

То:	Community Safety Committee	Date:	January 19, 2024
From:	Jim Wishlove Fire Chief	File	09-5140-01/2024-Vol 01
Re:	Richmond Fire-Rescue Monthly Activity Report - Review	- Decem	ber 2023 and Year in

Staff Recommendation

That the staff report titled "Richmond Fire-Rescue Monthly Activity Report – December 2023 and Year In Review", dated January 11, 2024, from the Fire Chief, be received for information.

Jim Wishlove Fire Chief (604-303-2715)

Att. 1

REPORT CONCURRENCE				
CONCURRENCE OF GENERAL MANAGER				
SENIOR STAFF REPORT REVIEW	INITIALS:			
APPROVED BY CAO				
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Staff Report

Origin

This report supports Council's Strategic Plan 2022-2026 Focus Area #3, A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

Analysis

Emergency Programs

During the month of December staff contributed to the regional Hazard Risk Assessment being conducted in support of safety and security planning efforts for the upcoming FIFA World Cup 2026. As part of the risk assessment, staff facilitated engagement with numerous departments including: RCMP, Water, Roads, Transportation and Business Development to ensure the assessment was comprehensive and accurate.

In support of regional partners, staff participated in a training program to certify several external staff as instructors in the Incident Command System at the 300 level, enabling them to deliver training throughout their organizations. This training capacity will elevate the response capability of the region and improve interoperability between Richmond staff and those within Metro Vancouver.

2023 Highlights

During 2023, staff responded to and supported several significant weather-related events including planning, managing and working with internal City departments to support the community and City staff. Staff supported other City business units, including safety and security planning for large community events. Staff, with grant funding from the Canadian Red Cross, developed an outreach program targeting newcomers to Canada and the City, and to seniors in order to enhance their community resilience and hazard awareness through education and awareness activities. Staff are exploring ways to further develop this program and continue to enhance community resilience through public education.

In the spring of 2023 Staff reviewed the Emergency Support Services (ESS) delivery processes and standards. Staff determined that a two-hour benchmark from notification of the Emergency Programs Duty Officer to service delivery in the form of accommodation provision is achievable. To support this, a new communication process was established following a consultation and trial period with Richmond Fire-Rescue staff. Since the implementation of this new SOP and related process management, staff have been successful in achieving the two hour timeline for service delivery.

Public Outreach & Education

In December 2023, staff facilitated the annual "Lighting of the Fire Hall" at the Hamilton Fire Hall event with approximately 200 local community attendees. Staff also continued with educational social media videos and posts throughout December.

2023 Highlights

During 2023, RFR successfully recruited selected, trained and deployed 13 firefighters by quarter three. These firefighters were replacement firefighters as a result of typical attrition and are actively serving in the emergency response teams.

By taking proactive measures to self-educate and embrace new or enhanced technologies and social media platforms, RFR staff significantly increased their reach, 2-way communication and fire safety education in 2023 through Facebook, Social Media, the RFR website and various online forms that service our community needs. These changes have increased public interaction, customer service and accessibility for the community. Additionally, RFR incorporated Google language translation tools on their website and associated online forms to better serve the multicultural community.

In April 2023, RFR decommissioned a front line vehicle from active emergency response and the RFR Community Relations Branch identified an opportunity to repurpose the vehicle for education, training and large community events. The vehicle has successfully mitigated crew overtime for these events and also avoided having an active response vehicle being called away during a public event. This proactive measure has also kept the RFR emergency response resources in active duty and resulted in community outreach attending at least 98 events with the repurposed vehicle:

- 32 events for classes that completed the online fire safety education, including: Calling 911, Smoke Alarms and Carbon Monoxide Detectors, Escape Plans, Turnout Gear Demonstration and Kitchen Safety. (Note: These will increase annually as the additional two programs launch.)
- 32 Public and Community Events
- 34 Education visits (adult, special interest groups)

Internal Staff Training

In December 2023, staff organized in-house training events including: Technical High Angle Rope Rescue and Frontline Fire Service Leadership Levels I and II.

Emergency Response

One of the City's emergency response goals is to arrive on-scene, in time and with enough resources to contain a fire to the room of origin. The room of origin standard is especially important in terms of preventing further fire loss and damage, which can be reduced when a fire is contained to the room of origin. Meeting this standard also assists in mitigating loss of life, reduction of property damage and protection of the environment.

