



To: Community Safety Committee

Date: April 13, 2021

From: Tim Wilkinson
Fire Chief

File: 99-Fire Rescue/2021-
Vol 01

Re: **Richmond Fire-Rescue Monthly Activity Report – March 2021**

Staff Recommendation

That the staff report titled “Richmond Fire-Rescue Monthly Activity Report – March 2021”, dated April 13, 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

Training and Public Education

The education and development of firefighters in the Province of British Columbia is regulated through the Office of the Fire Commissioner. The Office of the Fire Commissioner has created minimum training standards which are found within the "Structure Firefighters Competency and Training Playbook" or "Playbook". Richmond Fire-Rescue (RFR) implemented the Playbook in March 2019 where all firefighters review, practice and demonstrate the skills identified within the Playbook. Firefighters are continuing within their Playbook training.

Fire Training staff facilitated multiple training activities during March 2021 including: Frontline Leadership, Fire Attack, Playbook, Helicopter Landing Zone Management and Fire Ground Survival.

During March 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 incidences in a manner where loss of life, reduction of property damage and protection of the environment is mitigated. In March 2021 there were a total of 682 incidents, representing a 0.7 per cent increase in incidences from March 2020 (Attachment 1).

The average time on scene for RFR crews was 34 minutes, which was less than the 37 minutes recorded in 2020. Time on scene can vary due to the nature and severity of each incident.

	Totals	Percentage Change (March 2020)	Number Change (March 2021)
Alarm Active No Fire	122	+16%	+17
Explosion	0	-	0
Fire	45	+22%	+8
Haz-Mat	11	-15%	-2
Medical	309	-9%	-32
MVI	63	+9%	+5
Public Hazard	20	+122%	+11
Public Service	75	-3%	-2
Response Cancelled/Unfounded	36	+9%	+3
Specialized Transport	1	-75%	-3
Tech Rescue	0	-	0
Totals	682	+1%	+5

In March 2021 there were 45 reportable fires to the Office of the Fire Commissioner, representing a 22 per cent increase from March 2020. The average figure for fires reported in March over the last five years is 35.

Richmond Fire-Rescue continues to experience decreases in medical responses due to the changes of the Provincial Health Orders and Medical Health Officer's direction. RFR continues to monitor all activities to identify and create programs to respond to emerging trends.

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 March 2021 are estimated at \$605,605. This total includes \$344,505 for building/asset loss and \$261,100 for content loss. The total building/asset and content value at risk was estimated to be \$83,147,335 and the total value preserved from damage was \$82,898,830. These numbers translate to 99 per cent of value protected (Table 2); this is greater than the 98 per cent protected 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	8	3,661,100	215,050	296,000	251,000	3,491,050
Multi family	4	22,440,000	20	2,000	-	22,441,980
Commercial/Industrial	2	56,767,000	300	7,000	7,000	56,766,700
Outdoor	29	155,100	5,000	52,100	3,100	199,100
Vehicle/Vessel	2	124,135	124,135	-	-	-
Totals*	45	83,147,335	344,505	357,100	261,100	82,898,830

* 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 March 2021 incidents:

- **March 9 – Structure fire on Graybar Road.** On arrival RFR crews found a structure fire. Crews quickly worked to extinguish the fire. One patient had sustained burns to their face and was sent to Vancouver General Hospital. There were no other injuries reported by residents or RFR personnel. WorkSafe BC, BC Emergency Health Services (BCEHS) and the Richmond RCMP were called to attend. A Fire Investigator attended the scene to determine the cause and origin of the fire.
- **March 18 – Structure fire on No. 2 Road.** On arrival RFR crews found a fire in the upstairs bathroom of a two story townhouse. RFR crews attacked and quickly extinguished the fire and searched the rest of the residence to ensure there was no fire spread. A family of nine people was displaced as a result of the fire. There were no injuries to residents or RFR personnel. A Fire Investigator attended.
- **March 19 – Structure fire on Rathburn Drive.** RFR crews responded to the site of a house with flames showing out the window. First arriving crews quickly extinguished the flames and began to search for occupants. Search crews found two victims who were already deceased. Richmond RCMP were on-scene assisting with the investigation. The fire and scene were considered suspicious. There were no injuries reported to other people involved or RFR staff. After RFR crews had completely extinguished the fire, they conducted Critical Incident Stress Management (CISM) diffusing for those personnel involved in the victim recoveries. A Fire Investigator attended to determine fire cause and origin.
- **March 22 – Motor vehicle incident on Knight Street.** RFR crews attended a motor vehicle incident for a semi-tractor trailer which had jack-knifed while navigating the off-ramp onto Bridgeport Road. On arrival crews found one truck involved in the incident and no injuries were reported. The vehicle's diesel fuel tank had ruptured and some diesel fuel was leaking onto the roadway. Crews used diking processes to slow the impact and called for the RFR Hazardous Materials unit to attend the scene to transfer the remaining diesel fuel into a containment drum to mitigate the impact. RFR informed the City's Environmental group and also directed the trucking contactor to attend and initiate their Emergency Response Action Plan (E-RAP). The vehicle was removed by a trucking contractor who also arranged for further environmental clean-up.
- **March 30 – Structure fire on Garden City Road.** RFR crews responded to the site of a house fire. The structure is abandoned and boarded up, which made entry into the building dangerous. Multiple crews extinguished the majority of fire and completed a primary search of the structure. No persons were found in the search. Fire crews then began to work on final extinguishment of the fire. There were no injuries reported by the public or RFR personnel. After the fire was extinguished RFR crews transitioned into overhaul and investigation. A Fire Investigator attended the scene.

