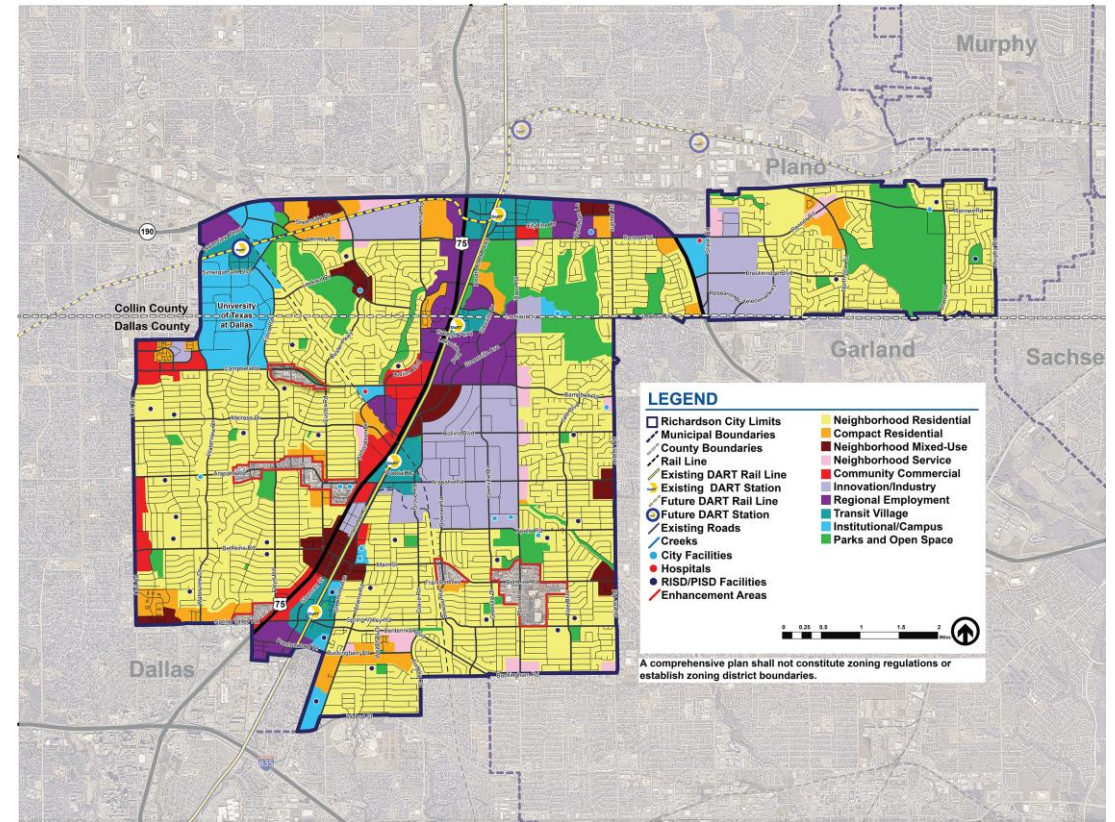
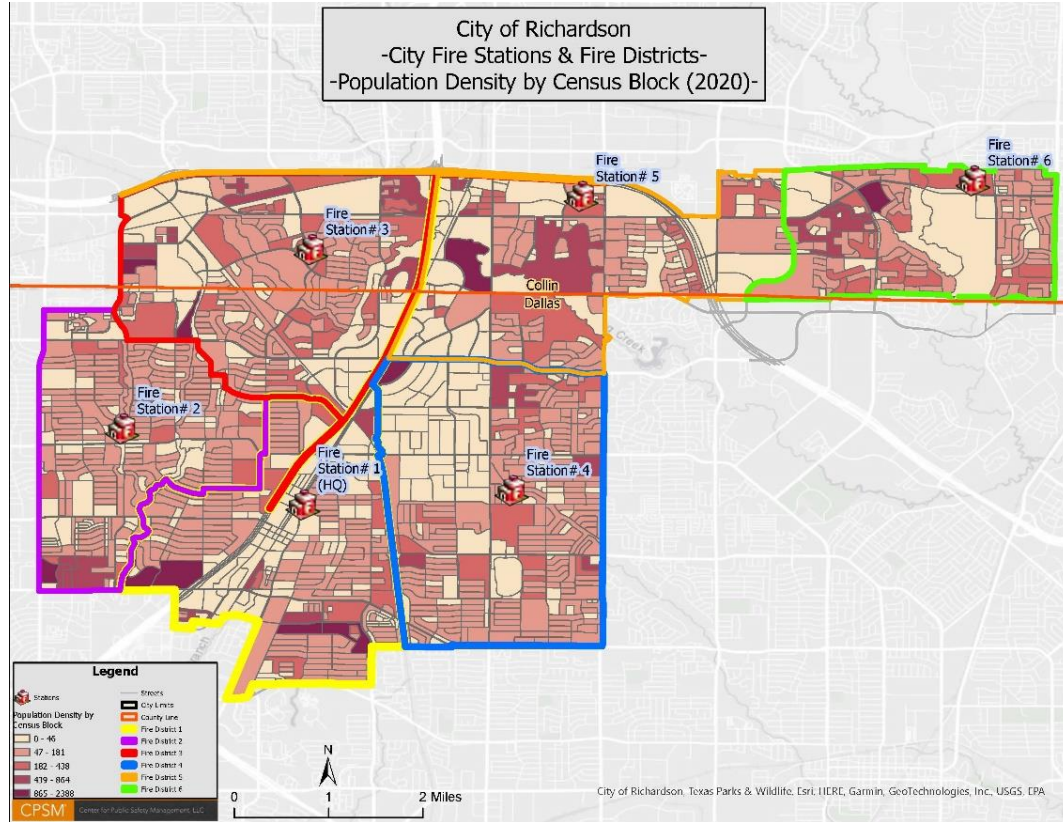
Population and Growth



Comparing the 2020 U.S. Census population of 119,469 to the projected low, moderate, and high projections for 2045 results in a 15%, 22%, and 27% increase, respectively.

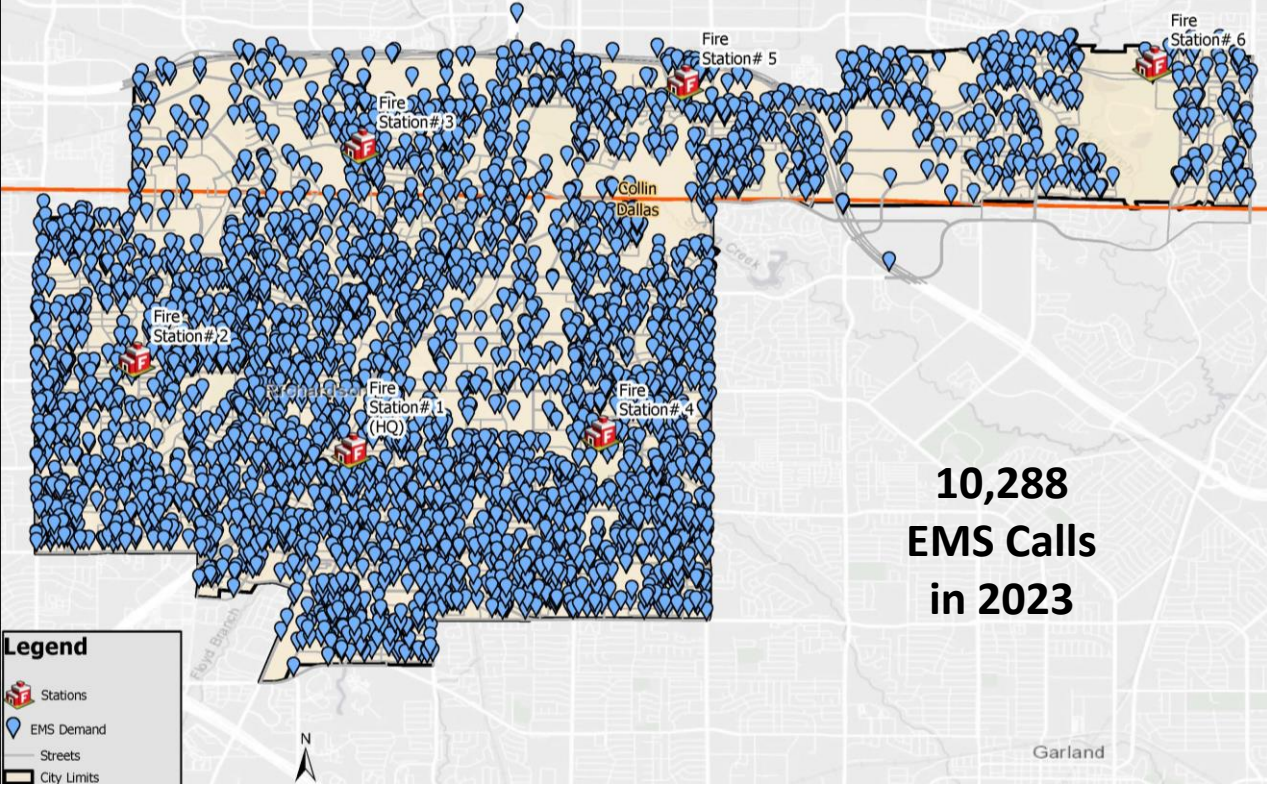
U.S. Census Richardson Population Growth





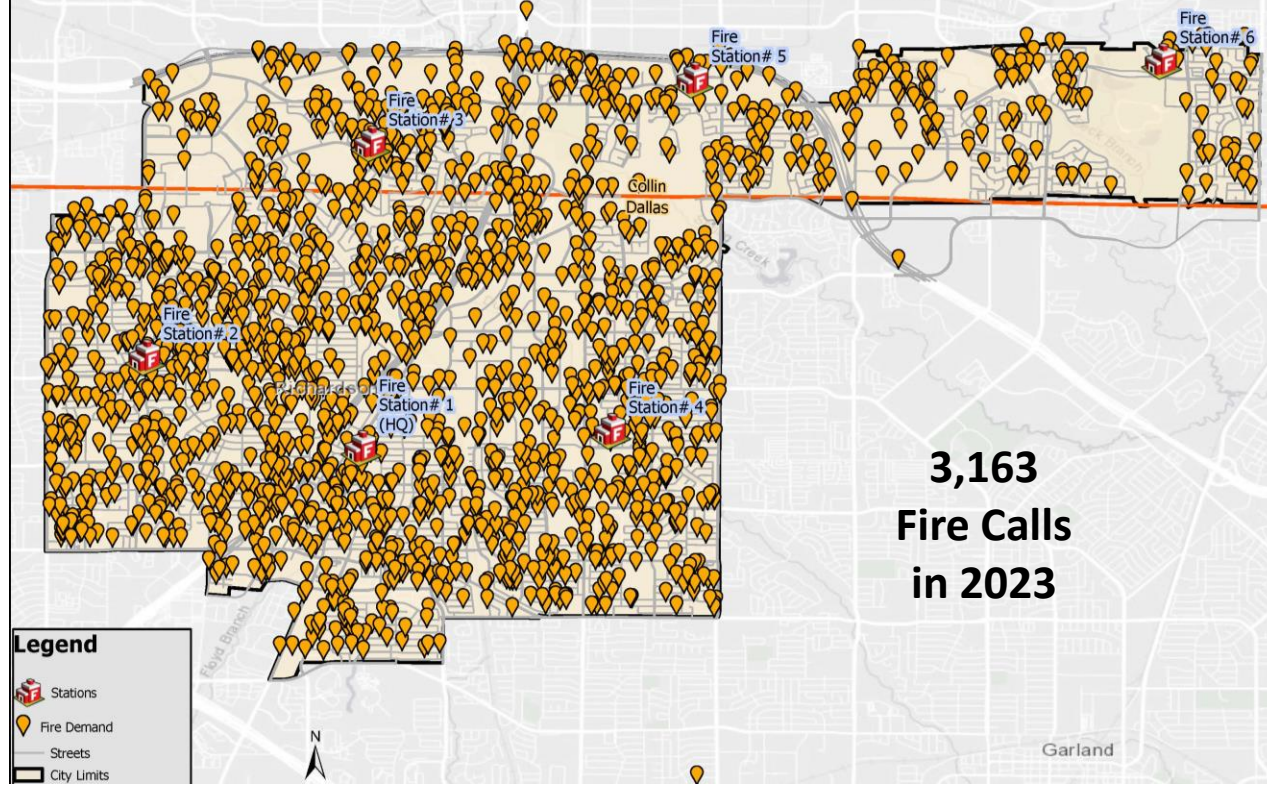
Community Planning and Current Population Density

-All City Fire Stations-
- EMS Calls-



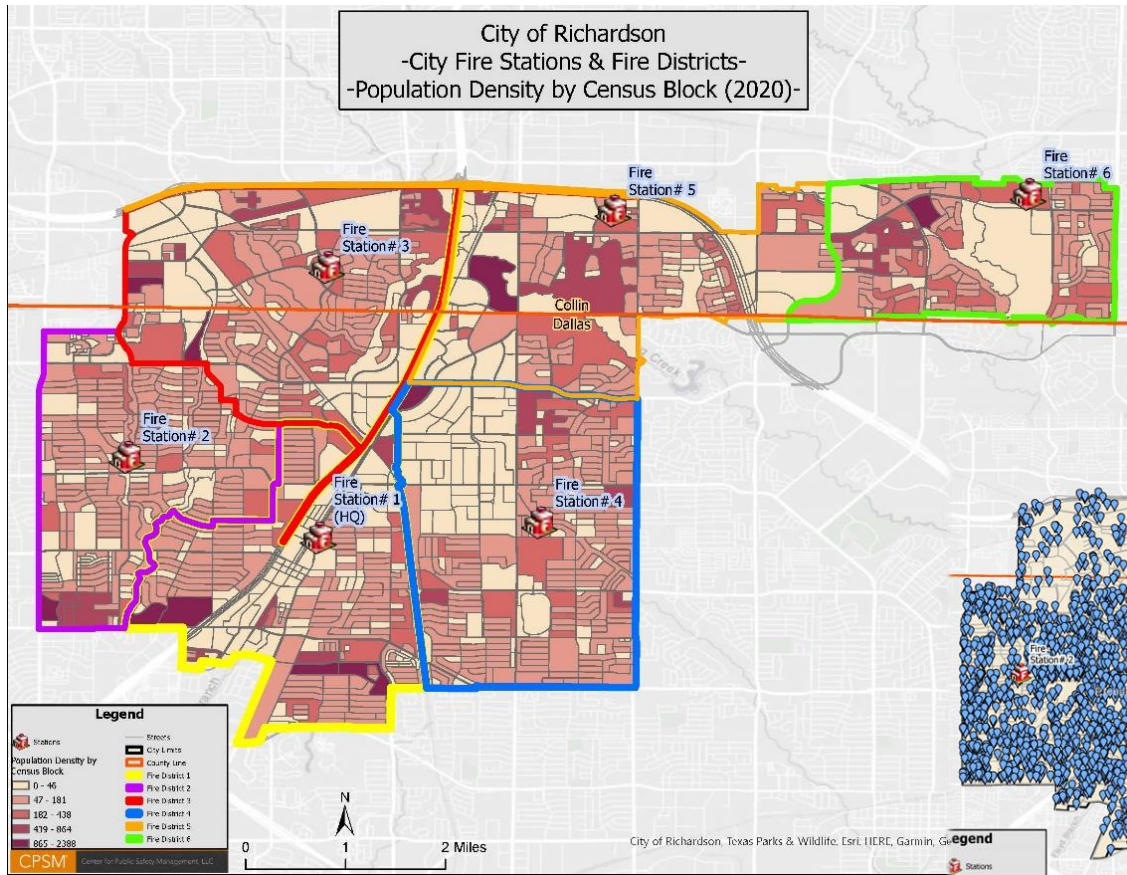
**10,288
EMS Calls
in 2023**

-All City Fire Stations-
-Fire Calls-

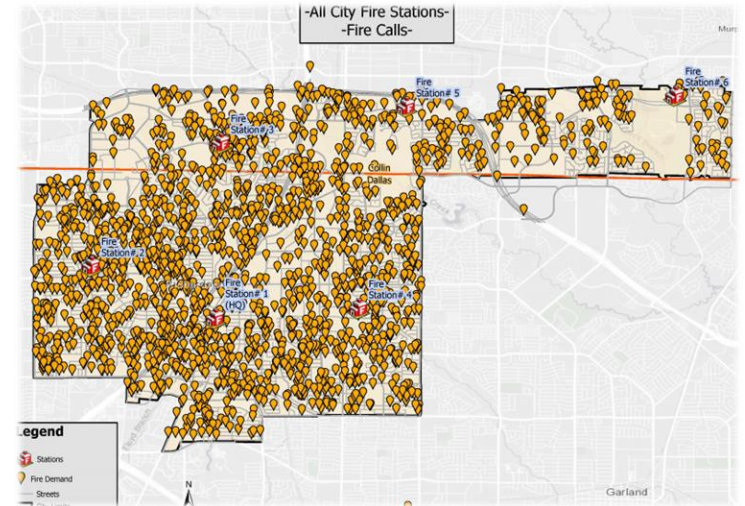
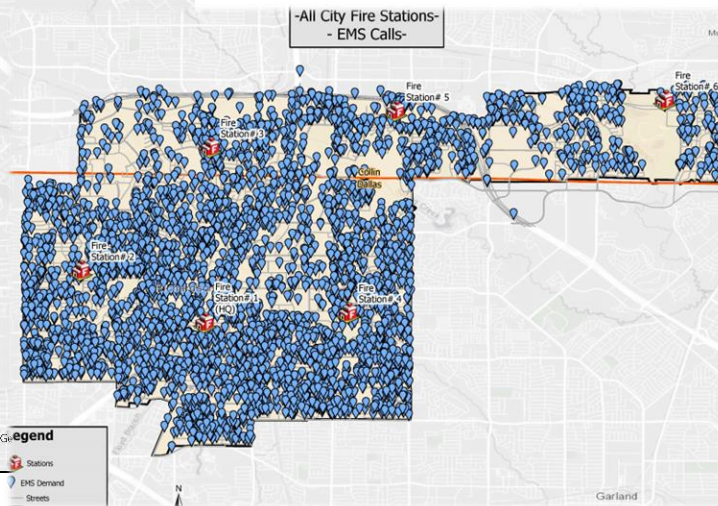


**3,163
Fire Calls
in 2023**

Fire and EMS Demand-2023



First Due Area	Calls	Pct. Calls	Runs	Runs Per Day	Pct. Work
Station 1	3,447	24.7	5,694	15.6	25.8
Station 2	2,719	19.5	4,109	11.3	19.0
Station 3	2,542	18.2	3,902	10.7	17.3
Station 4	2,428	17.4	3,935	10.8	17.5
Station 5	2,258	16.2	3,578	9.8	16.0
Station 6	521	3.7	875	2.4	3.9
RFD's Service Area	13,915	99.8	22,093	60.5	99.6



Fire and EMS Demand by Station and Population Density -2023

Percent work does not include cancelled calls and calls outside of city.

