



City of Richmond

Report to Committee

To: Community Safety Committee

Date: July 19, 2021

From: Tim Wilkinson
Fire Chief

File: 99-Fire Rescue/2021-
Vol 01



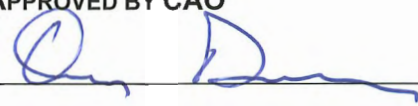
Re: Richmond Fire-Rescue Monthly Activity Report – June 2021

Staff Recommendation

That the staff report titled “Richmond Fire-Rescue Monthly Activity Report – June 2021”, dated July 19, 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 June 2021 are as follows:

- The Emergency Operations Centre (EOC) has operated for 473 consecutive days, following the Provincial State of Emergency that commenced on March 17, 2020. EP staff continue to complete necessary follow-up documentation, administration and reimbursement submissions with the Province, as well as improve processes for the next EOC activation.
- Staff have been working with the Province to identify their readiness in regards to the wildfire and freshet season. The Province predicted that wildfire season would be extreme, and temperatures have been unusually hot and dry. This prediction has been true so far and EP staff have prepared accordingly. On the other hand, the Freshet was determined to be calm and gradual in 2021.
- Staff have reviewed the capabilities, strengths, and weaknesses of the Emergency Management Information System (EMIS) system as it pertains to how to move forward and work remotely/electronically.
- Staff are collaborating with YVR's Emergency Programs staff in preparation for the Vancouver airport regulatory exercise in 2021.
- Topics discussed in June's Emergency Support Services Director regional committee meeting included establishing a "new normal" for Emergency Social Services (ESS) service delivery/volunteer management post-COVID, and an After Action Review of their recent Level 3 ESS Activation shared by the City of Surrey.
- Staff are working with Canadian Red Cross (CRC) to identify and address gaps in the ESS Agreement and the Operational Plan for Level 2 emergency events.
- Staff will be participating in the City of Vancouver's Hazard Risk Vulnerability Assessment (HRVA) workshops, held in June, July and September and will be discussing emergency preparedness and action in regards to multiple emergency scenarios. EP staff plan to update the City's HRVA through collaboration with other municipalities.
- Staff coordinated with multiple City departments to create, share and provide important information to Richmond residents during the heatwave.

Vaccinations

During June, staff continue to book appointments for their immunizations.

Training and Public Education

Fire Training staff facilitated multiple training activities during June 2021 including: Playbook High-rise, Hook-Lift, Utility Terrain Vehicle, Fire Response and Confined Space Training.

During June, Richmond Fire-Rescue (RFR) hosted a demonstration of the fire performance of mass timber structures during construction. The purpose of the demonstration was to validate the safety and structural performance of Mass Timber under specific fire related stress scenarios. The Canadian Wood Council partnered with the National Research Council, Fire Prevention Innovations, CHM Fire Consultants Ltd, and GHL Consultants Ltd to develop the demonstrations, held in Richmond, and Ottawa. Working with GHL Consulting, the Richmond event was held at the Lafarge fire training site. The results of these demonstrations will be used to educate actors within the Mass Timber supply chain including fire officials, municipal regulators, code officials, insurance firms, the public and more.

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

Recruitment

During June 2021, potential firefighter candidates participated in the physical testing portion of the recruitment process. Sixty-four candidates took part in the physical testing held at Fire Hall No. 1 and the swim testing held at Watermania.

To date, there have been 499 total applications, 65 Candidate Suitability Evaluations, 129 panel interviews and 57 Fire Chief Interviews.

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 June 2021, there were a total of 830 incidents, representing a 136 per cent increase in incidences from June 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 June 2021 is a result of the gradual return to normal levels of service of medical event types. 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 28 minutes recorded in 2020. Time on scene can vary due to the nature and severity of each incident.

Table 1: Total Incidents - June 2021

	Totals (2021)	Percentage Change from June 2020	Number Change from June 2020	5 Year Average for June
Alarm Active No Fire	149	+28	+33	133
Explosion	0	0	0	0
Fire	44	+52	+15	49
Haz-Mat	12	+300	+9	10
Medical	390	+584	+333	304
MVI	66	+25	+13	87
Public Hazard	8	+14	+1	9
Public Service	111	+152	+67	66
Response Cancelled/Unfounded	48	+14	+6	74
Specialized Transport	2	-	+2	2
Tech Rescue	0	-100	-1	0
Totals	830	+136	+478	735

In June 2021, there were 44 reportable fires to the Office of the Fire Commissioner, representing a 52 per cent increase from June 2020. The average figure for fires reported in June over the last five years is 49.