- **March 31 – Gas leak on No. 3 Road.** RFR crews responded to reports of a gas leak on No. 3 Road. Private contractors had severed a two inch gas line while removing some large trees. Fortis Gas was on scene attempting to shut down the gas line. RCMP and RFR crews blocked traffic on No. 3 at Blundell Road. RFR crews remained on scene while Fortis completed their task. Four neighbouring houses were also evacuated as a precaution. There were no injuries reported. Once the two inch gas main line had been clamped, RFR cleared the scene and Fortis Gas took over scene management.

Financial Impact

None.

Conclusion

During March 2021, Richmond Fire-Rescue crews continue to experience impacts on all incident volumes. For medical incidents, this is due to the decreases in medical responses emanating from the temporary changes by order of the Provincial Medical Health Officer in response to the pandemic.

The impacts of the pandemic, on incident volumes, has resulted in RFR Management pivoting staff to learning, development and preparedness activities. Richmond Fire-Rescue staff remain ready to react and adapt to the ever changing pandemic situation.

Richmond Fire-Rescue has not experienced any negative impacts to emergency response and continues to monitor activities to identify and create programs to respond to emerging trends.



Tim Wilkinson
Fire Chief
(604-303-2701)

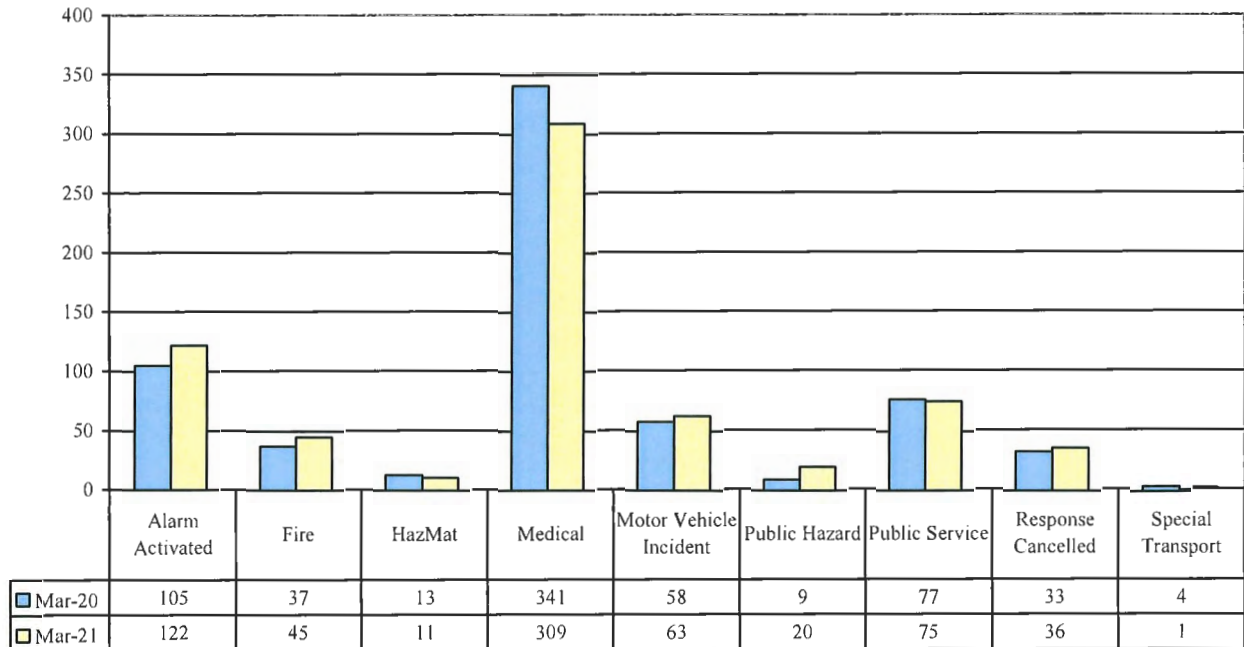
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Att. 1: Suppression Activity, including location of March's Fire, Medical and MVIs

Incident Volumes

The following chart provides a month to month comparison regarding incidents occurring in March 2021 and 2020. In March 2021, there were a total of 682 incidents, compared to 677 in March 2020. This represents an increase of 1 per cent.

