



To: Community Safety Committee

Date: October 12, 2021

From: Tim Wilkinson
Fire Chief

File: 99-Fire Rescue/2021-
Vol 01

Re: Richmond Fire-Rescue Monthly Activity Report – September 2021

Staff Recommendation

That the staff report titled “Richmond Fire-Rescue Monthly Activity Report – September 2021”, dated October 12, 2021, from the Fire Chief, be received for information.

Tim Wilkinson
Fire Chief
(604-303-2701)

Att. 1

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

Staff Report

Origin

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

Analysis

Emergency Programs

Notable items from Emergency Programs (EP) for September 2021 are as follows:

- Staff supported the Pembina Pipeline Corporation in their emergency response training by participating in an exercise on September 17, 2021. Staff acted as exercise observers, providing consultation and recommendations as required. Staff will be submitting an after-action review of the exercise along with a list of recommendations.
- Staff continue to collaborate with the Canadian Red Cross (CRC) on the national inclusive resiliency three-year project. During September, staff presented to the Richmond Intercultural Advisory Committee (RIAC) and shared the project and opportunities with the attending group. Richmond is one of five communities participating across the country with the CRC on this project.

Training and Public Education

During September 2021, Fire Training staff facilitated the onboarding and training for the 29 new recruits who have joined the City. This completes the hiring of the final 12 new fire fighters approved by Council as part of the Safe Community Program as well as replace fire fighters who have retired from 2019-2021 during the temporary COVID hiring freeze. Other training activities included Fire Rescue and a Leadership Course for Pool Officers.

During September 2021, public education events remained on hold. Fire staff continued to create and post educational videos on the RFR Facebook and website pages.

Emergency Response

Richmond Fire-Rescue staff continue to support incidences emanating from Health Orders issued by the Province to combat the COVID-19 pandemic as well as provide regular services to the community.

Richmond Fire-Rescue's goal is to respond to incidents in a manner where loss of life, reduction of property damage and protection of the environment is mitigated. In September 2021, there were a total of 860 incidents, representing a 55 per cent increase in incidences from September 2020 (Attachment 1).

Richmond Fire-Rescue is experiencing increases in medical responses due to the changes of the Provincial Health Orders and Medical Health Officer's direction. The increase in September 2021 is a result of the gradual return to normal levels of service of medical event types and responses to medical calls for hot weather responses. RFR continues to monitor all activities to identify and create programs to respond to emerging trends.

The average time on scene for RFR crews was 33 minutes, which was higher than the 30 minutes recorded in 2020. Time on scene can vary due to the nature and severity of each incident.

	Totals (2021)	Percentage Change from September 2020	Number Change from September 2020	5 Year Average for September
Alarm Active No Fire	129	+8	+10	129
Explosion	0	-	-1	0
Fire	34	-26	-12	38
Haz-Mat	3	-6	-5	6
Medical	446	+134	+255	353
MVI	86	+43	+26	96
Public Hazard	11	+120	+6	10
Public Service	95	+25	+19	68
Response Cancelled/Unfounded	51	+4	+2	82
Specialized Transport	4	+300	+3	3
Tech Rescue	1	-	+1	0
Totals	860	+55	+304	787

In September 2021, there were 34 reportable fires to the Office of the Fire Commissioner, representing a 26 per cent decrease from September 2020. The average figure for fires reported in September over the last five years is 38.

Richmond Fire-Rescue's emergency fire response goal is to contain the fire to the room of origin. The room of origin standard is especially important in terms of fire loss, which increases significantly once the fire leaves the room of origin.

Fire damage and property losses during September 2021 are estimated at \$217,100. This total includes \$196,600 for building/asset loss and \$20,500 for content loss. The total building/asset and content value at risk was estimated to be \$165,587,627 and the total value preserved from damage was \$165,370,527. These numbers translate to 99 per cent of value protected (Table 2); this is higher than the value observed in 2020.