Year	EMS	Fire	Other	Total
2021	9,180	3,186	415	12,781
2022	10,405	3,512	500	14,417
2023	10,288	3,163	495	13,946

Emergent Calls

Year	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Total
2021	5,257	3,585	3,398	3,657	2,866	1,426	20,238
2022	6,023	4,145	3,733	4,161	3,430	1,300	22,848
2023	5,694	4,109	3,578	3,902	3,935	875	22,149

Emergent Runs

Year	EMS	Transport	Conversion Rate
2021	9,180	5,569	60.7
2022	10,405	6,657	64.0
2023	10,288	6,847	66.6

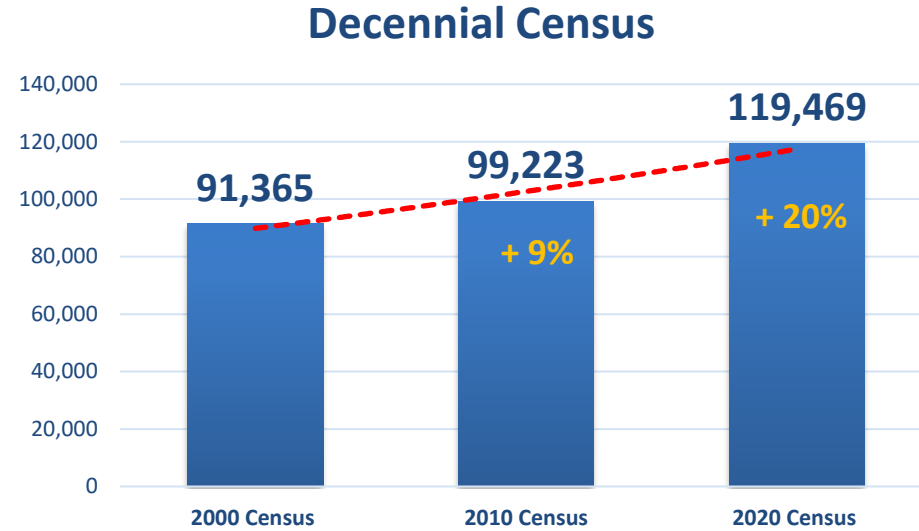
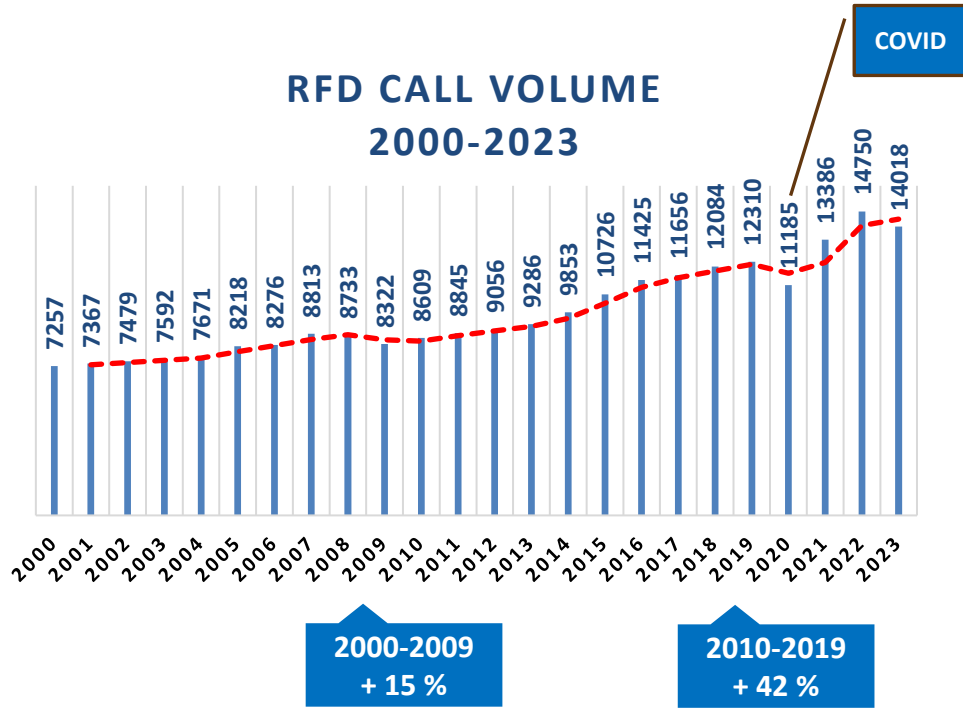
EMS Transport

Increase in Community Development and Growth in Population Has a Direct Impact on Fire and EMS Demand and Requires Continual Assessment of Deployable Resources.

Overall, Runs represent the actual workload of a Fire and EMS Department.

3-Year Historical Workload

A call is a single unit response. A run includes multiple unit response count of units.

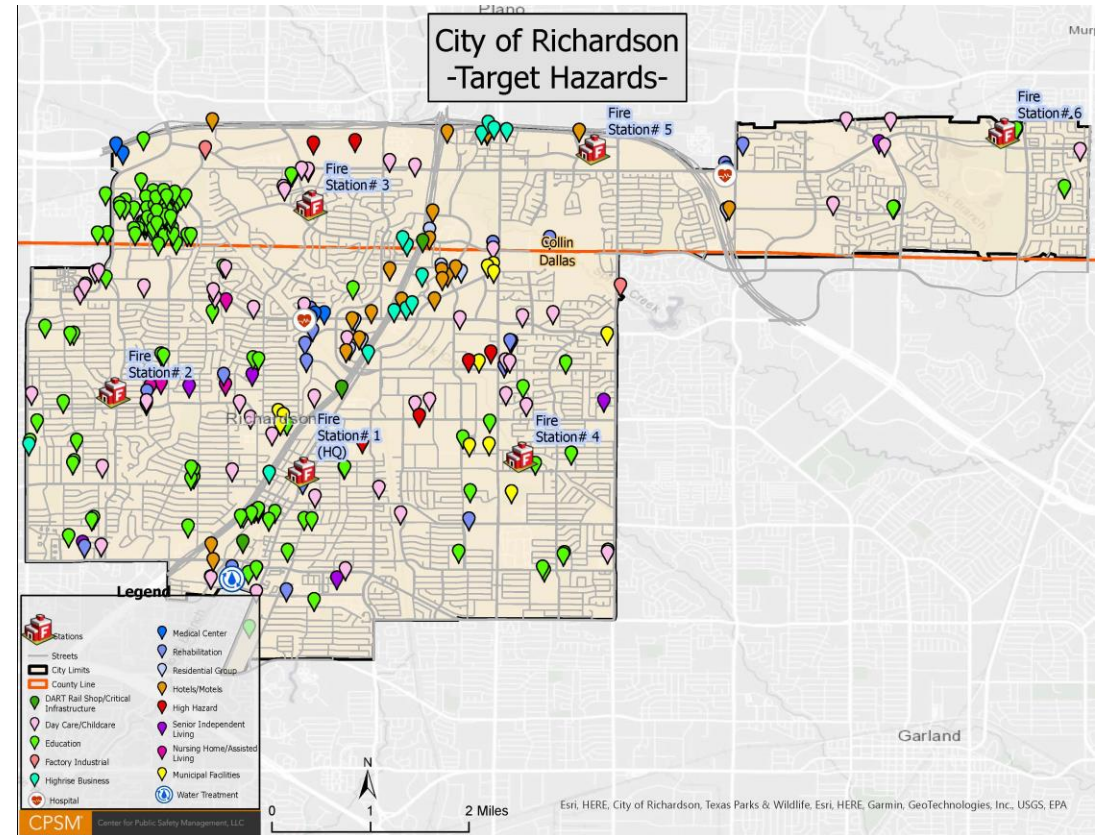
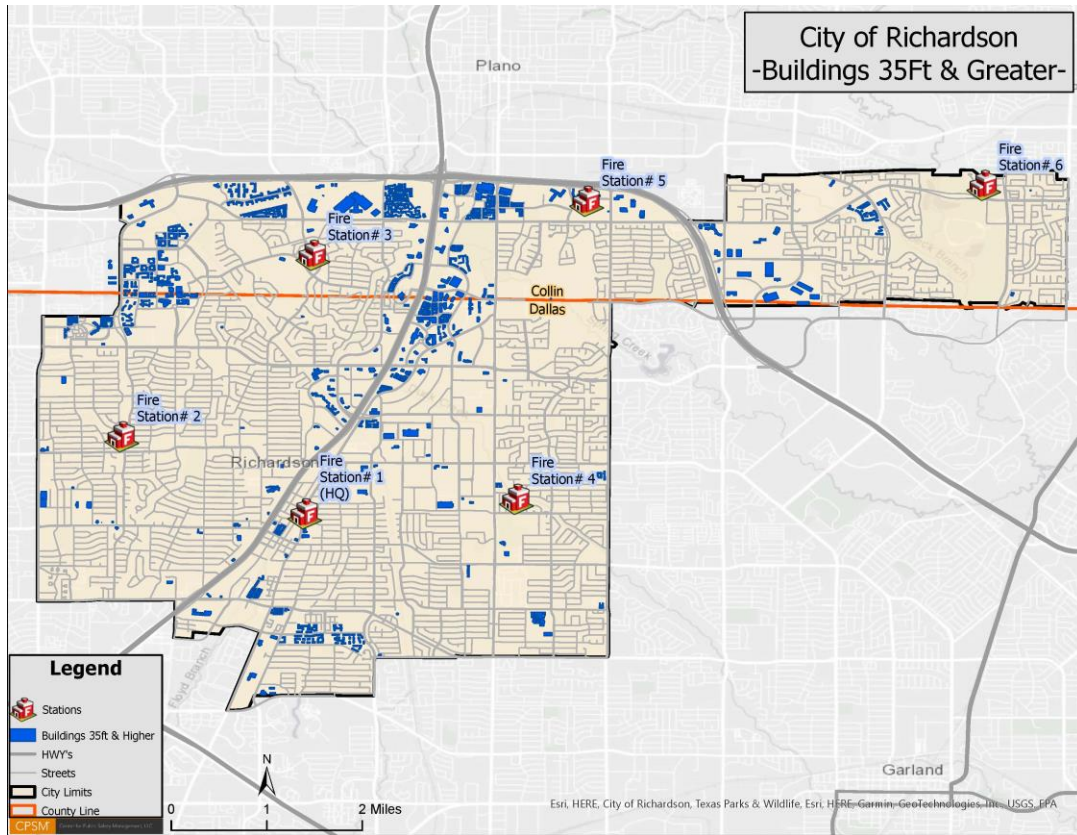


Historical Fire & EMS Calls and Population

All Calls 2000-2023

Key Findings

- The RFD is an exemplary, professional, well managed, and well-prepared Fire and EMS Department.
- The City has the typical urban and suburban community risk that a Fire and EMS Department must prepare for:
 - A transportation system that includes roads of all classifications and commuter and freight rail.
 - Environmental risks that include winter and summer storms with extreme temperatures, and the potential for flooding and tornadoes.
 - Varying residential structure types to include single-family dwellings, multi-family dwellings, mixed use, and assisted living and nursing homes. Includes multi-family structures that are three or more floors.
 - 15 business, commercial, and hotel structures that are considered high-rise buildings.
 - 1700+ commercial and industrial structures.
 - 2 Hospitals and over 75 educational and day-care facilities.



Buildings over 35' and Identified Target Hazards

Key Findings

- CPISM assesses the RFD has a modern Fire, EMS, and support vehicle fleet, and should continue to include in all capital budgeting and strategic master planning the department conducts, planning objectives that follow the NFPA 1901 standard for fire apparatus and industry best practices for ambulances.
- The Fire Marshal's Office in Richardson is a busy unit conducting fire code inspections and re-inspections, plans review, and plans review inspections, and conducting permit related inspections.
- What the office is able to accomplish is inspections related to permits, plans review, high risk and moderate-risk occupancies, which are scheduled annually. Low risk occupancies such as office suites in a multi-occupancy building, are inspected, but not all are completed in the timeframe outlined in NFPA 1730 due the division's current staffing and workload.

Key Findings

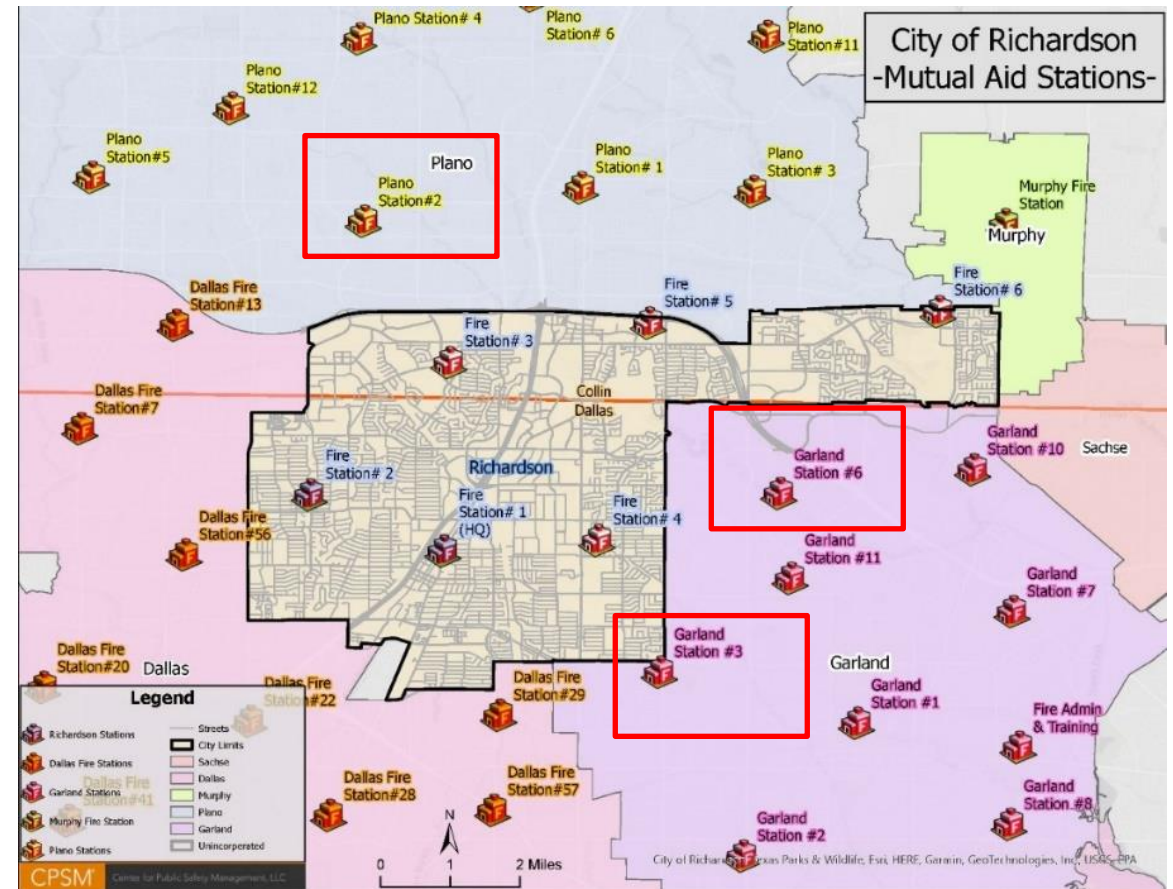
- The RFD is committed to providing exceptional emergency medical services (EMS) to the residents and visitors of Richardson. The EMS division plays a crucial role in the department's mission to safeguard the health, safety, and well-being of the community through rapid response, advanced medical care, and continuous improvement in service delivery.
- As Richardson's healthcare landscape continues to evolve, the development of a Mobile Integrated Health/Community Paramedicine (MIH/CP) program should be evaluated to determine if it would be helpful in expanding the RFD's role in promoting community health and well-being while potentially reducing EMS responses.
- CPSM assesses the RFD meets all mandatory Fire and EMS training to include Texas Commission on Fire Protection Certifications standards, Texas Department of State Health Services, and the Insurance Services Office Fire Suppression Rating Schedule requirements. CPSM further assesses the RFD training programs and training program management for recruit and incumbent personnel is well organized and delivered to high standards.

Key Findings

- CPSM assesses the mutual aid system the RFD is signatory to is robust in that it includes Dallas County fire departments and specialty teams as well as the cities of Garland and Plano.
- CPSM further assesses the RFD should evaluate the feasibility of including the Dallas Fire Department as a response agency into Richardson in certain areas of the city.

Automatic Aid Stations outlined in red.

All other stations are Mutual Aid.