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 loss during June 2021 are estimated at \$40,000. This total includes \$31,000 for building/asset loss and \$9,000 for content loss. The total building/asset and content value at risk was estimated to be \$45,754,200 and the total value preserved from damage was \$45,714,200. These numbers translate to 99 per cent of value protected (Table 2); this is the same value observed in 2020.

Table 2: Fire Incidents By Type and Loss Estimates - June 2021

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	475,000	10,000	140,000	-	605,000
Multi family	4	-	-	-	-	-
Commercial/Industrial	5	45,021,000	-	30,000	5,000	45,046,000
Outdoor	32	33,500	-	29,000	4,000	58,500
Vehicle/Vessel	2	25,700	21,000	-	-	4,700
Totals*	43	45,555,200	31,000	199,000	9,000	45,714,200

* 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 June 2021 incidents:

- **June 11 – Hazardous Materials (Haz-mat) on Westminster Highway.** RFR crews attended to a white powder incident in the mailroom of an office building. RFR Haz-mat teams responded to the site, isolated the area and shut down HVAC systems. RCMP were dispatched to the scene and isolated onsite staff to observe any potential health impacts. RFR teams isolated the powder and took samples to identify the substance. Using a variety of tools to assess both the envelope and the mailroom, no hazardous materials of any type were found. RCMP also conducted a risk assessment and found the event to be of a low risk. There were no injuries reported.
- **June 12 – Residential fire on Moore Road.** RFR crews arrived to a hedge fire approximately 20 feet long and seven feet high along with live wires down. Crews quickly extinguished the hedge fire and secured the down power lines. There was damage from the fire to the corner soffit of the house. The homeowner had suffered first-degree burns to their face and arms from trying to extinguish the fire. BC Ambulance staff took the patient to Richmond General Hospital. There were no other injuries reported.
- **June 16 – Motor vehicle incident on Railway Avenue.** RFR crews, along with BC Emergency Health Services (BCEHS) and the RCMP responded to a serious motor vehicle incident. A car with one driver drove into the back of a waste services garbage truck. The garbage truck occupants were not injured, however they had jumped off the truck to avoid being hit and were noticeably shaken up from the event. The driver of the car was seriously injured, with some significant fractures and injuries. Once extracted, the driver was transported to hospital by BCEHS. There were no other reported injuries. RFR staff conducted critical incident stress debriefings for the responding firefighters.
- **June 25 – Recreational vehicle fire on Clifton Road.** Crews responded to a motor home and large hedge fire. Crews quickly extinguished the fire. There were multiple bylaw violations at this location and the City's Bylaws and the RCMP were requested to attend. A Fire Inspector also attended. There were no injuries reported.
- **June 28 – Commercial building fire on No. 9 Road.** RFR crews responded to a fire in a fuel hopper. The hopper contained chopped up tires, which produced heavy black smoke. RFR crews encountered very high temperatures throughout this call and set up a rehabilitation area with lots of water and a hose for the purpose of reducing body temperatures. The body temperatures of all involved were monitored by the on-site Incident Safety Officer. No BCEHS staff were able to attend due to call volumes. RFR crews were able to extinguish and cool the areas involved. There were no injuries reported, however some staff suffered heat related issues like cramping up and dizziness.

July 19, 2021

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Financial Impact

None.

Conclusion

During June 2021, Richmond Fire-Rescue crews continued to experience impacts on all incident volumes. RFR are continuing to see incident numbers slowly returning to normal levels due to gradual changes in the Provincial Medical Health Officer orders in response to the pandemic. RFR 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.

A handwritten signature in black ink, appearing to read 'Tim Wilkinson', with a long horizontal line extending to the right.

Tim Wilkinson
Fire Chief
(604-303-2701)