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	2	882,000	36,000	15,000	500	860,500
Multi family	5	118,090,627	90,000	47,000	10,000	118,037,627
Commercial/Industrial	4	23,116,000	36,100	23,290,000	-	46,369,900
Outdoor	15	-	-	-	-	-
Vehicle/Vessel	8	137,000	34,500	10,000	10,000	102,500
Totals*	34	142,225,627	196,600	23,362,000	20,500	165,370,527

* 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

Fire crews minimized harm and limited fires to the place of origin in these notable September 2021 incidents:

- **September 1, 2021 – Vehicle fire on Smith Drive.** Multiple crews responded to reports of large volumes of smoke in a residential area. On arrival, crews traced the smoke to a car on fire. Crews proceeded to extinguish the fire and complete an overhaul of the area. This was a suspicious fire and a Fire Investigator was called to attend the scene. There was no damage to any other structures in the area and no injuries to residents or staff were reported.
- **September 3, 2021 – Vehicle fire on Cambie Road.** Crews responded to reports of a car that had driven into a house. On arrival, crews found a car in the house, which was in flames. Crew's rapid response to the extinguishment of the fire and their deployment of hand lines mitigated the spread of the fire, ensuring minimal damage to the house. The car was completely burned up. The driver of the vehicle required medical attention and was provided assistance until BC Emergency Health Services crews arrived on scene. A Fire Investigator attended the scene. There were no reports of other injuries to residents or RFR personnel.
- **September 5, 2021 – Commercial fire on Alexandra Road.** On arrival crews found that there had been a fire in the kitchen of a restaurant and a sprinkler activation had extinguished the fire. Crews proceeded to shut down the sprinkler system to stop further water damage to the restaurant. A Fire Investigator and the Health Department attended the scene. There were no injuries reported.

- **September 9, 2021 – Residential fire on Airey Drive.** RFR crews responded to a fire in an apartment. Arriving crews identified a pot on the stove creating a large amount of smoke and some fire. All of the residents and their pets had been evacuated. Crews quickly extinguished the fire, which contained the fire to the point of origin. Crews assessed the damage and ventilated the apartment. One resident was unable to return to their property and were provided Emergency Social Services assistance. There were no injuries reported. A Fire Investigator attended the scene.
- **September 27, 2021 – Commercial fire on No. 3 Road.** RFR crews responded to reports of an electrical fire in a mall. On arrival crews located the fire in a light fixture. Crews remained on scene to assess the light fixture. There were no injuries reported to the public or RFR personnel. A Fire Investigator attended the scene.
- **September 27, 2021 – Residential fire on 7th Avenue.** RFR crews responded to a townhouse fire. Crews quickly attacked and extinguished the fire, which was limited the kitchen and entry vestibule. The occupants had exited the residence and were not injured. Emergency Support Services were deployed to provide assistance. No other injuries reported to residents or firefighters. A Fire Investigator attended the scene.

Financial Impact

None.

Conclusion

During September 2021, Richmond Fire-Rescue crews continued to experience increases to incident volumes that are a return to volumes experienced in years prior to the COVID-19 pandemic. RFR staff remain ready to react and adapt to the ever changing pandemic situation.



Tim Wilkinson
Fire Chief
(604-303-2701)