Key Findings

- CPSM assesses the RFD has established a contemporary health, safety, and wellness program with a focus on employee health and safety.
- Currently, of the 184 FTEs allotted to the RFD.
 - 179 Sworn (uniform personnel)
 - 5 Non-Sworn (non uniform personnel)

The department has fifty-two employees with twenty or more years of service as outlined next:

- 35 or more years of service: 5 (includes four Captain positions)
- 30-34 years of service: 5 (includes the Fire Chief, Assistant Chief of Operations, and Assistant Chief of Administration).
- 25-29 years of service: 24 (includes Assistant Chief-Fire Marshal, two Battalion Chiefs and four Captains).
- 20-24 years of service: 18 (includes three Battalion Chiefs and four Captains).

Key Findings

- CPSM performed a staffing factor analysis for the RFD and the RFD has planned for and budgeted sufficient personnel to cover scheduled and unscheduled leave, vacancies created by separation from the department, and required training leave.
- CPSM assesses that the RFD does not have sufficient civilian administrative and technical support staff to support all department administrative, technical, program, and strategic work.

Key Findings

- Response times are typically the primary measurement for evaluating Fire and EMS services. Achieving the quickest and safest response times possible should be a fundamental goal of every fire department.

CPSM performed a response time analysis as a part of the assessment and found that current technology and time recording processes skew the data.

The RFD is currently in the process of installing an Automated Dispatch System that will improve the accuracy of response time data and is anticipated to be on-line in early 2025.

NFPA 1710 Response Time Standard Goals

Dispatch Time

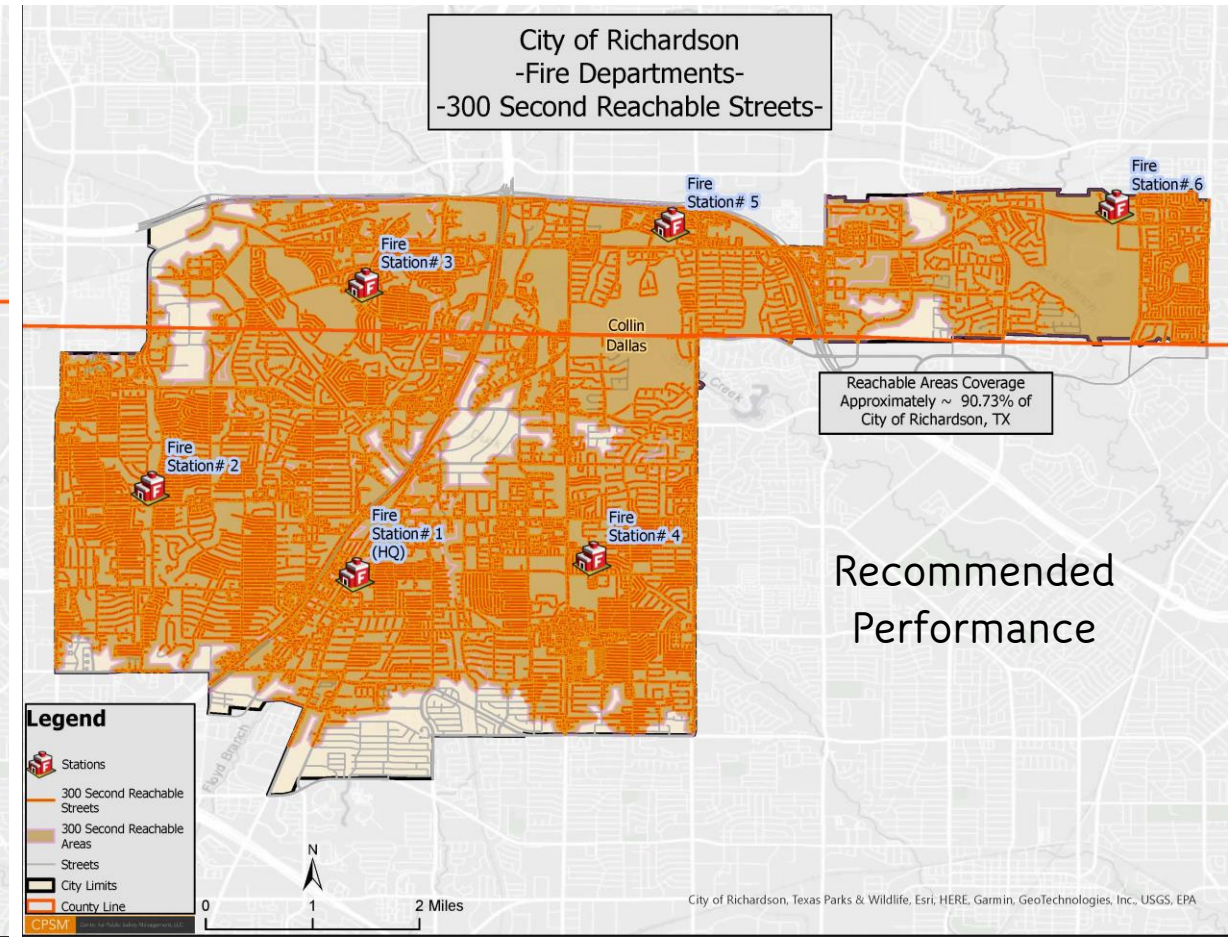
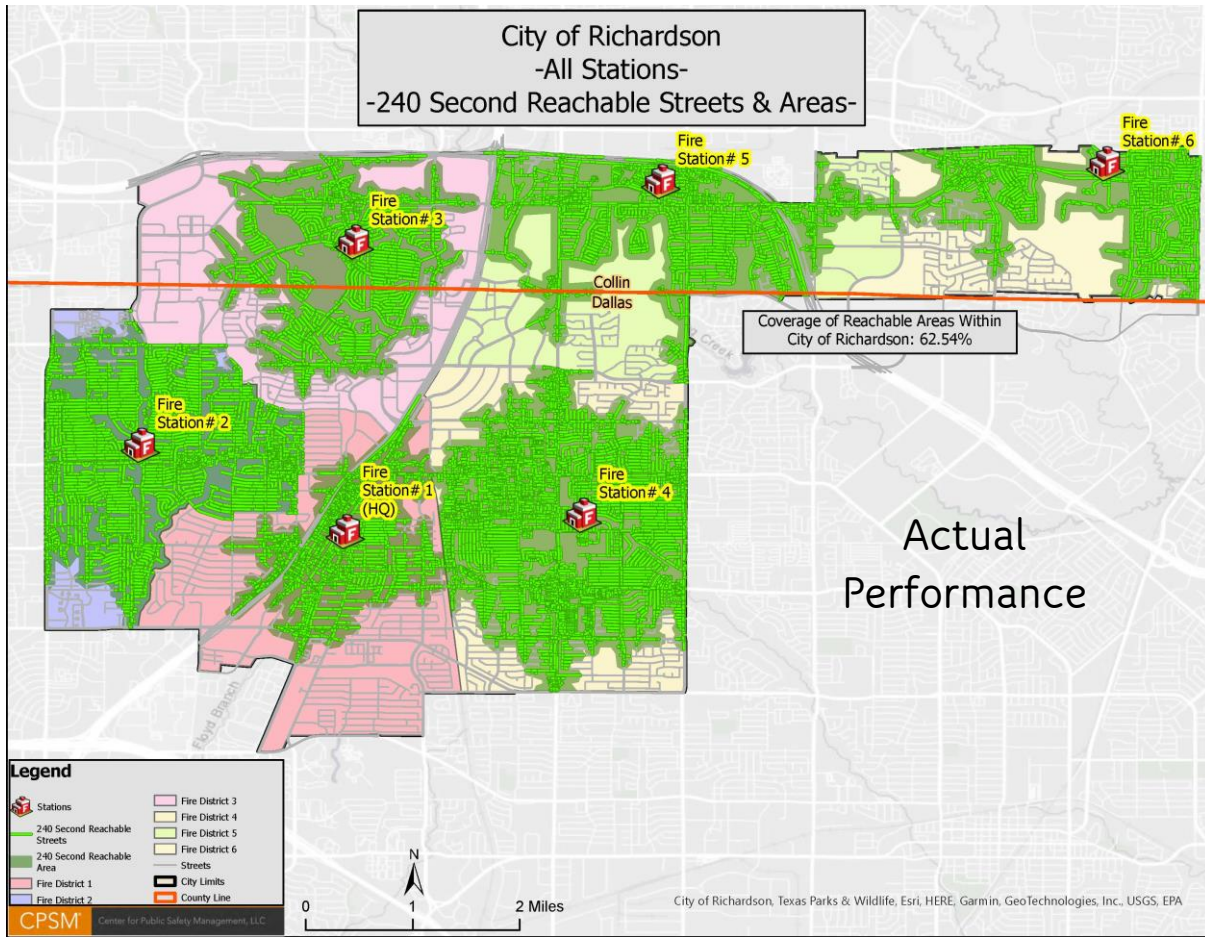
- ≤ 64 seconds 90 percent of the time.
- ≤ 106 seconds 95 percent of the time.

Turnout Time

- ≤ 80 seconds for fire and special operations 90 percent of the time.
- ≤ 60 seconds for EMS responses 90 percent of the time.

Response Travel Time

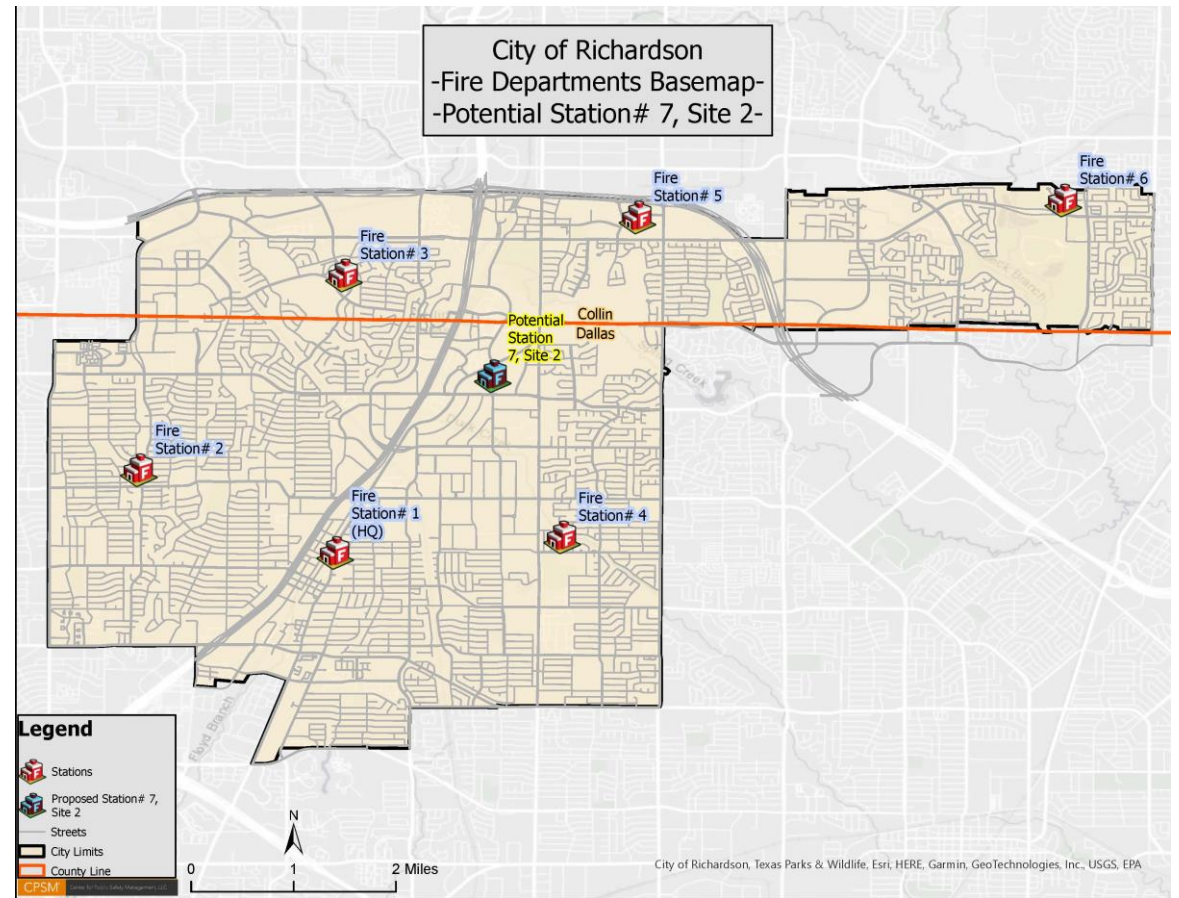
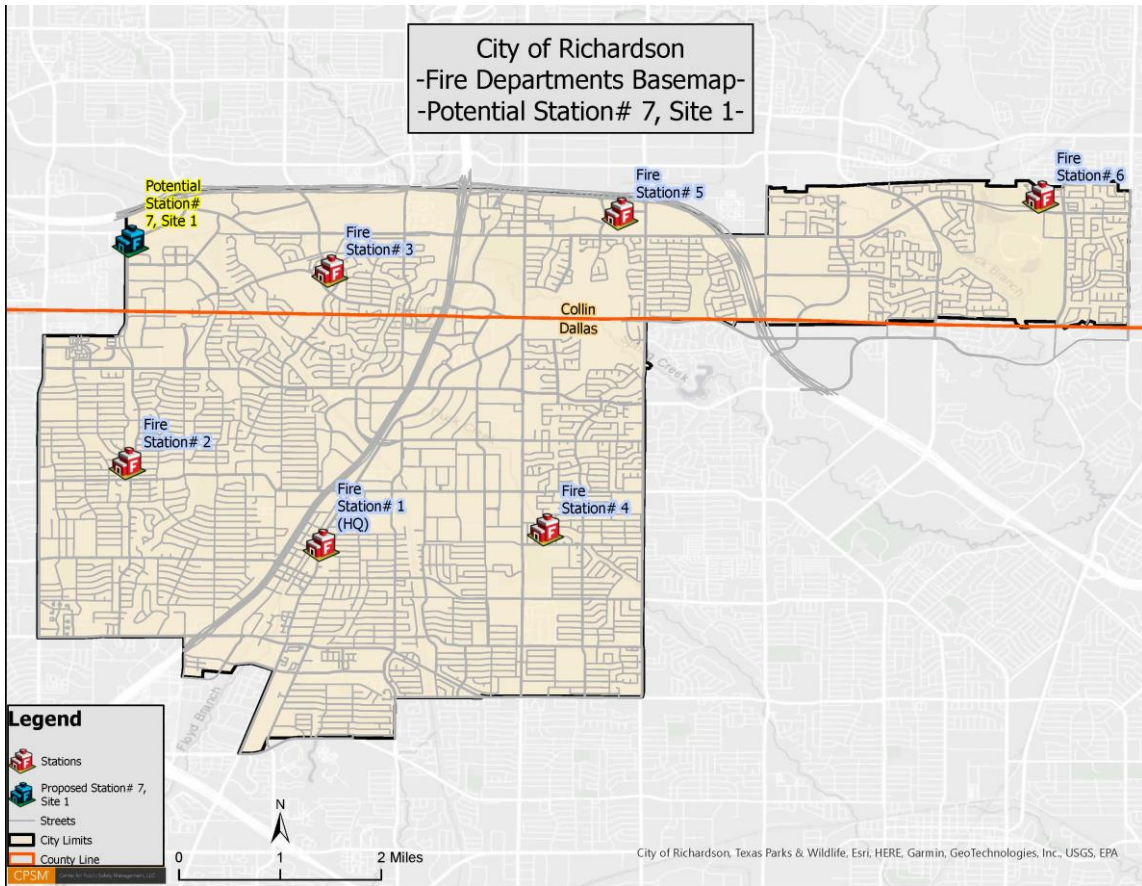
- ≤ 240 seconds for the first arriving engine company to a fire suppression incident 90 percent of the time.
- ≤ 240 seconds for the first arriving engine company with automated external defibrillator (AED) or higher level capability.