Table 3: March 2020 & March 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 45 per cent of the total emergency responses for RFR during the month of March 2021. A detailed breakdown of the medical incidents for March 2020 and 2021 is set out in the following table by sub-type. There were a total of 309 medical incidents in March 2021 compared to 341 in March 2020, a decrease of 9 per cent.

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

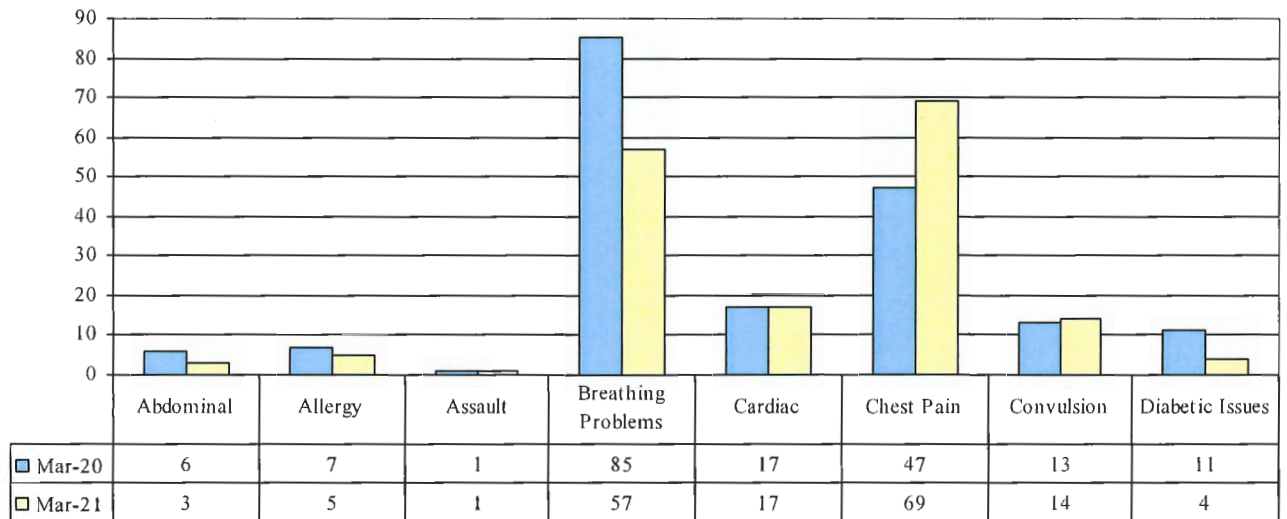
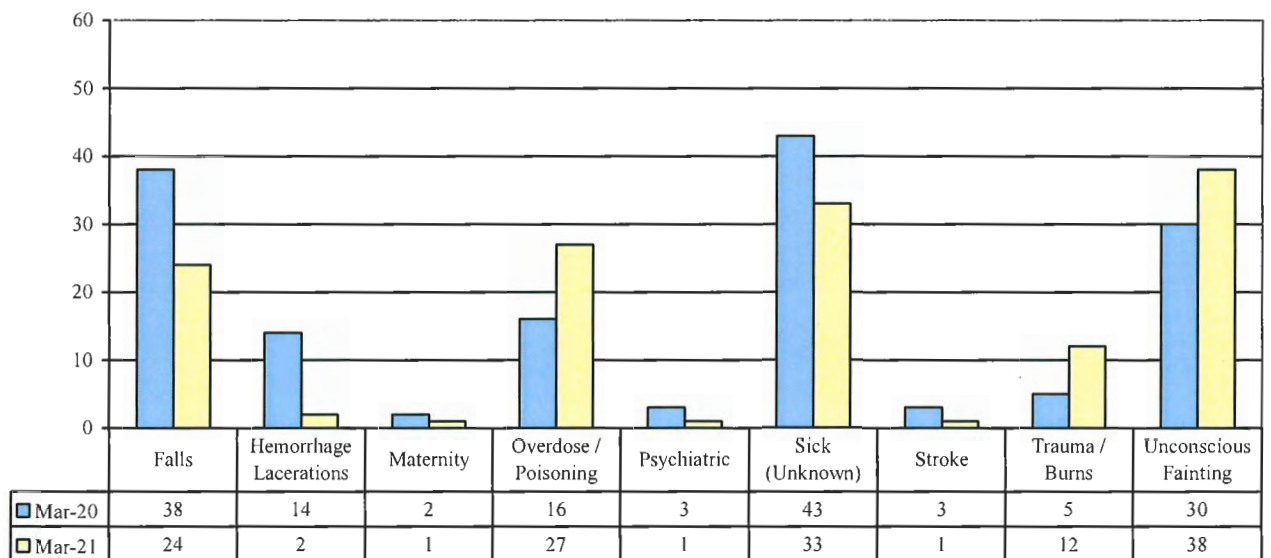