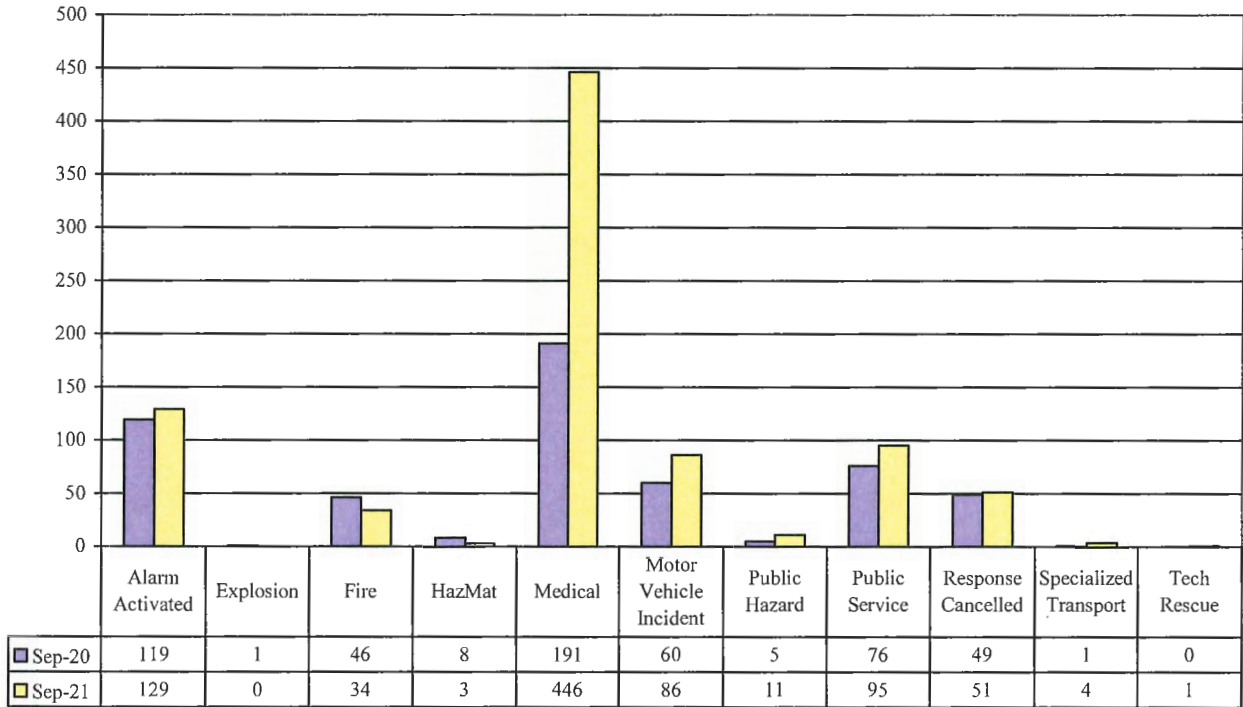
TW:js

Att. 1: Suppression Activity, including location of September's Fire, Medical and MVIs

Incident Volumes

The following chart provides a month to month comparison regarding incidents occurring in September 2021 and 2020. In September 2021, there were a total of 860 incidents, compared to 556 in September 2020. This represents an increase of 55 per cent.

Table 3: September 2020 & September 2021



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, bomb removal standby, 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 52 per cent of the total emergency responses for RFR during the month of September 2021. A detailed breakdown of the medical incidents for September 2020 and 2021 is set out in the following table by sub-type. There were a total of 446 medical incidents in September 2021 compared to 191 in September 2020, an increase of 134 per cent. RFR continue to see incident numbers returning to normal levels due to gradual changes in the Provincial Medical Health Officer orders in response to the pandemic.