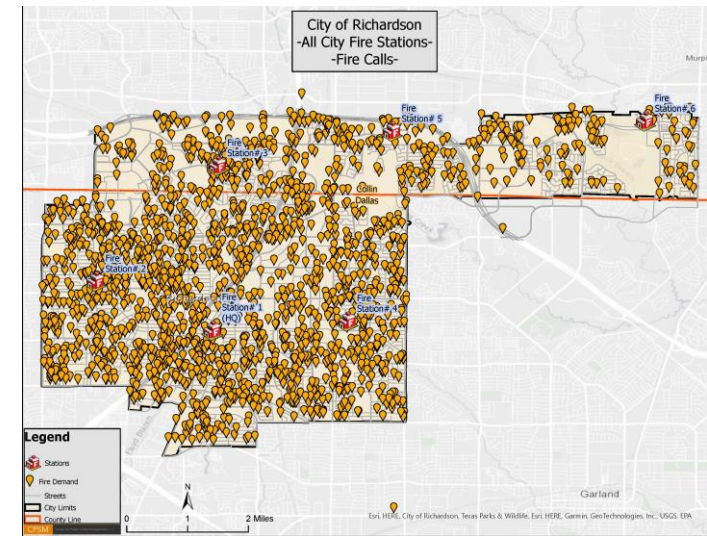
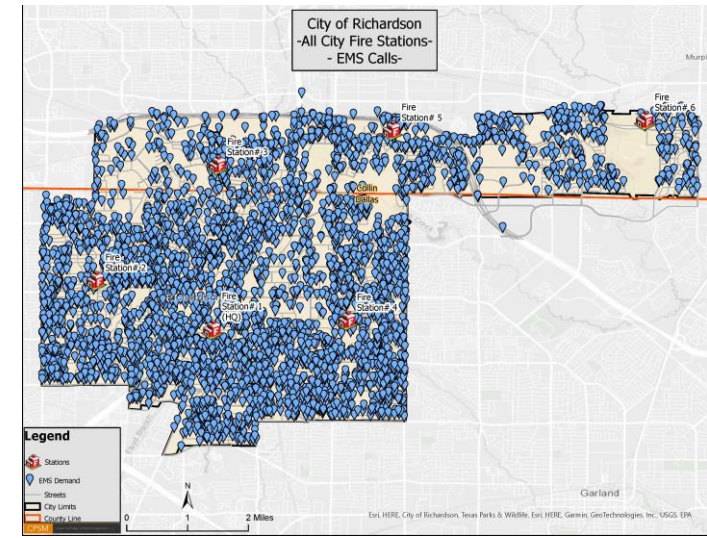
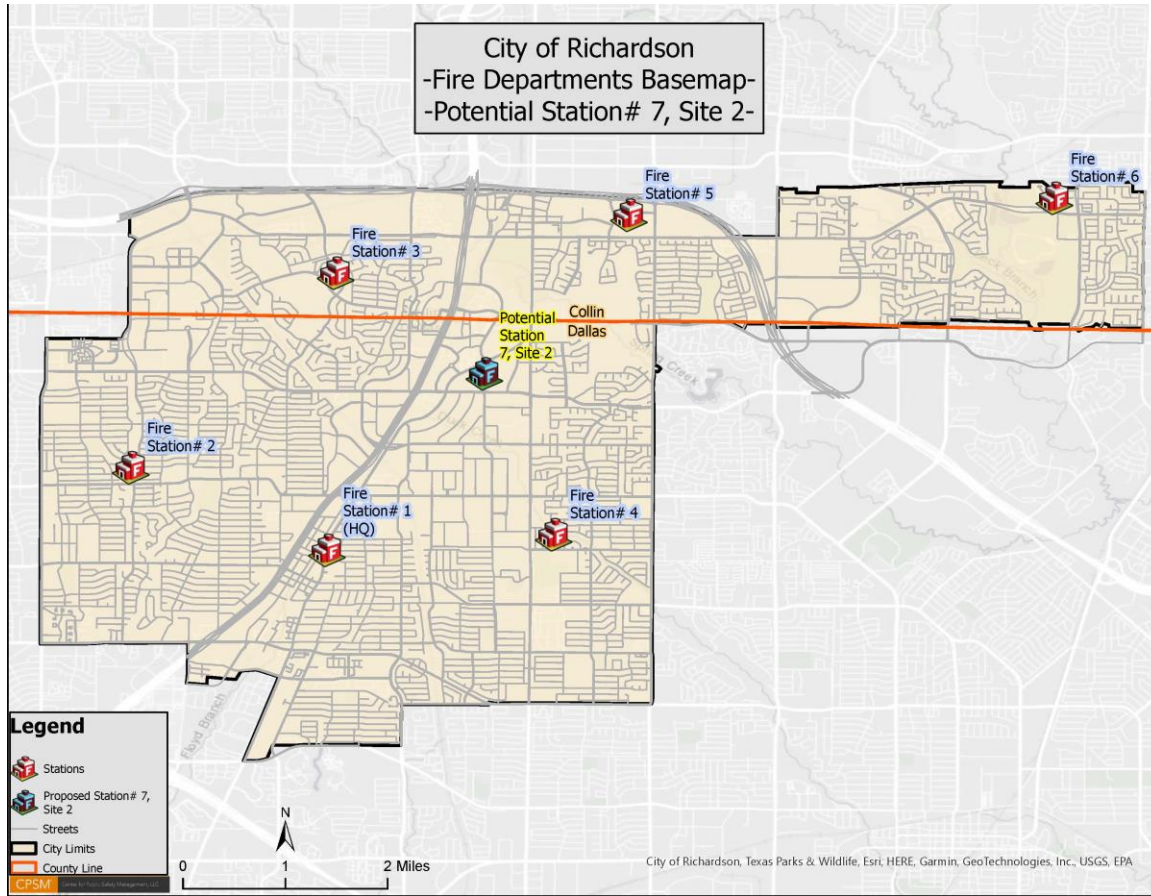
Station Distribution Response Travel Times

Key Findings

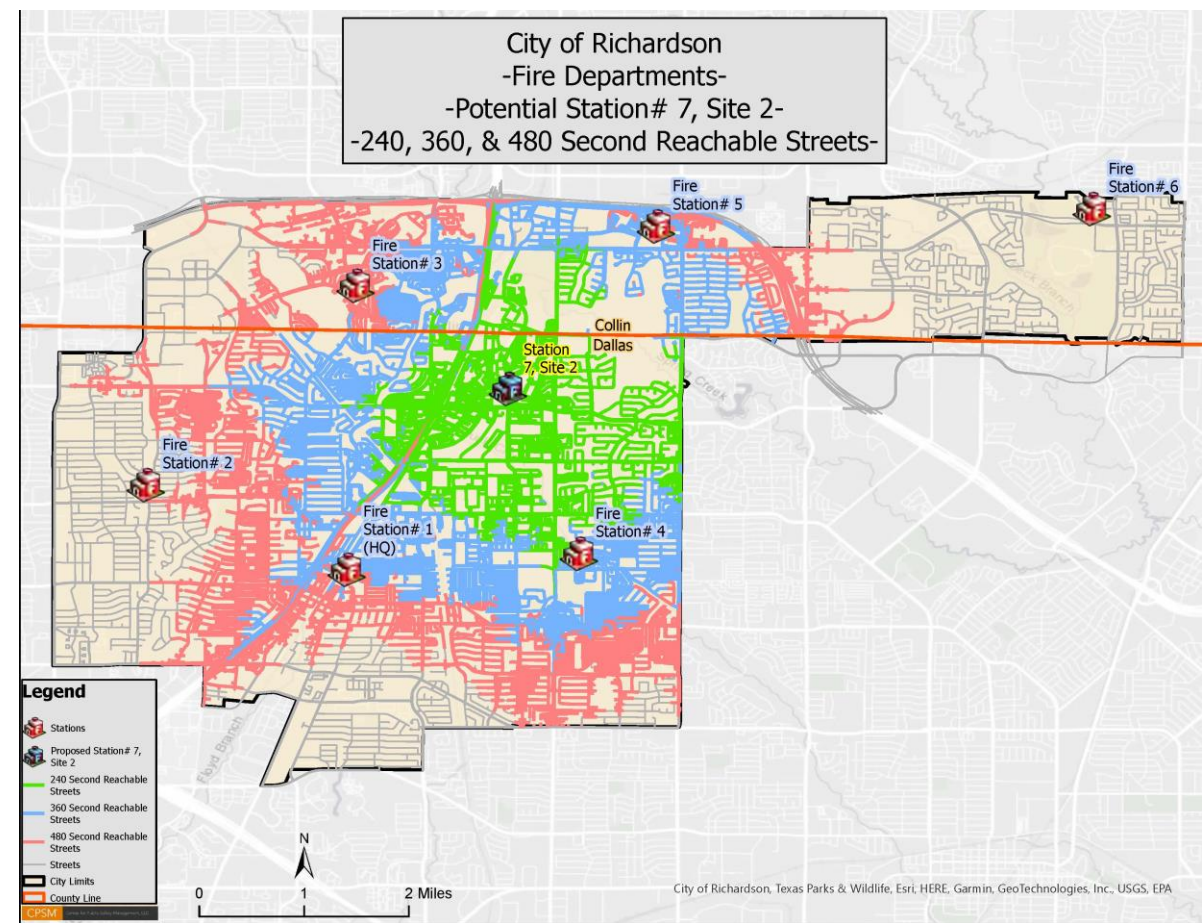
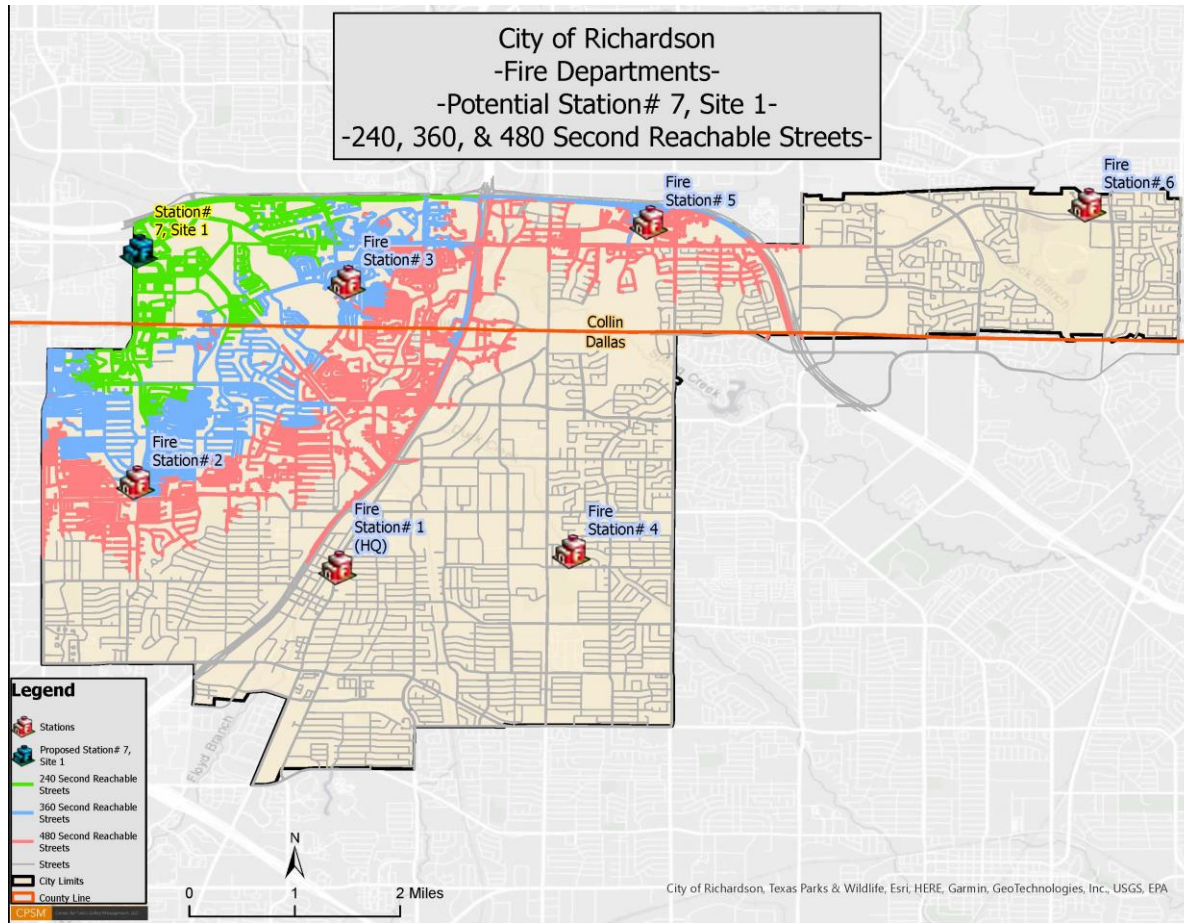
- CPSM analyzed each of the six fire facilities (non-mechanical) during our site visit. CPSM assesses that overall, the RFD has taken steps to ensure each facility has contemporary fire facility components. Station 6 was renovated in 2023, and Station 5 is currently being renovated.
- Based on current station locations, workload, response travel times, and potential growth, there is a need for an additional fire station in the future.
 - Two potential locations were provided to CPSM for analysis and included the northwest and north-central Richardson areas.
 - CPSM analyzed both sites and determined the north-central location will provide the most beneficial new Fire and EMS service due to types of residential and building risk, mixture of target hazards, and current response time gaps.



Recommended Station 7 Location-Site 2



Recommended Station 7 Location-Site 2



Recommended Station 7 Location-Site 2 Response Time Perspective

Key Findings

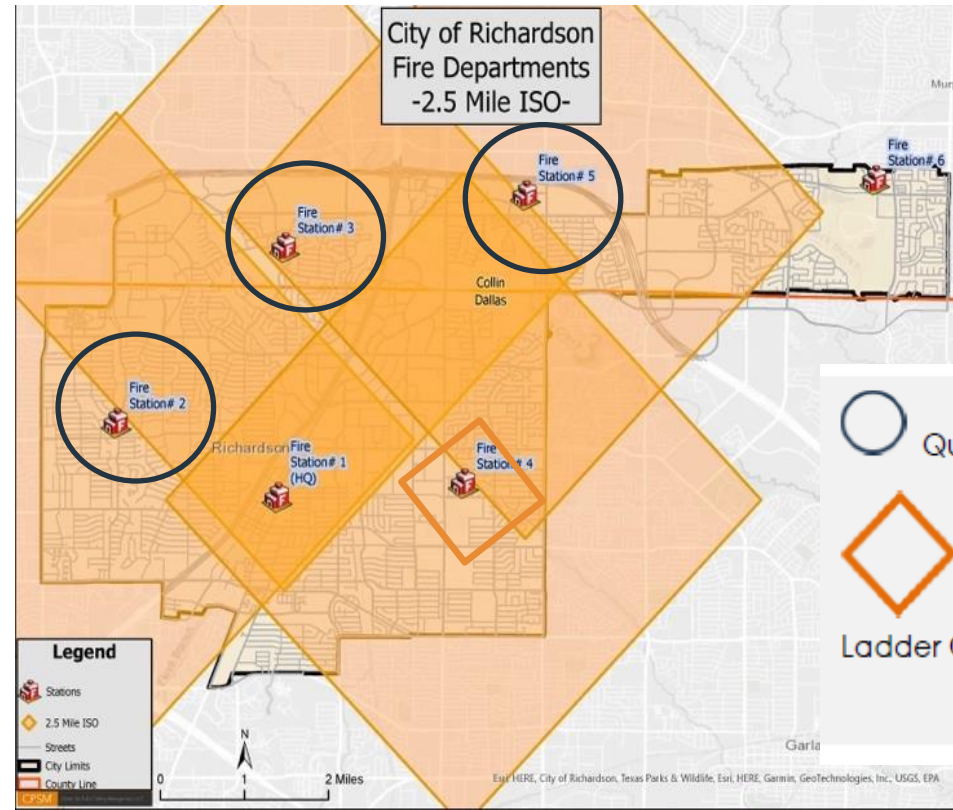
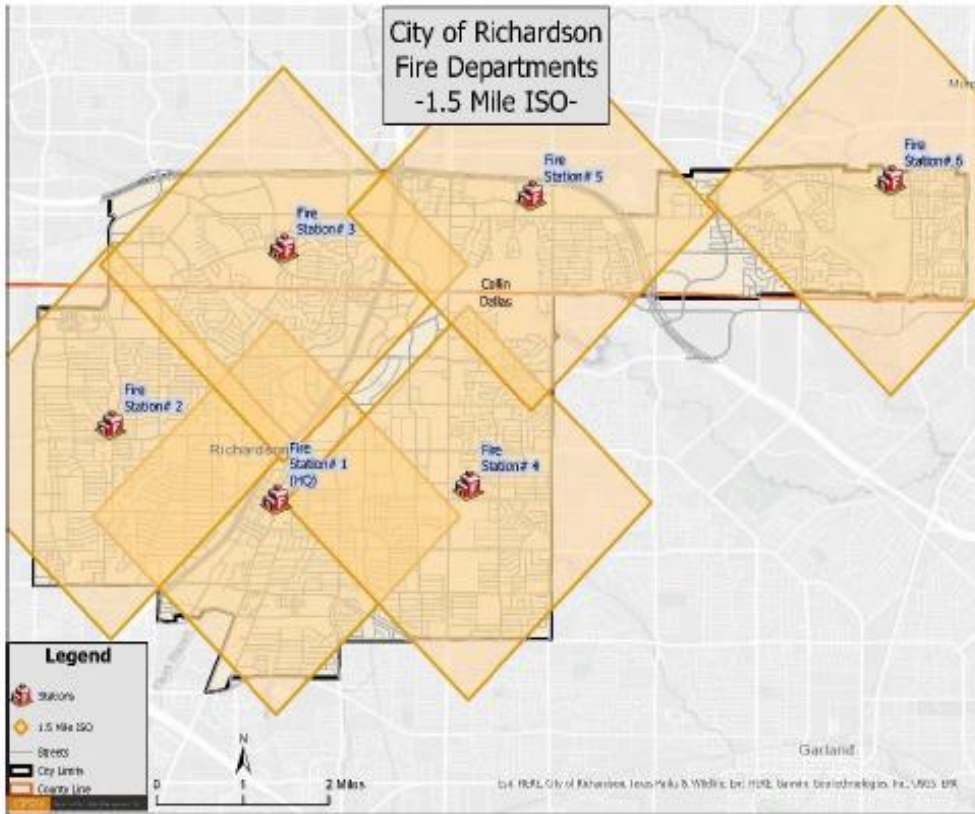
- An important area of ISO credit points includes the distribution of engine and ladder companies regarding their location when compared with developed land.
 - When applying the 1.5-mile engine benchmark, there is an overlap in all districts providing excellent ISO coverage with only minor gaps in the panhandle of the city between Stations 5 and 6, and small gaps along the perimeter of the city boundaries and in the central area of the city.
 - The City received partial credit for Ladder Company deployment in the current ISO-PPC analysis (1.0/4.0). Although the RFD deploys three Quint apparatus, the ISO does not give these apparatus full credit for a ladder company, as the quint apparatus in the RFD model is used primarily as an engine company.
 - In the RFD deployment model, there is one separate ladder company (Truck 4).
 - Overall, CPSM assesses that as the city continues to add residential and commercial buildings that are or have the potential to be multi-level, and/or clusters of buildings that are multi-level, the RFD should add one additional ladder apparatus as a separate company (apparatus and staffing) to meet the service level and performance benchmarking established by the ISO-PPC and NFPA 1710 standards. CPSM further assesses the additional ladder truck should be located in the Station 3 District and be a tractor drawn (tiller) apparatus.