Table 1: Total Incidents - December 2023							
	Incident Totals December (2023)	Incident Totals December (2022)	Number Change from December 2022 to 2023	Percentage Change from December 2022 to 2023	5 Year Average for December		
Alarm Active - No Fire	167	306	-139	-45	191		
Explosion	0	1	-1	-100	0		
Fire	37	33	+4	+12	30		
Hazardous Materials	9	12	-3	-25	10		
Medical	585	605	-20	-3	473		
Motor Vehicle Incident	97	92	+5	+5	88		
Public Hazard	8	5	+3	+60	9		
Public Service	117	124	-7	-6	96		
Response Cancelled/Unfounded	77	54	+23	+43	57		
Specialized Transport	3	4	- 1	-25	3		
Technical Rescue	1	0	+1	+100	0		
Total	1,101	1,236	-135	-11	957		

In December 2023, there were 1,101 reported incidents of all types, representing an overall decrease of 11 per cent in incidents between December 2022 and December 2023 (Table 1).

The average time on scene in December 2023 for emergency response crews was 31 minutes, which is lower than the number recorded in December 2022: 37 minutes. The time spent on scene can vary due to the nature and severity of each incident.

In December 2023, there were 37 fire incidents reported to the Office of the Fire Commissioner, representing a 12 percent increase from December 2022. The average number of fires reported each December over the last five years is 30.

Fire damage and property losses during December 2023 are estimated at \$355,370. This total includes \$206,240 for building/asset loss and \$149,130 for content loss. The total building/asset and content value at risk is estimated to be \$431,180,985 and the total value preserved from damage was \$430,825,615. These numbers translate to 99 per cent of value protected (Table 3), which is the same as the value observed in 2022: 99 per cent.

2023 Highlights

In 2023, RFR adjusted its fire inspection approach based on risk probability scores, targeting buildings with high risk scores of 8, 9 and 10. RFR's Fire Risk Prediction Modeling used fire incident, inspection and property data to predict structure fire and inspection risks in the City. This focused strategy covered 86% of inspectable buildings most likely to have a fire.

RFR found that in 2022, 59% of all fire incidents occurred in properties with a model Risk Score of 10. In response, RFR resources were concentrated on mitigating risks in the highest-risk properties in 2023. Through inspections and evaluations, RFR successfully lowered the assessed risk level of 24% of the properties inspected. These efficiencies aim to reduce insurance costs for both commercial and residential properties while optimizing the use of Fire Prevention Branch resources for increased effectiveness.

RFR observed the significant increase in wildland fires that occurred throughout the Province in 2023. In a strategic approach and with Council's endorsement, RFR has applied for grant funding from the Province for Community Wildfire Resiliency Investment Program in an effort to evaluate and reduce risk to wildfires within our City. Regular progress will be provided on this initiative as it moves forward.

Table 2: Fire Incidents By Type and Loss Estimates - December 2023								
Incident Type Breakdown	Incident Volume	Estimated Building/ Asset Value (\$)	Estimated Building/ Asset Loss (\$)	Estimated Content Value (\$)	Estimated Content Loss (\$)	Estimated Total Value Preserved (\$)		
Residential: Single family	1	700,000	-	30	30	700,000		
Residential: Multi family	4	95,589,900	145,500	27,226,290	133,700	122,536,990		
Commercial/Industrial	7	304,332,700	500	3,023,990	400	307,355,790		
Outdoor	19	300	-	51,275	5,000	46,575		
Vehicle/Vessel	6	246,500	60,240	10,000	10,000	186,260		
Totals*	37	400,869,400	206,240	30,311,585	149,130	430,825,615		

* The dollar losses shown in this table are preliminary estimates. They are derived from RFR's record management system and are subject to change due to delays in reporting and confirmation of actual losses from private insurance agencies (as available).

Significant Events

Emergency response crews minimized harm, limited damage and stopped fire spread from the place of origin and performed life-saving interventions in these notable December 2023 incidents:

• December 15, 2023 – Structure Fire on Granville Avenue. RFR emergency crews responded to Granville Avenue for an alarms ringing incident. Upon investigation, crews found a hallway filled with smoke and fire coming out of one unit. Crews quickly extinguished the fire and shut off power at the unit's electrical breaker. The water valve for the unit was also shut off. Once the fire was extinguished, crews began protocols for clearing smoke from the unit and hallways. The fire was contained to the unit, with no extension to the surrounding structure. The individual unit was declared uninhabitable and an occupant was transported to Richmond General Hospital by onsite BC Emergency Health Services for assessment. All adjacent units were declared clear and habitable and the building residents were allowed back to their suites. The building was placed on a fire watch protocol and the Property Manager was on site along with a restoration company to commence cleaning the corridors. There were no additional injuries reported to public or RFR personnel. A Fire Investigator attended.