Table 4a: September 2020 & September 2021 Medical Calls by Type

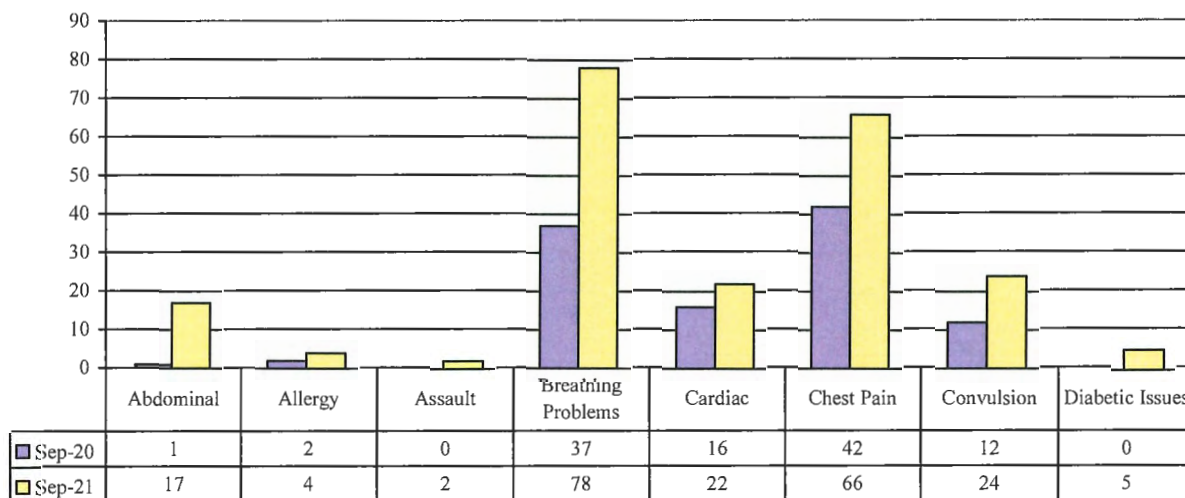
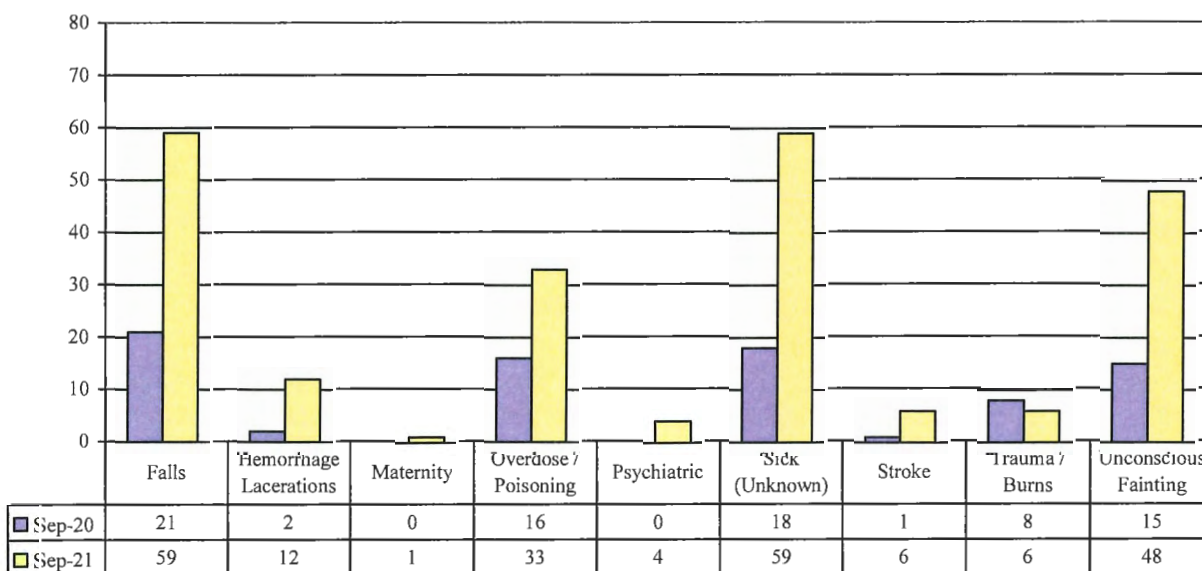


Table 4b: September 2020 & September 2021 Medical Calls by Type



Fire Investigations

The fire investigation statistics for September 2021 are listed below:

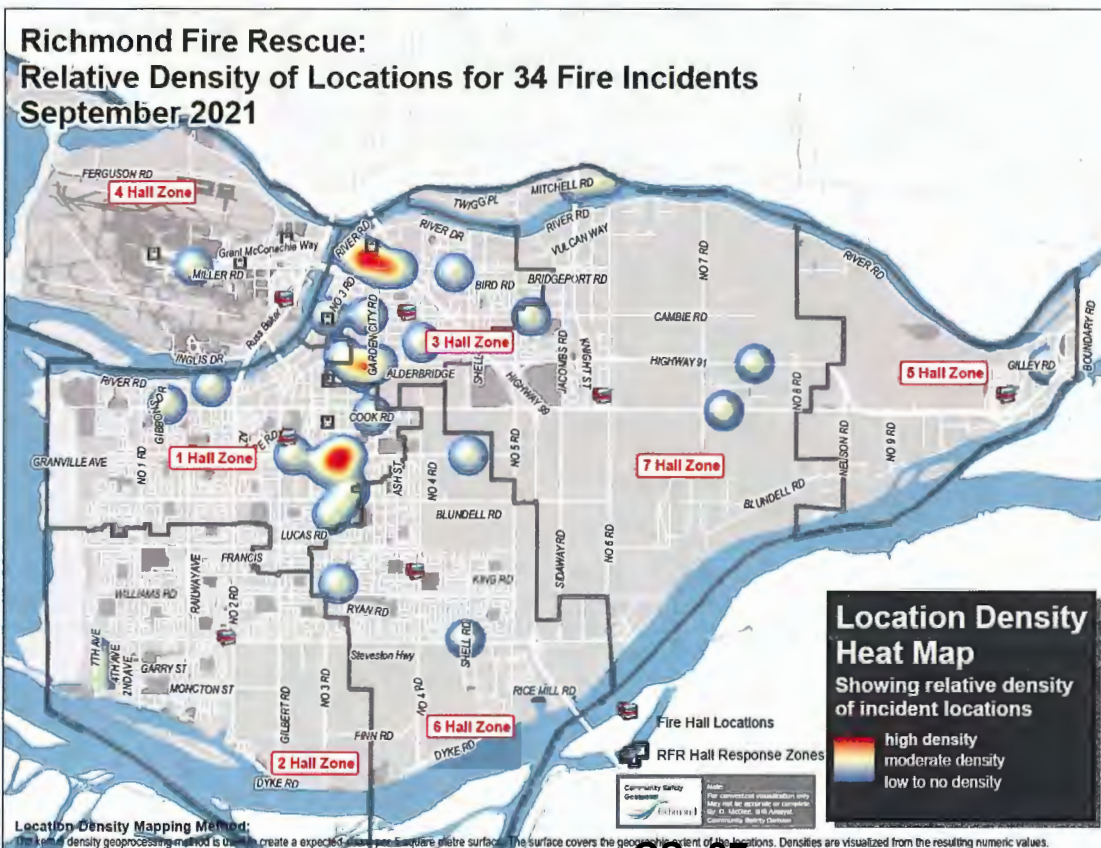
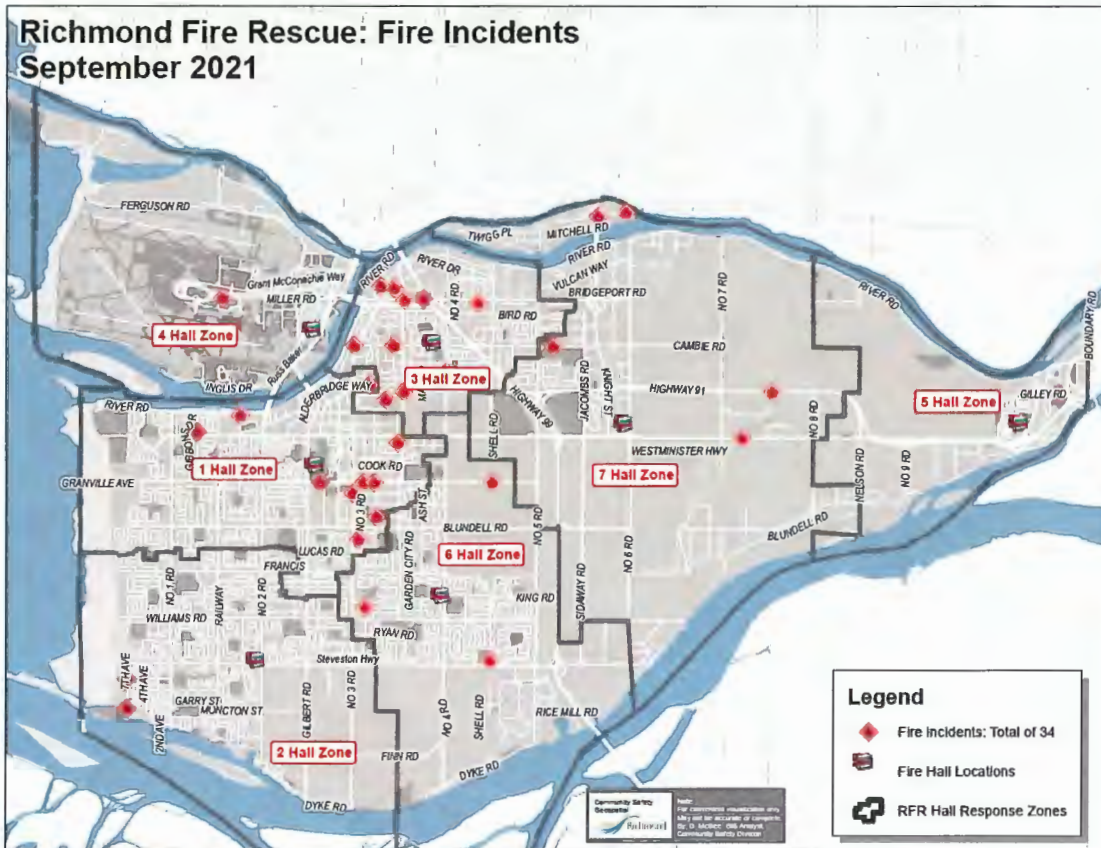
Table 5: Total Fire Investigation Statistics – September 2021			
	Suspicious	Accidental	Undetermined
Residential - Single-family	-	2	-
Residential - Multi-family	-	3	2
Commercial/Industrial	-	4	-
Outdoor	3	10	2
Vehicle	1	4	3
Totals	4	23	7