Tractor Drawn Aerial

- Advantages over rear or mid-mount aerial ladder truck:
 - Tractor drawn aerial is the most maneuverable aerial apparatus available, even though it's much longer than a straight frame aerial.
 - Able to navigate around obstacles and get in and out of tighter congested areas, narrow streets, and around traffic calming devices.
 - Highly maneuverable because of the fifth wheel articulation and the ability to steer the rear of the trailer around obstacles.
 - This capability provides the opportunity to get closer to a structure for firefighter access or victim rescue. In certain locations, a straight-frame aerial would require a three-point turn to make access or would simply have to park and have the crew walk their equipment to the fire location.

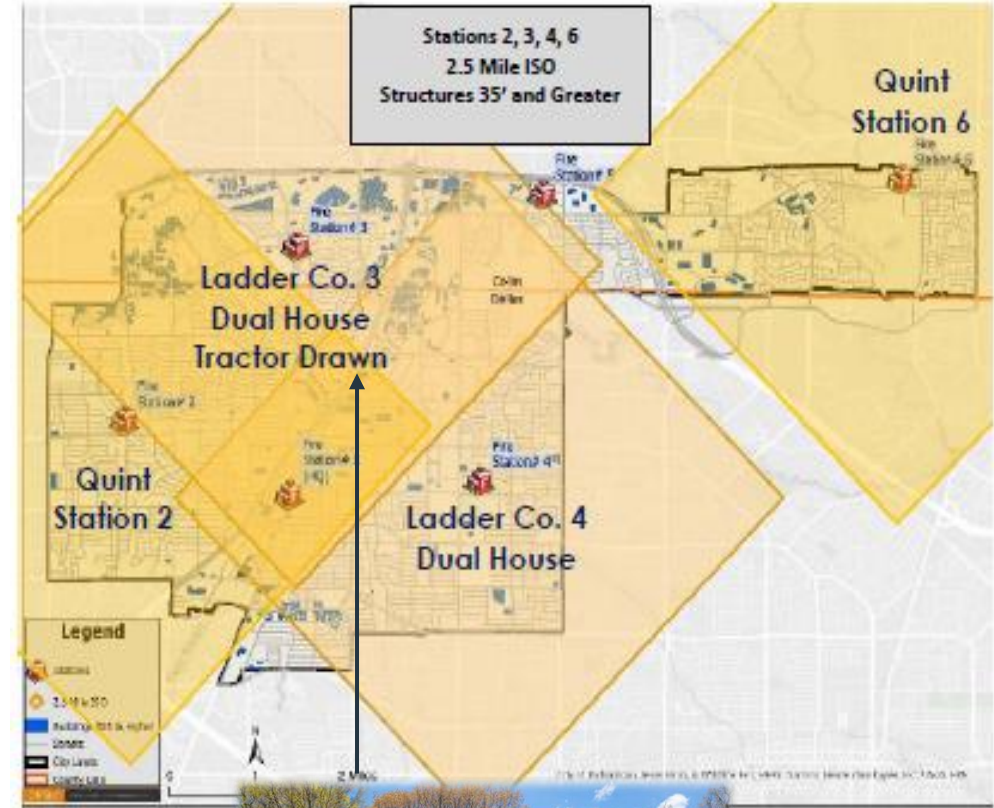
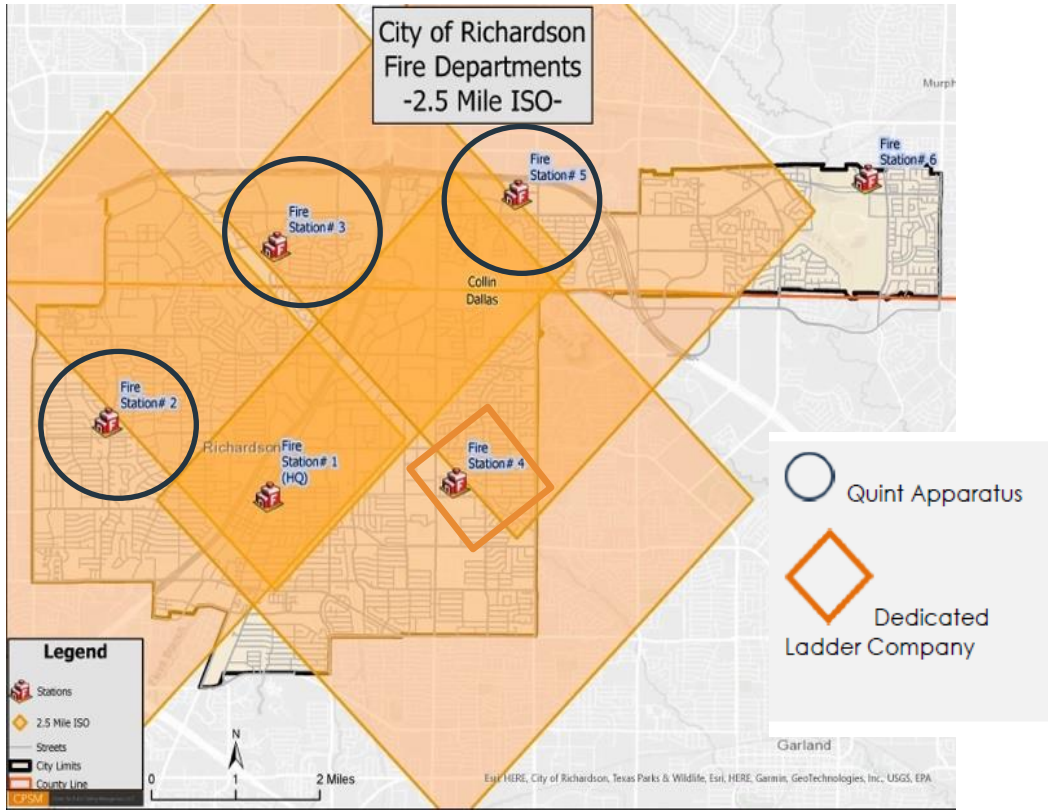




○ Quint Apparatus

◇ Dedicated Ladder Company

ISO Benchmark-Current



ISO Ladder-Current & Proposed



Key Findings

- CPSM assesses the RFD is able to, as a single responding agency, assemble an Effective Response Force for single-family dwellings, strip mall/commercial buildings, and apartment building fires.
 - The RFD, as a single responding agency, cannot assemble an Effective Response Force for a high-rise fire without the response of mutual aid companies, which is received and allowed under the NFPA 1710 standard.
- CPSM assesses that overall, the RFD has moderate resiliency issues across the department in terms of workload.

Resiliency is the RFD's ability to recover from one or more incidents and have the staffing and resources available to respond to the next call for service.

- Stations 1 and 5 have moderate resiliency issues when analyzing each station's ability to respond in their fire district.
- Station 1 has the highest workload of all stations, which impacts resiliency in this district.
- Station 4 has the highest resiliency as two fire apparatus and one MICU unit respond from this station.

Key Findings

- In Richardson, 74% of all calls are EMS related. Currently, the RFD does not have an EMS Shift Supervisor.
 - Attention to the needs of EMS response crews to include overall management and coordination, training, internal communications, liaison with hospitals and medical facilities, monitoring ambulance resiliency and transfer time at the hospital, and incident management of higher acuity EMS incidents are critical and equally important in EMS service delivery.
- The RFD currently staffs each operational shift with one Battalion Chief. The current operational Battalion Chief's span of control is six stations, which includes six engine companies, one ladder company, and six MICU ambulances, spread out over 28.6 square miles, and which includes seven company officers and forty-seven driver-engineers and firefighters.
 - Adding a second Battalion Chief would provide a reduction in the span of control and greater attention to the needs of response crews to include overall management and coordination, training, and internal communications.



Fire & EMS Assessment Strategic Initiatives

Health, Wellness, and Safety

As discussed earlier, CPSM assesses the RFD has established a contemporary health, safety, and wellness program with a focus on employee health and safety.

CPSM recommends the RFD continue this effort through any strategic planning and initiatives, to include establishing a formal health, safety, and wellness committee, which includes the City Human Resources Department and Risk Management, and continue the development of a comprehensive health, safety, and wellness initiative program that aligns with NFPA 1500, *Standard on Fire Department Occupational Safety and Wellness Programs, 2021 edition*.

Strategic Initiative 1 – RFD Organizational Resiliency
<i>Initiative Manager(s): As assigned.</i>
Goal 1.1: Health, Safety, and Wellness: Alignment with NFPA 1500: Standard on Fire Department Occupational Safety and Wellness Programs.
Objectives
<ol style="list-style-type: none"> 1. Develop a health, safety, and wellness committee, to include the City of Richardson Human Resources and Risk Management, with a goal of developing a comprehensive health, safety, and wellness initiative program that aligns with NFPA 1500, <i>Standard on Fire Department Occupational Safety and Wellness Programs, 2021 edition</i>. 2. Maintenance of and continual updating of department policies, procedures, and guidelines that link or should link to health, safety, and wellness while members are engaged in emergency and non-emergency activities.

Strategic Initiative 1: RFD Organizational Resiliency

Succession Planning

CPSM assesses that the RFD through promotional policy and rank structure has a traditional succession plan through the rank of Fire Chief. CPSM recommends that as a part of any strategic planning, the RFD leadership work with a cross-section of department personnel and develop a contemporary Succession Plan that is diverse, includes the entire organization, and has a focus on preparing current and future members to take on additional roles and responsibilities, and as well prepares members for advancement and promotion into key roles in the organization.

Strategic Initiative 1 – RFD Organizational Resiliency
<i>Initiative Manager(s): As assigned.</i>
Goal 1.2: Succession Planning
Objectives
<ol style="list-style-type: none"> 1. Engage a cross-section of department personnel to develop a contemporary Succession Plan that is diverse, includes the entire organization, and has a focus on preparing current and future members to take on additional roles and responsibilities, and prepares the workforce for advancement and promotion into key roles in the organization 2. Annually evaluate all company level, middle management, and senior leadership positions in the department and refine the knowledge, skills, abilities, and competencies needed to assume these roles to ensure the organizational members are current with the changing landscape and technologies of the Fire and EMS disciplines. <ol style="list-style-type: none"> 2a. Identify critical positions and highlight potential vacancies. 3. Focus on the development of individuals to meet future department needs as outlined in gap analysis to include developmental opportunities in the various officer positions.

Strategic Initiative 1: RFD Organizational Resiliency

Change Management

Organizations are no different than individual people in that both are typically resistant to change, even when it is known that change is needed.

During our stakeholder meetings, the topic of organizational change was introduced by stakeholders (policies, programs, procedures, equipment), and CPSM was informed the organization has been challenged with change in the past.

CPSM recommends that as a part of any strategic planning, the RFD formulate and adopt an organizational change implementation practice so that the organization can effectively manage the complexities of change and increase the likelihood of successful implementation and adoption across the organization.

Strategic Initiative 1 – RFD Organizational Resiliency
Initiative Manager(s): As assigned.
Goal 1.3: Change Management and Organizational Communication
Objectives
<ol style="list-style-type: none"> 1. Recognize the need for change through a continual analysis and diagnosis of current issues and future needs. 2. Implement change using a four-step methodology: (1) formulation of a clear vision for the change; (2) ensure all stakeholders are properly engaged; (3) when applicable, implement change through small-scale testing and piloting; (4) ensure the change is effectively communicated to all stakeholders. 3. The implementation and communication steps anticipate feedback and leads to further change management to address stakeholder and change element(s) issues, challenges, and concerns. 4. The communication step closes all communication gaps and ensures consistent messaging and actions across the organization; the most correct communication medium is utilized when delivering organizational information (i.e. e-mail, in-person, through formal training); messages and information are consistent and include feedback to the originator or sender when requested, necessary, and required; and the delivery of the change provides stakeholders a proper voice in the change. 5. The change is sustained and institutionalized through effective communication and implementation and creates a culture shift.

Strategic Initiative 1: RFD Organizational Resiliency

EMS Staff Rotation

CPSM learned through stakeholder input sessions that the operational field assignment to MICU units (ambulances) is a regular assignment, and that during the 48-hour shift, a MICU assignment can be for the entire 48-hours.

Ambulance responses in Richardson, as outlined in the assessment, have a higher response volume and longer task times than those for fire suppression units.

CPSM recommends the RFD include in any strategic planning, the development of company officer guidelines regarding on-shift MICU assignments. These guidelines should provide the company officer with workforce fatigue assessment considerations and the latitude to rotate MICU unit staff to a fire suppression unit as determined by the company officer, to ensure adequate rest and recovery.

Strategic Initiative 1 – RFD Organizational Resiliency
Initiative Manager(s): As assigned.
Goal 1.4: Operational EMS Assignment Rotation
Objectives
<ol style="list-style-type: none">1. Develop company officer workforce fatigue assessment guidelines so that they can better evaluate staff assigned to MICU units over a 48-hour time period through established parameters.2. The company officer continuously monitors the workload of station MICU ambulance, and the fatigue of staff assigned to MICU.3. Guidelines allow MICU unit staff rotation to a fire suppression unit when necessary and as determined by the company officer, to ensure adequate rest and recovery.

Strategic Initiative 1: RFD Organizational Resiliency

Administrative Support Staff

The current civilian professional support staff includes five positions.

CPSM assesses that the RFD does not have sufficient civilian administrative and technical support staff to support all department administrative, technical, program, and strategic work.

CPSM recommends that as a part of any strategic planning, the RFD include expanding civilian administrative support to include:

- One Project-Applications position to the Administrative Division for I-T support (technology/software and digital programs, contract administration, version/firmware updates, physical device management, end user training, data auditing and reporting).
- One Fire Management Technician position to the Training Division to support all administrative, technical, and records management system program work.
- One Fire Management Technician position to the EMS Division to support all administrative, technical, and records management system program work.

Strategic Initiative 2 – Organizational Growth and Excellence
Initiative Manager(s): As assigned.
Goal 2.1: Addition of Professional Administrative Support Staff
Objectives
<ol style="list-style-type: none"> 1. Funding for the addition of one Fire Management Technician for assignment in the Training Division to support all administrative, digital education, procurement, technical, and records management system program work. 2. Funding for the addition of one Fire Management Technician for assignment in the EMS Division to support all administrative, technical, and records management system program work. 3. Funding for the addition of one Project-Applications position for assignment in the Administrative Division for I-T support to include: technology/software and digital programs; contract administration; version/firmware updates; physical device management; end user training; and data auditing and reporting.

Strategic Initiative 2: Organizational Growth and Excellence

Second Operational Battalion Chief

The RFD currently staffs each operational shift with one Battalion Chief.

The current operational Battalion Chief's span of control is six stations, which includes six engine companies, one ladder company, and six MICU ambulances, spread out over 28.6 square miles, and which includes seven company officers and forty-seven driver-engineers and firefighters.

Adding a second Battalion Chief would provide a reduction in the span of control and greater attention to the needs of response crews to include overall management and coordination, training, and internal communications.

Strategic Initiative 2 – Organizational Growth and Excellence
Initiative Manager(s): As assigned.
Goal 2.2: Addition of a Second Operational Battalion Chief
Objectives
<ol style="list-style-type: none"> 1. Add a second Operational Battalion Chief to reduce the current single/city-wide Battalion Chief's span of control, and to improve the Effective Response Force coverage and response travel time (480 seconds) for the incident command function in the Stations 2, 3, 5, and 6 response districts. The addition of response units, such as an additional ladder at Station 3, will continue to exacerbate the span of control challenges for a single operational Battalion Chief. 2. Segregate the city into north and south operational regions with Stations 3, 5, and 6 in the north region and Stations 1, 2, and 4 in the South Region. 3. Assign North Battalion Chief to Station 5, as this station has the most positive impact on meeting the 480-second travel time of the incident command function in the north region. 4. Procure and outfit incident command vehicle and complete Station 5 upfitting to accommodate two additional staff (1 Battalion Chief and one Field Incident Technician).

Strategic Initiative 2: Organizational Growth and Excellence

EMS Program Staff

In Richardson, 74% of all calls are EMS related.

- Currently, the RFD does not have an EMS Shift Supervisor. Attention to the needs of EMS response crews to include overall management and coordination, training, internal communications, liaison with hospitals and medical facilities, monitoring ambulance resiliency and transfer time at the hospital, and incident management of higher acuity EMS incidents are critical and equally important in EMS service delivery.
- The Battalion Chief of EMS is a program management position that is assigned to the Assistant Chief of Operations. This position manages all aspects of staff EMS education, EMS quality improvement, EMS clinical oversight to include liaison and interaction with the Medical Director, medical protocol review and implementation, EMS equipment analysis, and interaction with the Regional Advisory Council.

Strategic Initiative 2 – Organizational Growth and Excellence
Initiative Manager(s): As assigned.
Goal 2.3: EMS Program Staff Enhancements
Objectives
<p>1. Add a shift Operational EMS Supervisor at the Captain level to provide overall management and coordination of EMS field operations, shift training, internal communications, liaison with hospitals and medical facilities, monitoring ambulance resiliency and transfer time at the hospital, and incident management of high acuity EMS incidents.</p> <p>1a. Procure and outfit EMS command vehicle and complete assigned station upfitting and office accommodations to accommodate additional staff (1 Captain position).</p> <p>2. Elevate the Battalion Chief of EMS position to a higher-level Chief Officer position within the current RFD chain of command. Elevation of this position to a level between Battalion Chief and Assistant Chief as determined by the Fire Chief.</p>

Strategic Initiative 2: Organizational Growth and Excellence

Facilities

CPSM assesses that overall, the RFD does not have an aging fire facility issue. Station 6 was renovated in 2023 to accommodate the ambulance staffing, and Station 5 is undergoing renovation 2024.

CPSM further assesses that most all of the facilities have or will have many contemporary fire facility features.