- December 19, 2023 Structure Fire on No. 3 Road. RFR Emergency crews responded to reports of alarms ringing on No. 3 Road. On arrival crews noticed a large volume of smoke coming from the east side of the building. Crews assisted with the safe evacuation of all residents. Upon investigation it was discovered that a garbage dumpster was on fire inside the entrance to the parkade. The fire was extinguished by RFR crews and contained to the area. The sprinkler system was isolated for that section of the parkade and the building was placed on a fire watch protocol until the sprinkler head could be replaced and alarm system reset. No injuries were reported to public or RFR personnel. A Fire Investigator attended.
- December 21, 2023 Motor Vehicle Incident on Highway 99. RFR emergency crews responded to a motor vehicle incident (MVI) of a transit bus and a car, located on the off-ramp from Highway 99 northbound to Steveston Highway. A vehicle had travelled the wrong direction down the off-ramp and had collided head on with the transit bus. All occupants reported no injuries. BC Emergency Health Crews responded to provide patient care. RCMP attended and a transit supervisor also attended the scene.
- December 26, 2023 Medical Incident on Grant McConachie Way. RFR emergency crews responded to a report of a person struck by a train on Grant McConachie Way. The person, who had been on the tracks, was alive with only minor injuries. Crews removed the person from the tracks and patient care was provided by BC Emergency Heath Services. The patient was then taken into custody by the RCMP. In this incident all first responder agencies collaborated carefully and respectfully to resolve this difficult situation.

Financial Impact

None.

Conclusion

Throughout 2023, the City continued to experience normalized levels of service for medical event types. This includes regular and incremental increases to incident volumes that are a return to the normal experience in the years prior to the COVID-19 pandemic.

During 2023, a driver of the change in volumes for incidents was significant weather-related events. RFR crews worked with internal City partners during recent heat, flooding and atmospheric river events during 2023.

Richmond Fire-Rescue continues to monitor activities to identify and create public outreach programs to respond to emerging trends and to regularly promote effective prevention behaviours.

Jim Wishlove Fire Chief (604-303-2715)

Att. 1: Emergency Response Activity for December 2023 and Year in Review.

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Incident Volumes

The following chart provides a month-to-month comparison regarding incidents occurring in December 2022 and 2023. In December 2023, there were 1,101 total incidents, compared to 1,236 in December 2022. This represents an overall decrease of 11 per cent between last year and 2023.





Incident Type Legend:

HazMat: includes fuel or vapour; spills, leaks, or containment

Medical includes: cardiac arrest, emergency response, home or industrial accidents

Public Hazard includes: aircraft emergency, object removal, or power lines down

Public Service includes: assisting public, ambulance or police, locked in/out, special events, trapped in elevator, water removal

First Responder Totals

Medical first responder incidents comprised 53 per cent of the total emergency responses for RFR during the month of December 2023. A detailed breakdown of the medical incidents for December 2022 and 2023 is set out in the following table by sub-type. There were 585 medical incidents in December 2023 compared to 605 in December 2022, a decrease of 3 per cent.



Table 4a: December 2022 & December 2023 Medical Calls by Type





Table 4c: Overdose / Poisoning Incidents By Type – December 2023						
		By Location				
	Ву Туре	Outdoors	Commercial Property	Residence		
Opioids	6	3	2	1		
Other Miscellaneous Drugs	9	2	2	5		
Alcohol	3	1	1	1		
Unknown (No patient contact / BC Emergency Health Services staff on scene)	9	8	1	-		
Totals	27	14	6	7		

The following chart provides the overdose/poisoning incident volume breakdown for December 2023.

Fire Investigations

The fire investigation statistics for December 2023 are listed below:

Table 5: Total Fire Investigation Statistics – December 2023							
	Suspicious	Accidental	Undetermined				
Residential - Single-family Residential - Multi-family	-1	1 3	-				
Commercial/Industrial	2	3	2				
Outdoor	7	9	3				
Vehicle	-	6	-				
Totals	10	22	5				

Richmond Fire-Rescue investigators report all suspicious fires to the RCMP, while working alongside RCMP staff to address potential risks to the community and coordinate appropriate fire investigations.