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

Hazardous Materials

Table 6: Hazardous Materials Incidents By Type – September 2021	
	Details
Flammable / Combustible Liquids	1
Natural Gas / Propane Leaks (small)	1
Unclassified	1
Totals	3

Figure 1: Location of reportable fires attended in September 2021 (total 34)



Location Density Mapping Method:

The kernel density geospatial method is used to create a expected 200m x 200m square metre surface. The surface covers the geographic extent of the locations. Densities are visualized from the resulting numeric values.

Figure 2: Location of medical Incidents in September 2021 (total 446)

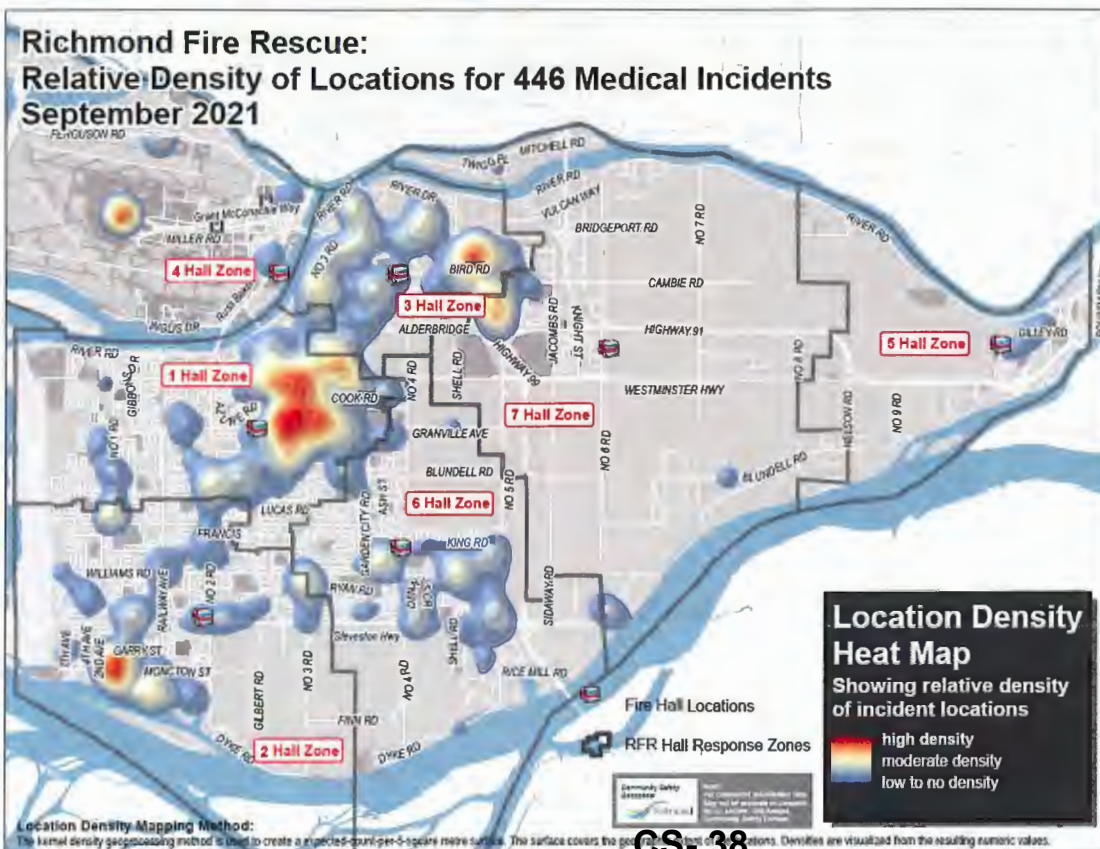
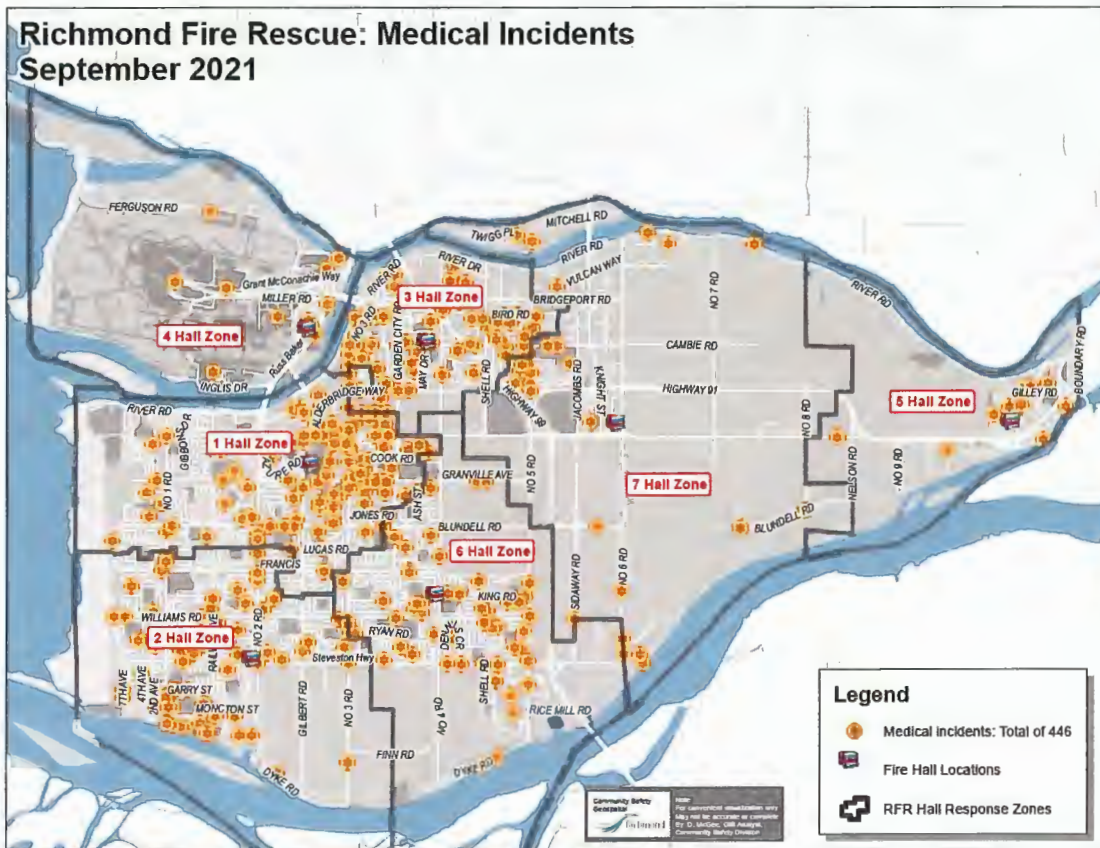


Figure 3: Location of MVI Incidents in September 2021 (total 86)