CPSM assesses the RFD has apparatus bay space congestion, and challenges storing reserve apparatus.

Strategic Initiative 3 – Infrastructure
Initiative Manager(s): As assigned.
Goal 3.1: Long Term Plan to Continue Maintaining RFD Facilities
Objectives
<ol style="list-style-type: none"> 1. Annualized funding for facility maintenance and improvements to sustain RFD facilities. 2. Ensure RFD facilities maintain all current and future fixtures, equipment, accessories, technologies, health, and safety measures, and building space of contemporary fire facilities, and that align with applicable NFPA, building code, and industry standards. 3. Begin planning for a separate facility to store reserve apparatus with the goal of reducing current apparatus bay space congestion, and ensuring frontline apparatus has the ability to utilize the drive-through bay space when returning to the station to reduce backing of heavy apparatus and ambulances.

Strategic Initiative 3: Infrastructure

Fleet

CPSM assesses the RFD has a modern Fire, EMS, and support vehicle fleet, and should continue to include in all capital budgeting and strategic master planning the department conducts, planning objectives focused on:

- Following the NFPA 1901 standard for fleet replacement.
- Following industry best practices for ambulance replacement. There is no national standard.
- Where applicable, rotating Fire and EMS apparatus from busier workload stations to less busy workload stations to extend the life cycle of apparatus.

Strategic Initiative 3 – Infrastructure
Initiative Manager(s): As assigned.
Goal 3.2: Solution to Sustain RFD Fire and EMS Operational Fleet
Objectives
<p>1. Continue to include in all capital budgeting the following planning objectives to sustain the current and future fleet:</p> <ul style="list-style-type: none"> □ Following the NFPA 1901 standard for fleet replacement: Apparatus should not remain on the frontline greater than fifteen years. Planning for replacement should be advanced up to 36 months due to current delivery times of fire apparatus manufacturers. □ Following the NFPA 1901 standard for fleet replacement: Placing apparatus out of service once the apparatus reaches the 25-year age ceiling. □ Following industry best practices and placing ambulances out of service once the unit reaches the 10-year age ceiling or 150,000 miles. Planning for replacement should be advanced up to 36 months due to current delivery times of ambulance chassis manufacturers. □ Where applicable, rotating Fire and EMS apparatus from busier workload stations to less busy workload stations to extend the life cycles of apparatus.

Strategic Initiative 3: Infrastructure

Growth and Resiliency

Overall, continued growth in the city is planned for and is occurring, which is a positive for the city. That said, population and related growth impacts must be included in any strategic master planning the RFD conducts.

The City of Richardson has achieved a Class 1 ISO-PPC community rating. CPSM recommends deficiencies in the ISO-PPC should be discussed and included in any strategic master planning the RFD conducts.

One of the fastest-growing value-added service enhancements in EMS is that of Mobile Integrated Healthcare/Community Paramedicine (MIH/CP) programs. An MIH/CP program is comprised of a suite of potential services that EMS could provide to fill gaps in the local healthcare delivery system. Such a service is intended to better manage the increasing EMS call volume and better align the types of care being provided with the needs of the patient.

Strategic Initiative 4 – Ensuring a Resilient Community
Initiative Manager(s): As assigned.
Goal 4.1: Monitoring Growth and Development and Sustaining ISO-PPC Community Rating
Objectives
<ol style="list-style-type: none"> 1. On a quarterly basis, engage the Economic Development and Development Services departments regarding ongoing, new, and potential development in the city. 2. Measure any new development or the aggregate of new developments for the potential impacts on the RFD regarding densification created by multi-family/multi-story buildings and/or residential development(s), increase in call demand, and impact on the current deployment model (apparatus type, staffing, deployment locations) of the RFD. 3. Continually monitor all components of the ISO-PPC analysis (Emergency Communications; Fire Department; Water Supply) to ensure current credits earned are not destabilized and result in a reduction in earned credit points. 4. To the extent possible (and as addressed in other strategic initiatives in the Fire & EMS Assessment), address any deficiencies in the current ISO-PPC analysis to improve earned credit points, specifically in sections: <ul style="list-style-type: none"> □ 549 Credit for Ladder Service □ 561: Deployment Analysis

Strategic Initiative 4: Ensuring a Resilient Community

Strategic Initiative 4 – Ensuring a Resilient Community
Initiative Manager(s): As assigned.
Goal 4.2: Develop a Mobile Integrated Health/Community Paramedicine (MIH/CP) Program
Objectives
<ol style="list-style-type: none"> 1. Align the RFD and community with national best practices in the development and implementation of a Mobile Integrated Health/Community Paramedicine program. 2. Implement a work group of RFD leadership, medical director, and community health partners to evaluate the local need for a Mobile Integrated Health/Community Paramedicine program,

Strategic Initiative 4: Ensuring a Resilient Community

Community Risk Reduction

Community Risk Reduction activities are important undertakings of a modern-day fire department. A comprehensive fire protection system in every jurisdiction should include, at a minimum, the key functions of fire prevention, code enforcement, inspections, and public education.

The plans review activity, and the permitting process the Fire Marshal's Office is responsible for is dominating much of the Fire Marshal's Office staff time.

Fire Life Safety Education helps promote a greater understanding of what to do when and what not to do when faced with a fire situation either in your home, a vehicle, or at work. Educating the community about fire and life safety not only prevents fires and accidents, but also contributes to a safer and more informed society.

Strategic Initiative 4 – Ensuring a Resilient Community

Initiative Manager(s): As assigned.

Goal 4.3: Expand Community Risk Reduction Program

Objectives

1. Expand Fire Inspection staff by one Fire Inspector (minimum) so that all current inspectable properties are inspected in accordance with NFPA 1730 inspection standards.

Occupancy Risk Classification	Frequency
High	Annually
Moderate	Biennially*
Low	Triennially
Critical infrastructure	Per Authority Having Jurisdiction

*The RFD FMO includes Moderate Risk Occupancies on an annualized inspection frequency.

2. Expand Community Risk Reduction staff as needed so that code enforcement, inspection, permitting, and plans review staff matches the growth and demand of inspectable properties, permitting, and plans review.
3. Expand Community Risk Reduction staff by one Public Life-Safety Educator and develop a program that: establishes community wide fire-safe behavior across all age groups with a focus on the community's vulnerable population; promotes a greater understanding of what to do when and what not to do when faced with a fire situation either in your home, a vehicle, or at work; educates the community about fire and life safety and the prevention of fires and accidents, and that contributes to a safer and more informed community.

Strategic Initiative 4: Ensuring a Resilient Community

Fire and EMS Operational Resources

CPSM assesses as the city continues to add residential and commercial buildings, particularly those that are or have the potential to be multi-level, and/or clusters of buildings that are multi-level there is a future need for one additional ladder apparatus as a separate company (apparatus and staffing) to meet the service level and performance benchmarking established by the ISO-PPC and NFPA 1710 standards.

CPSM assesses the RFD should continue to deploy Quint apparatus at Station 2 and redeploy a Quint apparatus to Station 6 to enhance aerial ladder capabilities in the city's panhandle, where there are clusters of buildings over 35' in height.

CPSM assesses the RFD has available apparatus and staffing resources to deploy specialty technical rescue equipment and services through the development of Rescue Engine Companies from Engines 1 and 5.

Strategic Initiative 5 – Resource Optimization and Effective Deployment

Initiative Manager(s): As assigned.

Goal 5.1 Enhance Deployment and Expand Current Fire and EMS Capacity (Ladder Company, EMS Units, Rescue Engines)

Objectives

1. Expand RFD operational resource assets through the addition of one additional ladder apparatus as a separate company (apparatus and staffing) to meet the service level and performance benchmarking established by the ISO-PPC and NFPA 1710 standards.

The additional ladder company to be located in the Station 3 District (create one additional dual house with separate engine and ladder companies), as this district and the contiguous Station 5 district have the greater amount of building clusters that are 35' or more in height.

Procure and outfit a tractor drawn (Tiller) ladder apparatus and complete Station 3 upfitting to accommodate four additional staff and additional company operations. Minimum aerial device extension length: 100' or greater.

2. Continue to deploy Quint apparatus at Stations 2 and 6 to maintain aerial ladder capabilities in the Station 2 district and enhance aerial ladder capabilities in the city's panhandle (Station 6), where there are clusters of buildings over 35' in height.
3. Upgrade Engines 1 and 5 to Rescue Engines to enhance technical rescue, vehicle extrication assets and specialty response deliverables in the city.
- 3b. Through the normal engine replacement cycles, upgrade Engines 1 and 5 with engines designed specifically with rescue cab & chassis configurations and rescue bodies.

Strategic Initiative 4: Ensuring a Resilient Community

Fire and EMS Operational Resources

As 74-percent of the RFD workload is EMS, and 67 percent of all EMS calls require transport (19 transports per day which last on average 56 minutes per transport), as Station 1 and Station 4 have the highest workload for EMS (2,800+ and 2100+ MICU calls per year respectively), and based on current and future growth, the RFD should include in any strategic master planning, planning objectives that include the addition of one additional ambulance at Station 1.

Due to the potential growth and the aggregate demand and moderate resiliency of ambulances in the Station's 2, 3, and 5 districts, the RFD should further include in any planning objectives the addition of one additional ambulance at Station 5.

Strategic Initiative 5 – Resource Optimization and Effective Deployment
Initiative Manager(s): As assigned.
Goal 5.1 Enhance Deployment and Expand Current Fire and EMS Capacity (Ladder Company, EMS Units, Rescue Engines)
<p style="text-align: center;">Objectives</p> <p>4. Expand RFD MICU resources in the Station 1 and Station 4 districts through the addition of one additional ambulance at Station 1 to meet the current call volume (the two highest in the city) and planned future reinvestment area and residential entitlement growth in the Station 1 and 4 districts.</p> <p>5. Expand RFD MICU resources in the Station 2, 3, and 5 districts through the addition of one additional ambulance at Station 5 to meet the current call volume and planned future residential entitlement growth in the Stations 2, 3, and 5 districts.</p>

Strategic Initiative 4: Ensuring a Resilient Community

Mutual and Automatic Aid

CPSM assesses the mutual aid system the RFD is signatory to is robust in that it includes Dallas County fire departments and specialty teams.

CPSM further assesses the RFD should evaluate the feasibility of including the Dallas Fire Department as a response agency into Richardson in certain areas of the city.

Strategic Initiative 5 – Resource Optimization and Effective Deployment
Initiative Manager(s): As assigned.
Goal 5.2: Enhancing Automatic Aid
Objectives
<ol style="list-style-type: none"> 1. Maintain current automatic aid agreements with the Garland Fire Department and the Plano Fire Department. 2. Maintain current mutual aid agreements with the Garland Fire Department, Plano Fire Department, Murphy Fire Department, and Dallas County. 3. Expand Automatic Aid agreement with the City of Dallas to include reciprocal automatic aid from Dallas Fire Department into Richardson from Dallas stations 7, 13, 22, 29, and 56 to certain areas in RFD Station's 1, 2, 3, and 4 districts.

Strategic Initiative 5: Resource Optimization and Effective Deployment

Strategic Initiative 5 – Resource Optimization and Effective Deployment
Initiative Manager(s): As assigned.
Goal 5.3: Dispatch, Turnout, and Response Travel Times of System Resources
Objectives
<ol style="list-style-type: none"> 1. Work with the Richardson Police Department 911-Center to close the gap of call processing times (to the extent possible) to align closer to NFPA 1710 performance standards of 64-seconds at the 90th percentile for identified higher acuity calls (structure fires and high acuity technical fire related calls, and high acuity medical calls). 2. Adopt a performance benchmark for turnout time of ≤ 80 seconds for fire and special operations and ≤ 60 seconds for EMS responses at the 90th percentile, which aligns with NFPA 1710 performance standard. 3. Travel time is affected by demand and workload on each station, road network, and traffic congestion; therefore, the RFD should adopt a 5-minute (300 second) travel time benchmark measured at the 90th percentile as an RFD performance benchmark.

Strategic Initiative 5: Resource Optimization and Effective Deployment

Fire and EMS Operational Resources

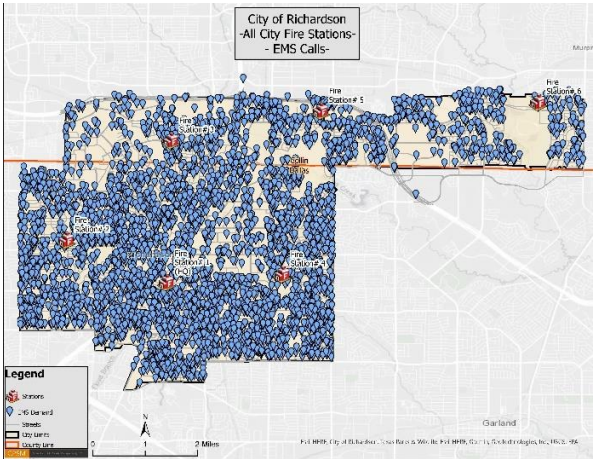
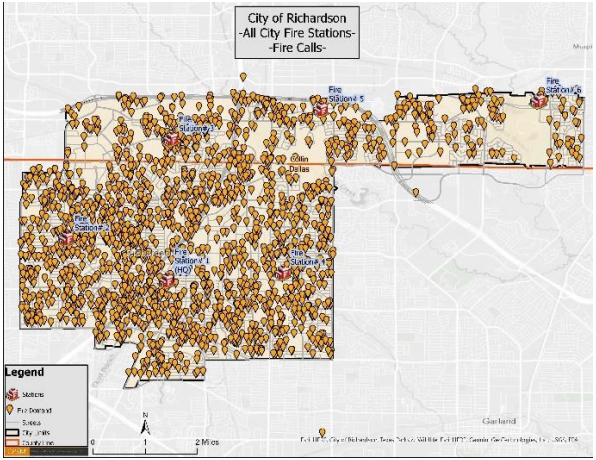
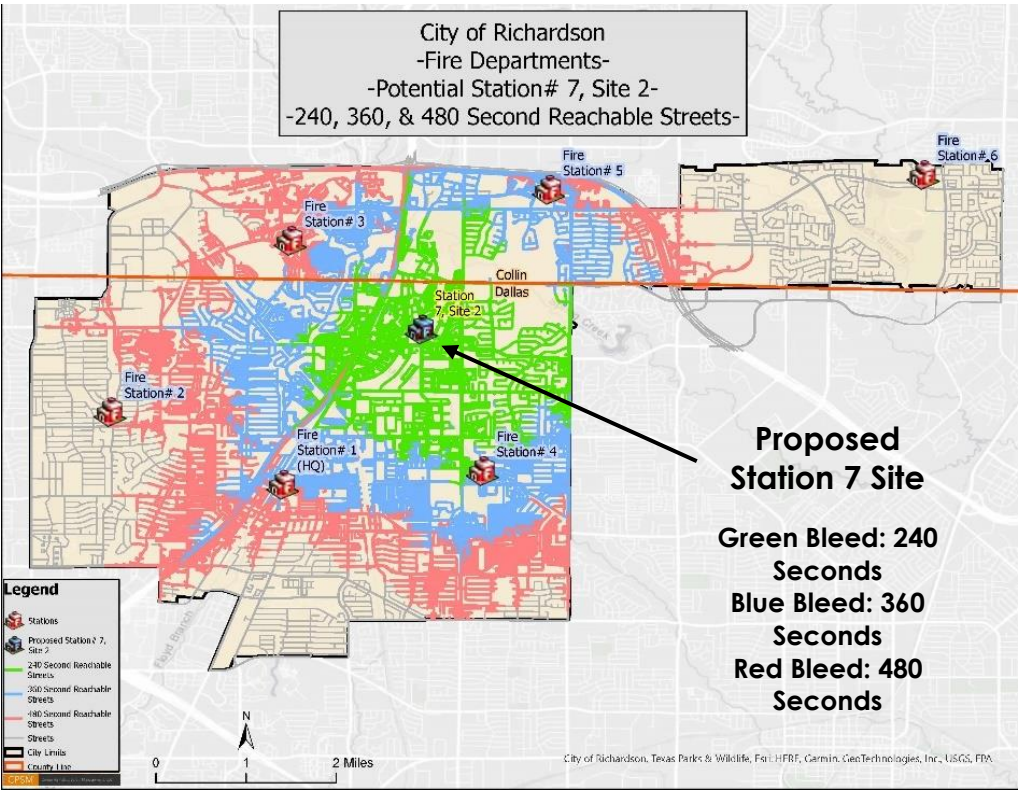
The RFD currently has identified the need to construct a new fire facility (Station 7).

Two potential locations provided to CPSM for analysis include locations in the northwest and north-central Richardson areas.

CPSM analyzed both sites and has determined the north-central location will provide the most beneficial new Fire and EMS service levels. CPSM assesses, based on operational response workload, response times, and community risk (current and planned) as discussed in the assessment, a new fire facility is needed in the north-central area of the city in the future.

CPSM makes this determination based on the several factors specific to this area, which includes: residential, mixed use, and office/industry land use; moderate demand (current); clusters of buildings over 35' in height (which includes residential); a mixture of target hazards; and response times gaps at the 240 second and 300 second travel time.

Fire and EMS Operational Resources



Strategic Initiative 5 – Resource Optimization and Effective Deployment

Initiative Manager(s): *As assigned.*

Goal 5.4: Expand to Seven Stations

Objectives

1. The RFD and the City should plan for a seventh station in the north-central area of the city that includes residential, mixed use, and office/industry land use, moderate demand (current), clusters of buildings over 35' in height (which includes residential), various target hazards, and response times gaps at the 240 second and 300 second travel time.
 - Continually monitor demand in the north areas of the Stations 1 and 4 districts and south area of the Station 5 district.
 - Continually monitor travel times to incidents in the north areas of the Stations 1 and 4 districts and south area of the Station 5 district.
 - Continually monitor resiliency of Station 1, Station 4, and Station 5.
 - Planning begins for Station 7 if demand and travel times to north-central Richardson deteriorate and Station 1, 4, and 5 resiliency deteriorate.
 - Station 7 construction begins, and the station is operational with an Engine and MICU (minimum).