Hazardous Materials

Table 6: Hazardous Materials Incidents By Type – December 2023					
Details					
Gasses (Natural / Propane)	8				
Unclassified	1				
Totals	9				

The following charts provide total incident volumes for fires and medical incidents on a year-to-year comparison in December from 2014 to 2023.



Table 7a: Total Fire Calls for Service in December from 2014 to 2023

Table 7b: Total Medical Calls for Service in December from 2014 to 2023



Year in Review

2023 Highlights

During 2023, staff responded to and supported several significant weather-related events including planning, managing and working with internal City departments to support the community and City staff during the summer heat dome and other heat-related, poor air quality and flooding events. By supporting these events and participating fully during deployments, staff brought their knowledge, skills, experience and support capacity to the various agencies who were managing events at the time.

In 2023, the RFR Community Relations Branch introduced a self-service, virtual booking platform for Mobile Outdoor Food Service Unit (MOFSU) inspections. This platform enabled food truck vendors to schedule inspections directly, facilitating coordinated traffic flow and preventing simultaneous arrivals. RFR showcased its commitment to Innovation, Team and Excellence through collaboration with the Greater Vancouver Fire Chief's Association for the annual MOFSU Inspection Event. This initiative provided complimentary fire and life safety inspections for Food Truck vendors, fostering efficient cooperation among municipalities and reducing duplication of resources. By centralizing inspections, the event supported business vendors in streamlining processes and avoiding duplicate inspections across the Lower Mainland. The public safety event, conducted at no cost to food truck operators, distributed operational costs among 17 municipalities.

Staff are able to focus on providing first class training and interactive educational opportunities to the community without interruption. Previously community and educational events could have been impacted by having the attending truck recalled back to emergency operations and community service. In previous years, this had impacted community events 50% of the time either requiring RFR to cancel the event or return for a second visit with a fire truck causing disappointment and reputational risk for the City. Having this dedicated re-purposed vehicle has added a positive benefit to the City, community events, and the public education portfolio.

Freedom of Information Requests

In 2023, Richmond Fire-Rescue received 72 Freedom of Information requests. This is a reduction in the number of requests received in 2022.

Table 8: Freedom of Information Requests for 2022 & 2023					
2022	2023				
83	72				

Incident Year to Year Comparisons

The following charts provide incident types totals on a year over year comparison for 2022 and 2023 and the total incident volumes on a month to month comparison occurring from 2020 to 2023, showing the impact of the pandemic on call volumes during 2020 and 2021. In 2023, there continues to be a return back to pre-pandemic levels of service for medical event types and ultimately higher responses to medical calls.

Table 9a: Incident Types - Year Over Year Comparison (2022-2023)							
	Incident Type Totals (2023)	Incident Type Totals (2022)	Number Change From (2022 to 2023)	Percentage Change from (2022 to 2023)	5 Year Averages		
Alarm Active - No Fire	1,965	2,018	-53	-3	1,758		
Explosion	5	6	-1	-17	3		
Fire	545	460	+85	+18	474		
Hazardous Materials	84	88	-4	-5	96		
Medical	6,523	5,871	+652	+11	4,707		
Motor Vehicle Incident	980	930	+50	+5	924		
Public Hazard	101	112	-11	-10	120		
Public Service	1,087	1,131	-44	-4	963		
Response Cancelled/Unfounded	934	678	+256	+38	717		
Specialized Transport	34	24	+10	+42	30		
Technical Rescue	4	5	-1	-20	4		
Total	12,262	11,323	+939	+8	9,797		

Table 9b: Total Incident Calls Volumes by Month from 2020 to 2023



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The following charts provides the fire and medical incident volume comparisons per month in 2023.



Table 9c: Total Fire Calls for Service by Month in 2023

Table 9d: Total Medical Calls for Service by Month in 2023





Figure 1: Location of reportable fire incidents attended in December 2023 (total 37)

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Figure 2: Location of reportable medical incidents attended in December 2023 (total 585)



Figure 3: Location of reportable motor vehicle incidents (MVIs) attended in December 2023 (total 97)

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Figure 4: Location of reportable overdose / poisoning incidents attended in December 2023 (Total 27)

Figure 5: Location of reportable fire incidents attended in 2023 (total 545)



Figure 6: Location of reportable medical incidents attended in 2023 (total 6,523)



Figure 7: Location of reportable motor vehicle incidents (MVIs) attended in 2023 (total 980)



Figure 8: Location of reportable overdose / poisoning incidents attended in 2023 (total 303)