Table 4b: March 2020 & March 2021 Medical Calls by Type



Fire Investigations

The fire investigation statistics for March 2021 are listed below:

Table 5: Total Fire Investigation Statistics – March 2021			
	Suspicious	Accidental	Undetermined
Residential - Single-family	1	7	0
Residential - Multi-family	0	3	1
Commercial/Industrial	0	1	1
Outdoor	8	19	2
Vehicle	1	0	1
Totals	10	30	5

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 – March 2021	
	Details
Natural Gas / Propane Leaks (small)	6
Unclassified	3
Flammable / Combustible Liquids	2
Totals	11

Figure 1: Location of reportable fires attended in March 2021 (total 45)

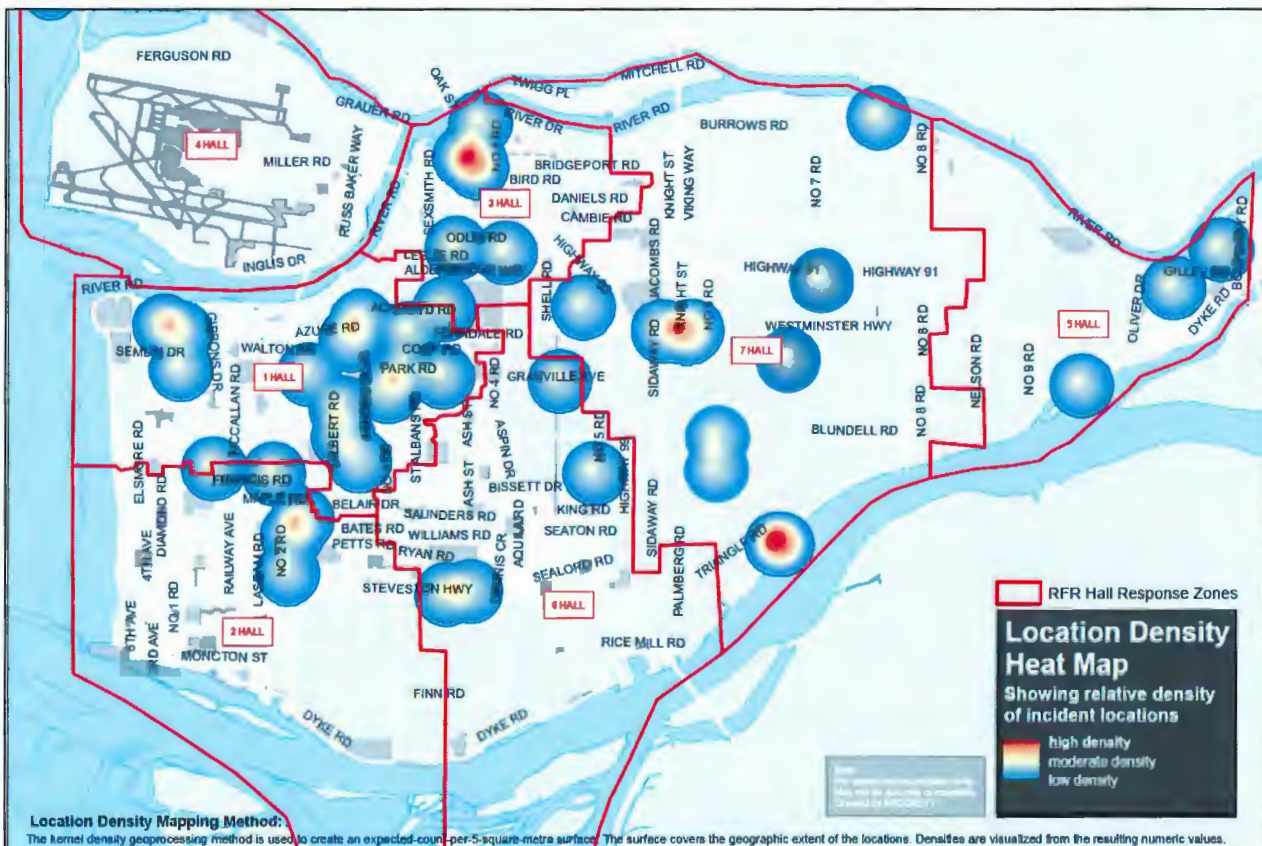
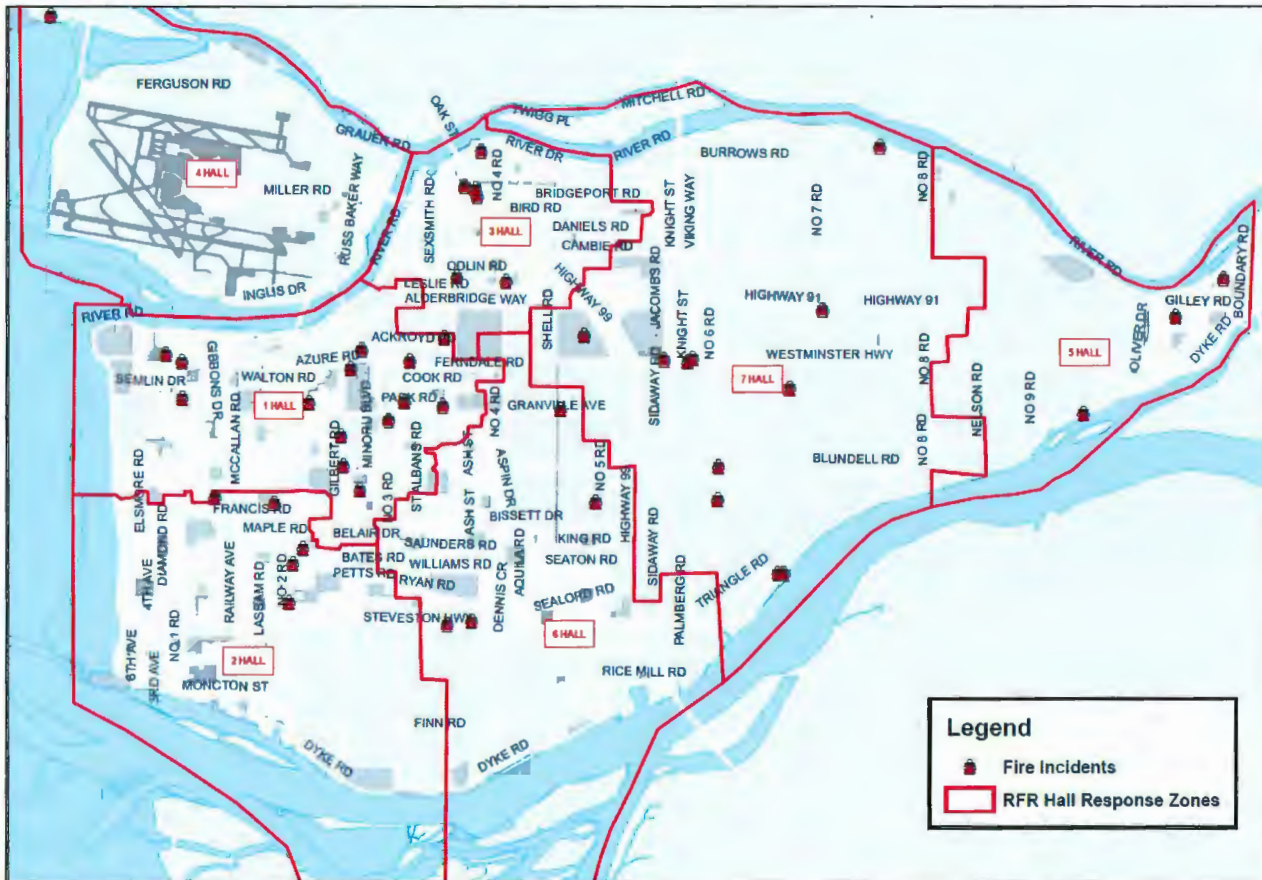


Figure 2: Location of medical Incidents in March 2021 (total 309)