Strategic Initiative 5: Resource Optimization and Effective Deployment

NEXT STEPS

- Review and consider Council comments
- Consider CPSM's recommended initiatives
- Update and include current strategic facility plan
- Update and include current apparatus and equipment replacement plan
- Prioritize all initiatives and present current day cost plus estimated escalation
- Coordinate with other Department Directors on timelines
- Present a ten-year Strategic Master Plan to Council

The title 'SOLID WASTE MASTER PLAN' is displayed in a large, bold, blue, sans-serif font. The text is centered and overlaid on a background of large, rectangular bales of compressed solid waste, including paper and plastic, under a clear blue sky. A large, semi-transparent white diamond shape is overlaid on the left side of the image, partially obscuring the waste bales.

SOLID WASTE MASTER PLAN

CITY OF RICHARDSON, TX

Presentation Overview

- ▶ SWMP Purpose
- ▶ Overall Planning Process
- ▶ Stakeholder Engagement Update
- ▶ Guiding Principles
- ▶ Key Financial Information
- ▶ Review of Key Service Deliveries
 - Survey Feedback
 - Industry Best Practices
 - Constraints of Current System
 - Preliminary Recommendations or Potential Options to be Evaluated
- ▶ Council Feedback & Next Steps

Purpose of Presentation

- ▶ This presentation aims to provide an update on the development of the SWMP and present the preliminary recommendations and potential options to be further evaluated in the SWMP Report.
- ▶ We request your confirmation of each of the preliminary recommendations, as well as your feedback on the potential options outlined during the presentation.
- ▶ Preliminary recommendations and options with financial implications will be considered in the evaluation of future rates.



SWMP PURPOSE

SWMP Purpose

The purpose of the SWMP is to:

- ▶ Evaluate and analyze the Solid Waste Division (Division)'s operations and financial health.
- ▶ Identify the critical short-term and long-term needs of the Division.
- ▶ Improve the efficiency of the services provided.
- ▶ Evaluate current systems and programs to identify potential strategies and options for key solid waste and resource recovery issues.
- ▶ Provide City staff with the necessary principled framework to guide its activities over a 20-year horizon, in order to improve the quality of life for Richardson's residents and businesses both now and in the future.



OVERALL PLANNING PROCESS

Overall Planning Process





STAKEHOLDER ENGAGEMENT UPDATE

Stakeholder Engagement Update

- ▶ Mayor and Council Interviews
 - April 23, April 24, and May 7, 2024
- ▶ Survey
 - August 12, 2024 – September 15, 2024
 - 4,969 responses
 - Single-family residents: 99% of responses
- ▶ Open House
 - October 8, 2024
 - 17 Participants





GUIDING PRINCIPLES

Guiding Principles

The guiding principles of the SWMP have been shaped by the goals of the City of Richardson Comprehensive Plan and City Council. In summary, the SWMP has been guided by the principles of:

- ▶ Maintaining community facilities
- ▶ Building and maintaining strong relationships
- ▶ Implementing smart technologies
- ▶ Encouraging clear communication with community members
- ▶ Supporting workforce supply and recruitment
- ▶ Implementing environmentally friendly and safe waste management practices
- ▶ Promoting financial transparency
- ▶ Meeting the needs of diverse and evolving population
- ▶ Prioritizing safety



KEY FINANCIAL INFORMATION

Personnel & Fleet Costs

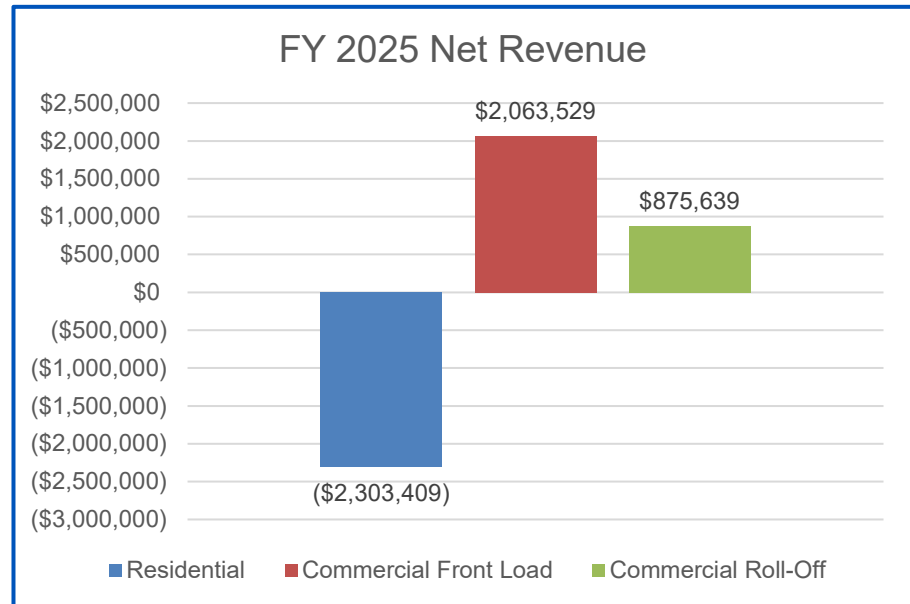
- ▶ Bagged collection system is personnel and vehicle heavy operation.
- ▶ Personnel and vehicle costs are \$8,570,278 per year
 - 49 percent of the total Solid Waste revenue requirement in FY 2024
- ▶ Personnel and vehicle costs have rapidly increased in recent years, largely due to inflation, and will continue to increase.



Net Revenue

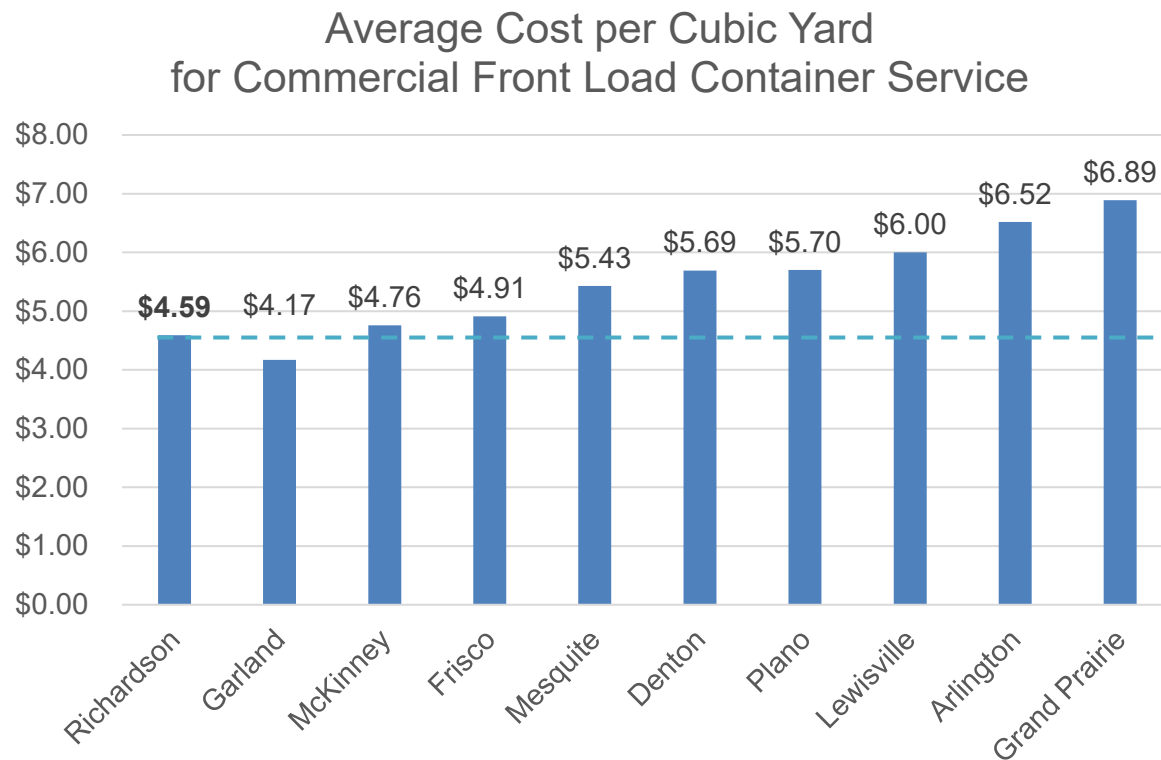
- ▶ The residential cost of service per household in FY 2025 is \$32.13 per month, however, the monthly rate paid by residential customers is \$25.09.
- ▶ The residential collection system, which includes trash, recycling, and BABIC services, is an expensive operation. However, revenue generated from the commercial sector offsets the cost of residential collection.

SWMP Guiding Principle:
“Providing clear and transparent financial reports on the costs and funding of solid waste management services helps maintain public trust and accountability”



Commercial Rate Benchmarking

The City's average costs per cubic yard for commercial front load container service is competitive, compared to other cities in the region.





REVIEW OF KEY SERVICE DELIVERIES

Review of Key Service Deliveries

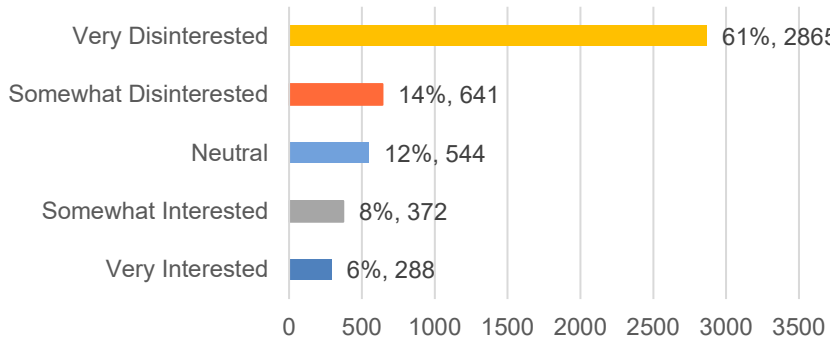
- ▶ Residential Trash & Recycling Collection
- ▶ BABIC
- ▶ Recycling Drop-Off Location
- ▶ Multifamily & Commercial Services
- ▶ Other Key Service Deliveries



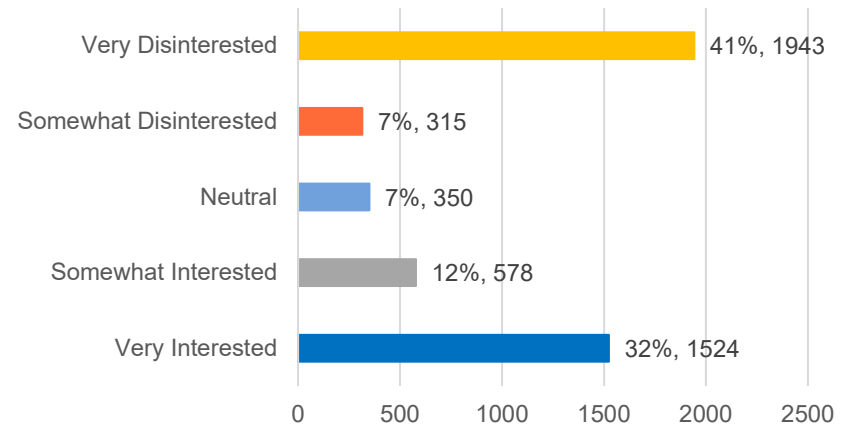
**RESIDENTIAL
TRASH & RECYCLING
COLLECTION**

Survey Results – Frequency & Carts

What is your level of interest in reducing the frequency of residential trash collection from twice per week to once per week?

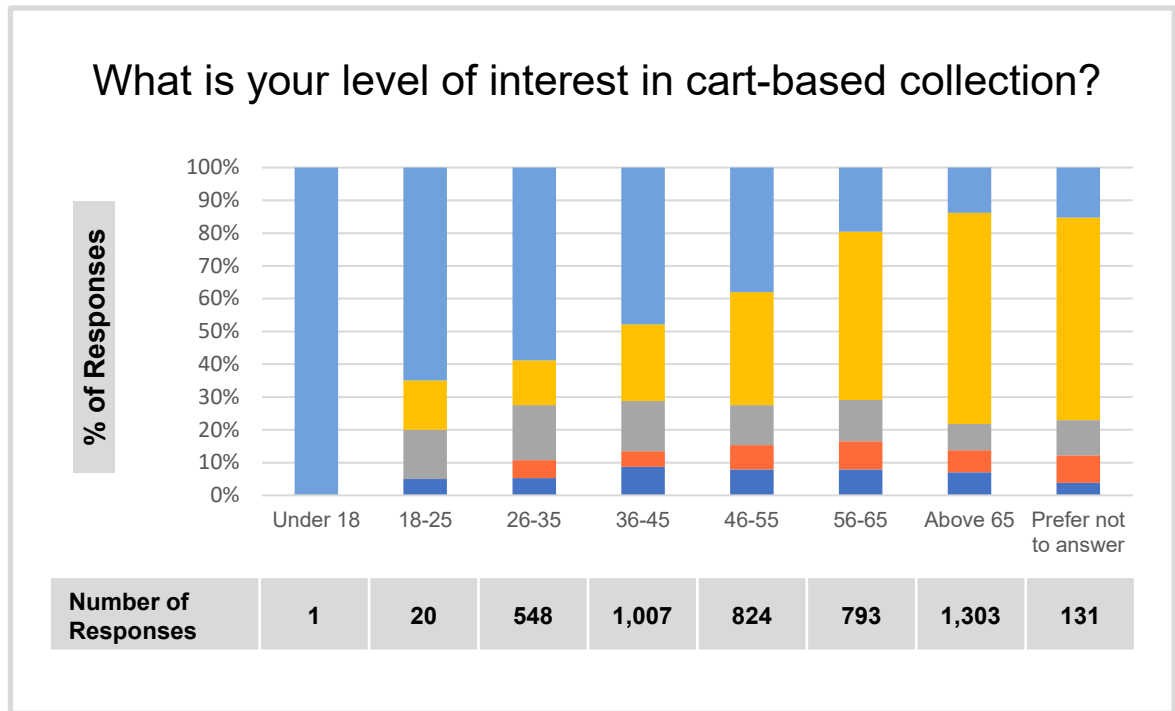


What is your level of interest in cart-based trash collection?



Key Takeaways: While residents indicated a disinterest in reducing the frequency of trash collection from twice per week to once per week, interest in cart-based collection was more balanced.

Survey Results – Interest in Carts & Age



Key Takeaways: While an equal number of responses was not collected per age group, respondents under the age of 45 were more likely to show interest in cart-based collection than those over the age of 45.

Residential Trash Collection: Current System vs Industry Best Practices

Metric	Current System	Industry Best Practice
Container Type	Bagged	Carts
Collection Frequency	Twice per week	Once per week
Staff per Vehicle	One Driver and Two Loaders per truck	One Driver per truck
Vehicles	Rear Load Truck	Automated Side-Load Truck
Collection Location	Alleys and Front Curb	Front curb
Average Workweek	Task Incentive	40-hour week
Worker Retention	Reliance on temporary labor	More FTEs than temporary workers

Residential Recycling Collection:

Current System vs Industry Best Practices

Metric	Current System	Industry Best Practice
Container Type	Bagged	Carts
Collection Frequency	Once per week	Once per week
Material Quantity	316 pounds per household annually	National Average: 440 pounds McKinney: 695 pounds Frisco: 917 pounds
Average Workweek	Overtime often utilized	40-hour week
Management	Shared supervisor with BABIC	Recycling-specific supervisor

What makes Richardson unique?

Residents expect a high level of service, while the City faces many constraints providing services within industry standards.

- ▶ Narrow alleys prevent the City from providing collection with automated side-load vehicles
- ▶ Narrow alleys may be unable to accommodate cart collections
 - Carts may be set in the drive path of the alley, making it impassable for collection trucks
 - Some properties have front drive access and do not have a gate on the back fence allowing for alley access
 - For those with back gates, back gate may not be wide enough to accommodate a cart
 - Cart collections would require a hybrid system where some would require alley collection while others would require street collection
 - Alley grade in some neighborhoods is not level with alley pavement



What makes Richardson unique?

- ▶ The City utilizes a task-incentive system
 - Collection crews compensated based on work completed, rather than hours worked
 - Leads to greater safety risks and inequities between collection crews
- ▶ The City relies upon temporary labor for collection

Average Daily and Weekly Working Hours

Service	Monday	Tuesday	Thursday	Friday	Weekly Total	Incentive Percentage
Trash	6.7	6.8	5.1	5.2	23.8	40.4%
Recycling	6.7	8.9	7.7	8.5	31.8	20.6%
BABIC	8.0	8.0	8.0	8.0	32.0	20.6%

Options to Evaluate

As a 20-year plan, options evaluated in the SWMP may be implemented in the short or long-term. City Residents' preferred service may change over time.

Enhanced Current System

- Evaluate route boundaries
- Modify the task-incentive system
- Replace temporary personnel with FTEs
- Dedicated recycling supervisor



Cart-Based Collection:

Both once/week & twice/week Trash,
Once/week Recycling

- Both trash and recycling carts
- Rear-load trucks equipped with tippers
- Maintain ratio of 3 workers per truck
- If twice/week collection, may not have cost savings



Cart-Based Collection

As part of the SWMP, the operations behind a cart-based collection system have been examined.

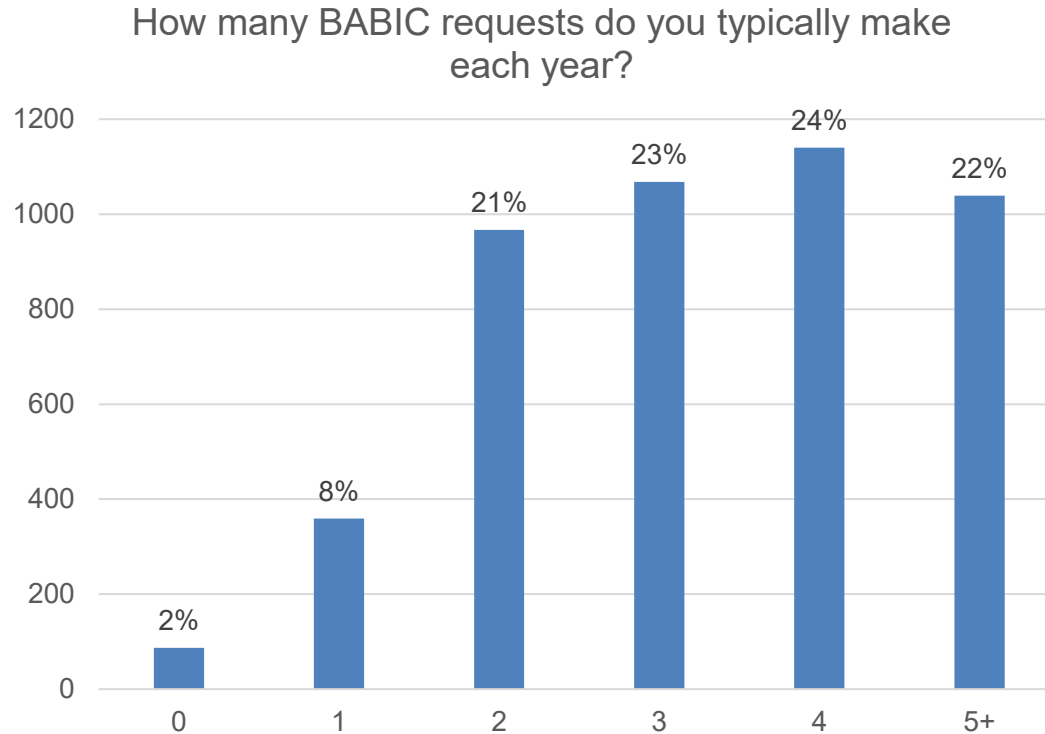
In many communities with cart-based collection:

- ▶ Each household is provided a 96-gallon cart
 - A 96-gallon cart fits about seven 13-gallon trash bags
- ▶ Using carts for recycling provides an opportunity to significantly increase recycling quantities
- ▶ City workers benefit from a reduction in heavy lifting and material exposure
- ▶ There are clearer distinctions between trash and recycling material
- ▶ Animals and pests are prevented from tearing open bags
- ▶ Excess waste that spills out of bags is contained in carts



BABIC

Survey Results



Key Takeaways: Three quarters of respondents reported making a BABIC request 4 or fewer times a year.

BABIC:

Current System vs Industry Best Practices

	Current System	Industry Best Practice
Program Type	Call-in program	Call-in program
Management	Shared supervisor with residential recycling	BABIC-specific supervisor
Set-Out Limits	Brush: 8 ft x 2 ft Bulky: No limits	Up to 10 CY per collection
Vehicles	Knuckleboom and supplementary trail truck	Knuckleboom and shuttle service
Workweek	Overtime often utilized	40-hour week
Avenues to Request Service	Website, phone-call, or MyRichardson app	Streamlined way to make request
Collection Frequency	Unlimited number of requests	Annual limit
Material Set Out	Material that could be collected as trash often set out for BABIC collection	Clearly defined material that cannot be set out for trash collection
Response Time	24-hours	1 to several weeks

What makes Richardson Unique?

The City's call-in BABIC program is provided at a high level of service, which puts strain on staff and equipment.

- ▶ One supervisor manages both BABIC and Residential Recycling services
- ▶ The City currently has no set-out limits for BABIC
- ▶ An unlimited number of BABIC requests can be made
- ▶ Overtime is often required to meet demand
 - Residential rear load vehicles are often used to support BABIC instead of residential recycling routes
 - Daily collection data evaluated shows peak demand ranges from 450 to 700 requests per day
 - The level of effort and collection efficiency per household can vary due to the lack of set-out limits
- ▶ Residents may be unsure about what warrants a BABIC request versus what can be set out for regular trash collection



Preliminary Recommendations

The City's BABIC program is beloved within the community and both residents and City Staff have indicated a strong lack of interest in making changes to the program. However, various enhancements are needed to continue the program's long-term viability and remain consistent with industry best practices.

Some potential enhancements to the program include:

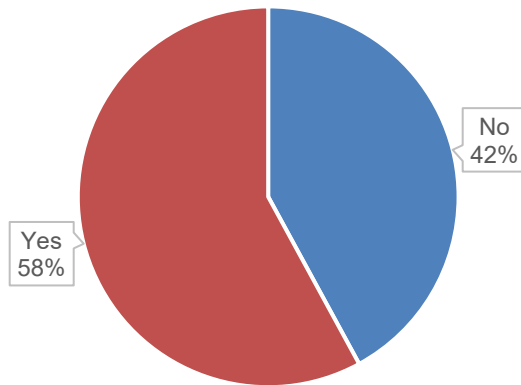
- Adding brush trucks to the fleet to provide shuttle service to the transfer station or landfill
- Appoint a BABIC-specific supervisor
- Increase the window of time between a request and collection
- Increased education and outreach on what material warrants a BABIC request
- Hire additional full-time employees



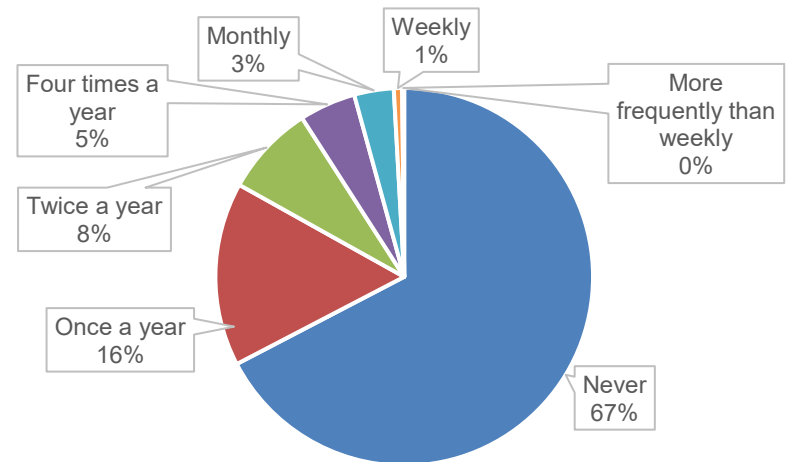
**RECYCLING
DROP-OFF LOCATION**

Survey Feedback

Prior to this survey, were you aware that you could drop-off recyclable material at the City's Recycling Drop-Off Location?



How often do you drop off recycling at the Recycling Drop-Off Location?



Key Takeaways: While the majority of respondents indicated that they were aware of the recycling drop-off location, 67 percent reported never dropping off recycling at the location.

Recycling Drop-Off Location: Current System vs Industry Best Practices

	Current System	Industry Best Practice
Security	No cameras or personnel	Multiple security cameras and personnel
Accessibility	Non-central location and no parking for users	More central location or multiple locations. Space for parking.
Number of Containers	Limited to 3 containers	Enough containers to prevent the overflow of material
Staff	No solid waste staff on site	Staff member to monitor site and support drop-off

What makes Richardson Unique?

The City's recycling drop-off location is at the Westside Pump Station. This facility was not designed to house recycling drop-off services.

- ▶ There are no security cameras to monitor drop off
- ▶ The location is unstaffed
- ▶ Space constraints limit the number of containers at the location to three
 - There is no parking for users of the recycling drop-off location



Options to Evaluate

In the short-term, the City should consider temporarily staffing the location to better understand who is using the location and what material is being dropped off.

In the long-term, the City should consider closing the recycling drop-off location and evaluating the following options:

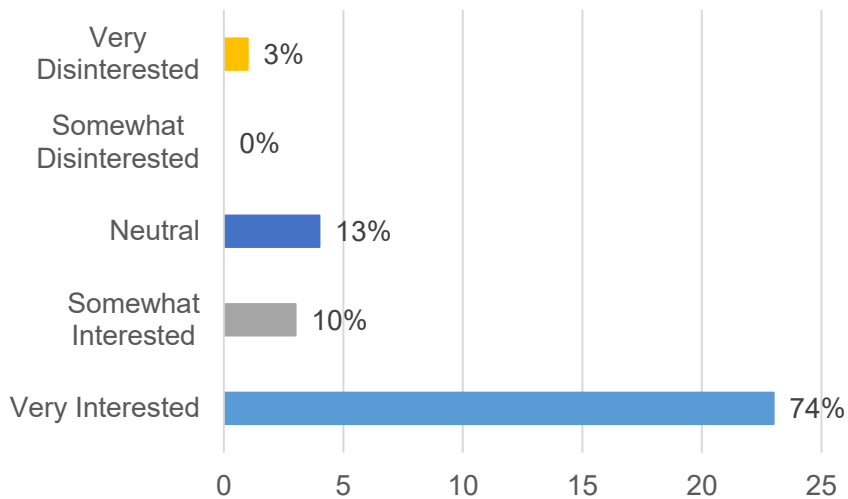
- ▶ Construct a new, centrally-located recycling drop-off location
- ▶ Construct multiple, smaller recycling drop-off locations throughout the City
- ▶ Permanently close the recycling drop-off location and increase residents' access to recycling through other means
 - Multifamily recycling services may decrease the need for a drop-off location



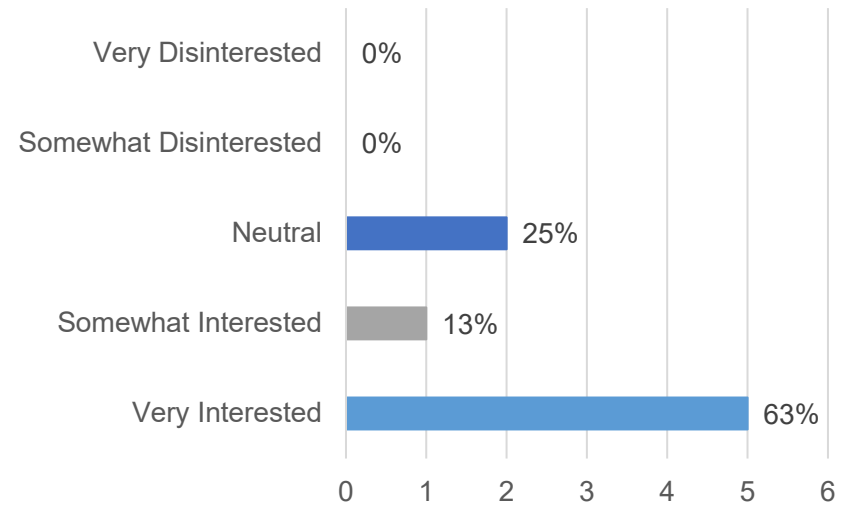
MULTIFAMILY & COMMERCIAL SERVICES

Survey Feedback

What is your level of interest in the City providing recycling collection services to apartment/condo complexes in the future?



What is your level of interest in the City providing recycling collection services to commercial businesses in the future?



Key Takeaways: While only 35 multifamily residents and 12 businesses or commercial entities responded to the survey, the majority of respondents indicated interest in multifamily or commercial recycling.

Multifamily & Commercial Trash Collection: Current System vs Industry Best Practices

	Current System	Industry Best Practice
Staffing & Routes	Frequent utilization of overtime required to complete weekly routes.	Route size and quantity fit the demand for services and require less than 50 percent of an FTE in overtime hours.
Recycling	City does not provide or require recycling	Provide recycling service to every multifamily residence and commercial business
Education & Outreach	No multifamily or commercial-specific campaign	Education and outreach for trash and recycling specific to multifamily and commercial
Billing	No businesses analyst role to manage billing	Financial personnel focused on commercial billing

What makes Richardson unique?

While commercial and multifamily collection is provided at a high level of service, staffing needs reduce efficiency and increase the workloads of current staff.

- ▶ Collection crews must often work overtime to complete their routes
 - No task incentive for workers if 2 hours of overtime required each day
 - Total of 1,233 hours of overtime, equal to 59 percent of an FTE
- ▶ Other responsibilities, such as servicing residential rent-a-bin containers, increase difficulty of completing routes

Daily Utilization of Overtime Hours per Route

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Weekly Total
FEL Hours	1.8	1.4	1.0	0.5	1.4	9.1	15.2
Roll-Off Hours	-0.2	0.2	0.5	0.1	0.1	N/A	0.7

Preliminary Recommendations

The City's commercial collection program is vital in maintaining the financial viability of its solid waste system. A high level of service with competitive pricing is currently offered, and it is important to not fall short of service expectations. Various enhancements to the program are needed for its long-term success.

Our preliminary recommendations include:

- ▶ “Right sizing” the number of routes, vehicles, and personnel
 - An additional full-time employee will likely reduce the amount of overtime needed
- ▶ Replace older fleet vehicles
- ▶ Update fleet maintenance software
- ▶ Establishing a commercial business analyst position
- ▶ Increasing multifamily and commercial-specific education and outreach

Extra capacity gained due to these enhancements could allow the City to provide multifamily and commercial recycling services in the long-term.

Multifamily & Commercial Recycling Options

If the City chooses to provide recycling for multifamily and commercial properties, there are multiple options to be evaluated:

- ▶ **City-Provided Service**
 - Increase number of FTEs and vehicles
- ▶ **Exclusive Franchise**
 - Franchisee would be the only acceptable service provider
- ▶ **Non-Exclusive Franchise**
 - Multiple franchisees would be authorized to provide services
- ▶ **Hauler Licensing**
 - Current system
 - Could enhance with additional requirements or guidelines
- ▶ **Generator Plan Ordinance**
 - Require commercial entities to develop recycling programs
 - Places burden of compliance on commercial businesses instead of haulers

Construction & Demolition (C&D) Debris Options

Construction and demolition (C&D) debris in the City is currently collected by a list of 18 permitted haulers. The City should consider evaluating the following options for C&D debris collection:

▶ Hauler Licensing

- Current System
- Continue program

▶ Exclusive Franchise

- Franchisee would be the only acceptable service provider

▶ Non-Exclusive Franchise

- Multiple franchisees would be authorized to provide services



OTHER KEY SERVICE DELIVERIES

Landfill & Transfer Station



121 Regional Disposal Landfill



Lookout Transfer Station

Preliminary Recommendations: The City should continue its long-standing partnership with NTMWD for material transfer and disposal.

Household Hazardous Waste



Dallas County HCCC

Preliminary Recommendations: The City should continue its long-standing partnership with Dallas for HHW disposal.

Recycling Processing



Plano Recycle Center

Preliminary Recommendations: The City's recycling processing contract with Republic Services expires in 2028, with two, 5-year renewals following expiration. Maintaining the relationship with Republic Services is beneficial for the City.

Organics Processing



Texas Pure Products Facility

Preliminary Recommendations: The City's current organics processing contract with Texas Pure Products expires in 2026. There are logistical benefits of maintaining the relationship, but the costs of continuing with Texas Pure Products should be evaluated before making a decision on organics processing.

Outreach and Compliance

- ▶ Code enforcement language may be difficult to understand.
- ▶ Additional education and outreach material related to both residential and commercial solid waste services are needed.
- ▶ The existing Environmental Outreach Coordinator position, whose role is focusing on solid waste education and outreach, is currently unfilled.

Preliminary Recommendations:

- ▶ The City should consider hiring an Environmental Outreach Coordinator to enhance coordination between Solid Waste, Communications, and Code Enforcement.
- ▶ Explicit interpretations of code and corresponding methods of enforcement should be determined.



**COUNCIL FEEDBACK
& NEXT STEPS**

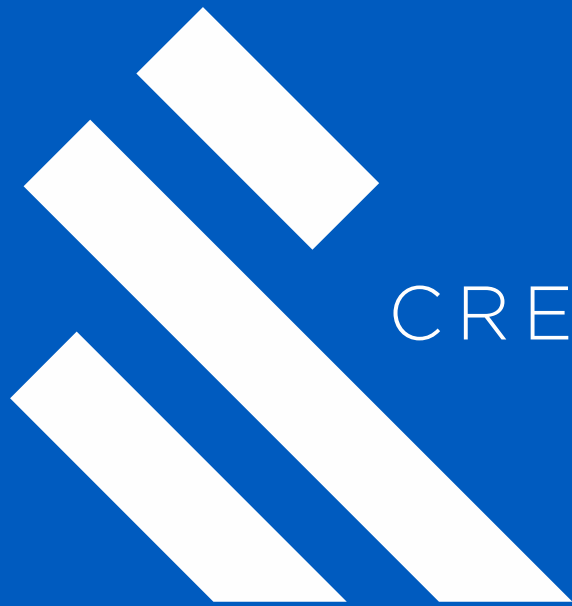
Council Feedback

We request your confirmation of the preliminary recommendations, as well as your feedback on the potential options outlined during the presentation.

Preliminary Recommendations	Options to Evaluate
Enhance current BABIC program	Residential Trash & Recycling
Enhance current Multifamily & Commercial services	Recycling Drop-Off Location
Maintain relationships with NTMWD and Dallas County	Multifamily & Commercial Recycling
Prepare for expiration of recycling and organics processing contracts	C&D Debris Collection

Next Steps

- ▶ The feedback gained during this presentation will allow Burns & McDonnell to:
 - Evaluate Potential Options
 - Develop 20-year Implementation Plan and Funding Plan
- ▶ Following these analyses, Burns & McDonnell will present their findings to Council



CREATE AMAZING.