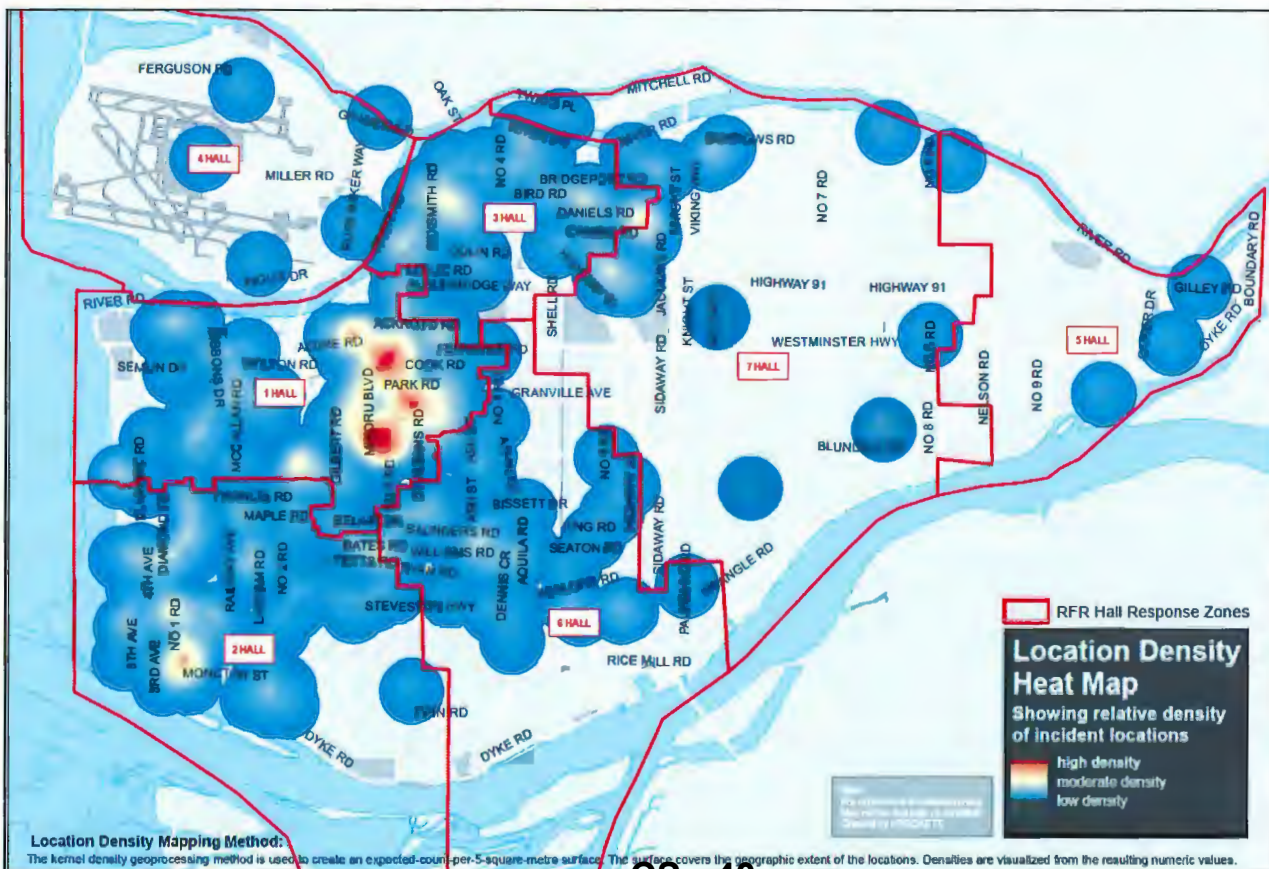
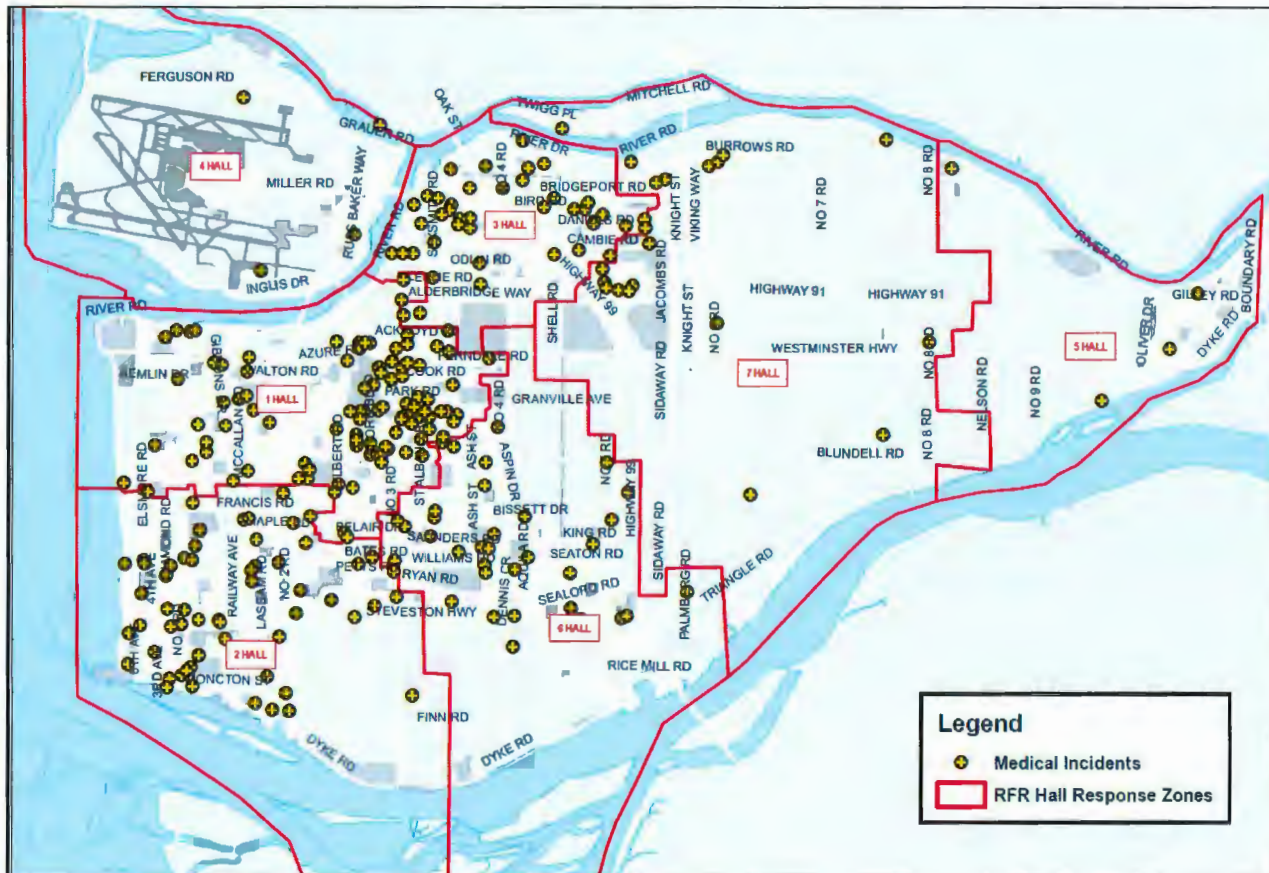
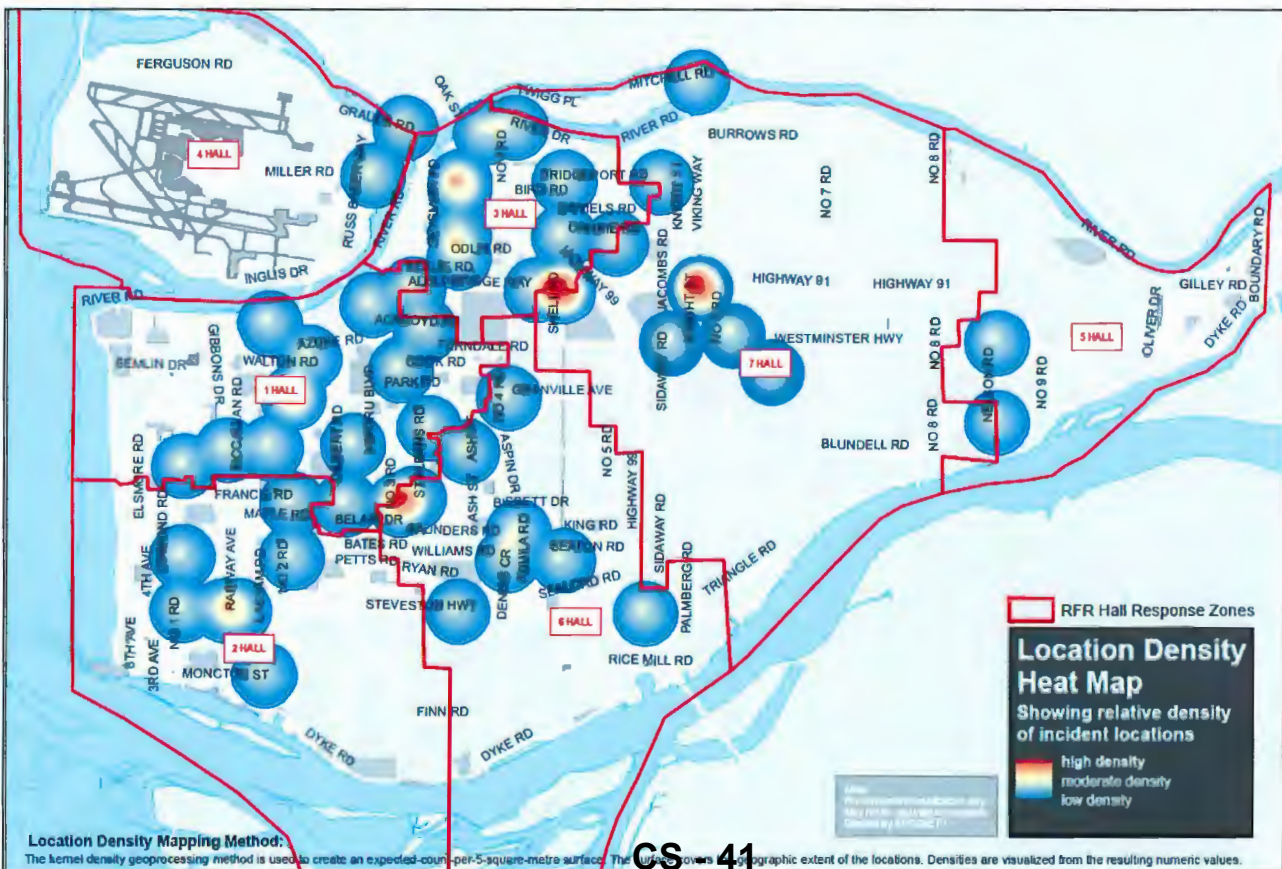
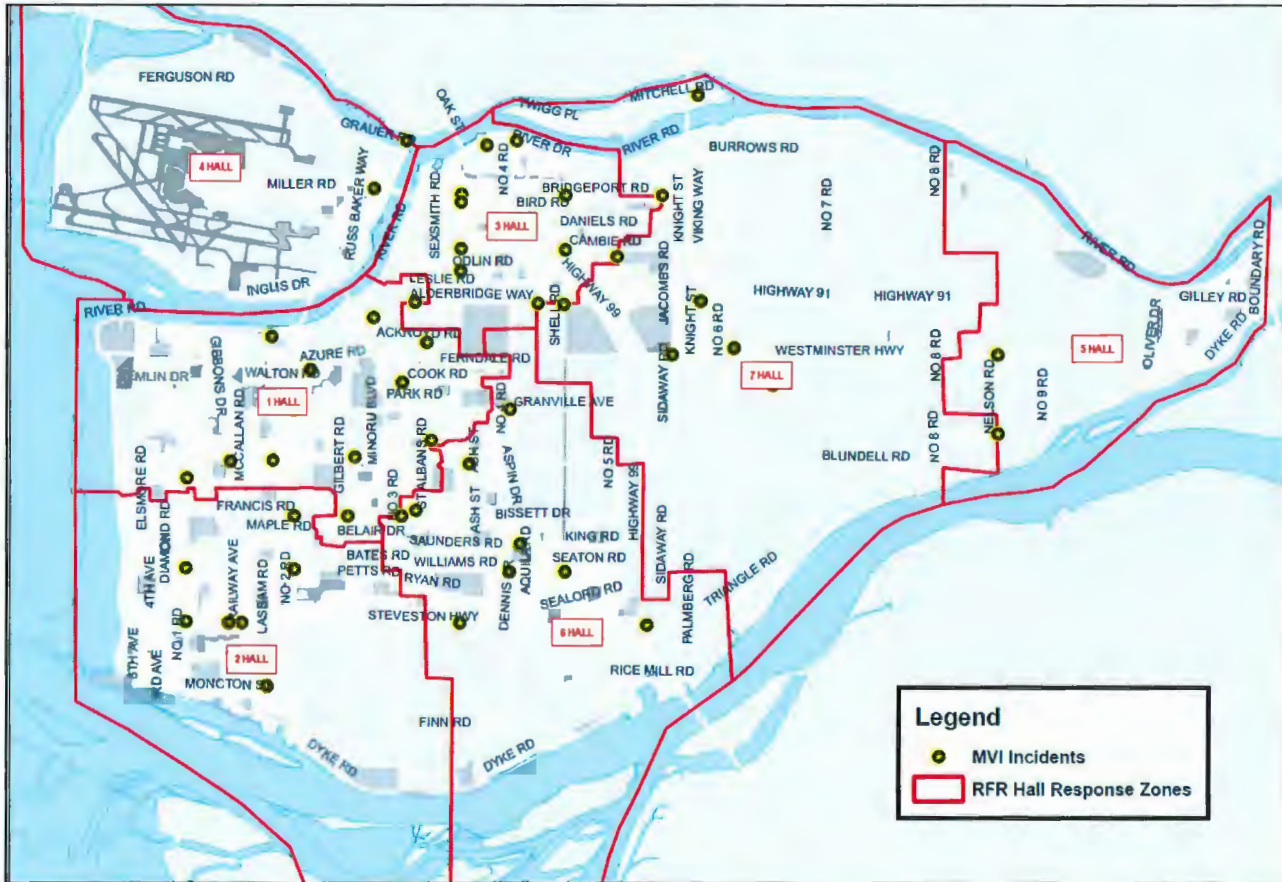


Figure 3: Location of MVI Incidents in March 2021 (total 63)



Location Density Mapping Method:

The kernel density geospatial processing method is used to create an expected count-per-5-square-metre surface. The kernel density geospatial processing method is used to create an expected count-per-5-square-metre surface. The kernel density geospatial processing method is used to create an expected count-per-5-square-metre surface. The kernel density geospatial processing method is used to create an expected count-per-5-square-metre surface.