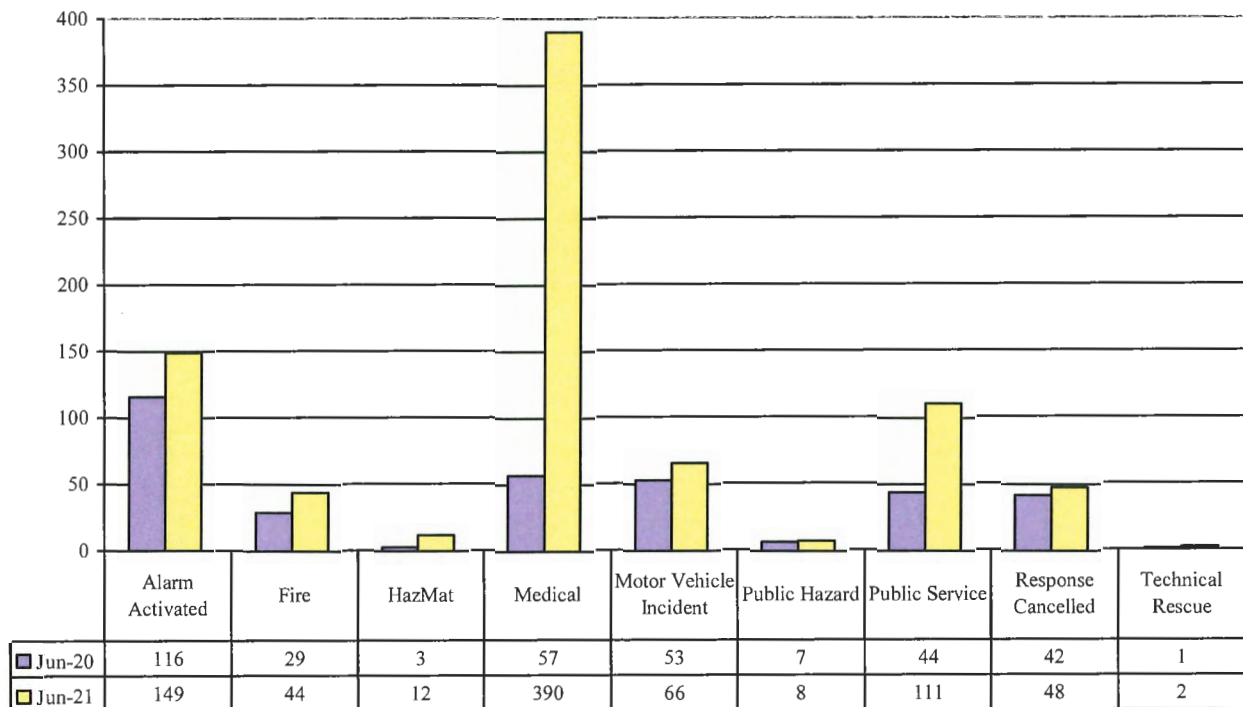
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Att. 1: Suppression Activity, including location of June's Fire, Medical and MVIs

Incident Volumes

The following chart provides a month to month comparison regarding incidents occurring in June 2021 and 2020. In June 2021, there were a total of 830 incidents, compared to 352 in June 2020. This represents an increase of 136 per cent.

Table 3: June 2020 & June 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 47 per cent of the total emergency responses for RFR during the month of June 2021. A detailed breakdown of the medical incidents for June 2020 and 2021 is set out in the following table by sub-type. There were a total of 390 medical incidents in June 2021 compared to 57 in June 2020, an increase of 584 per cent.

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

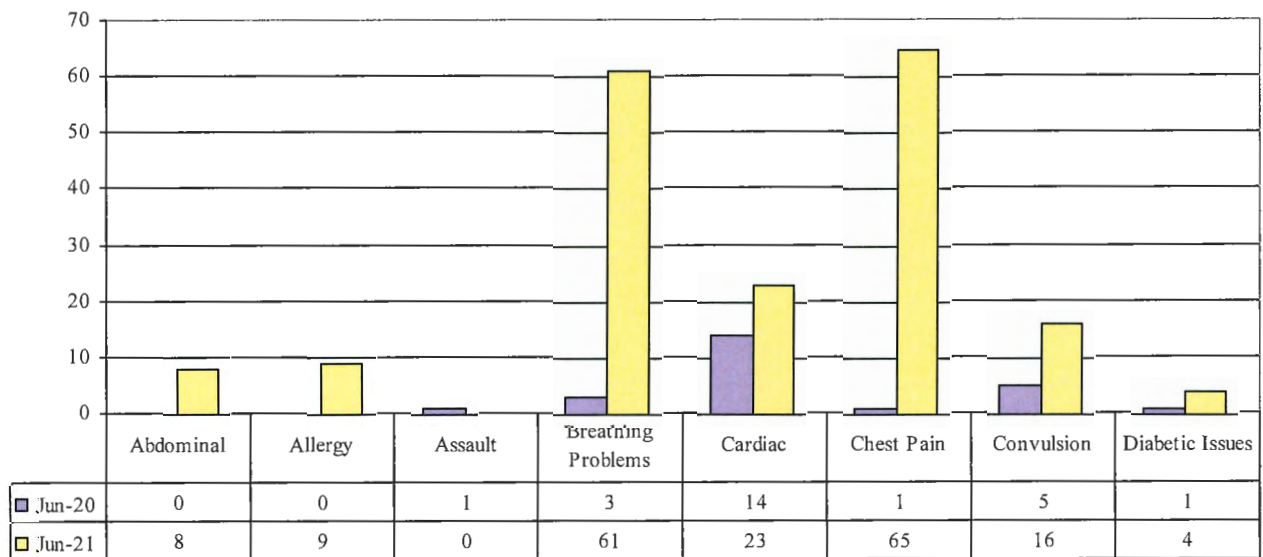
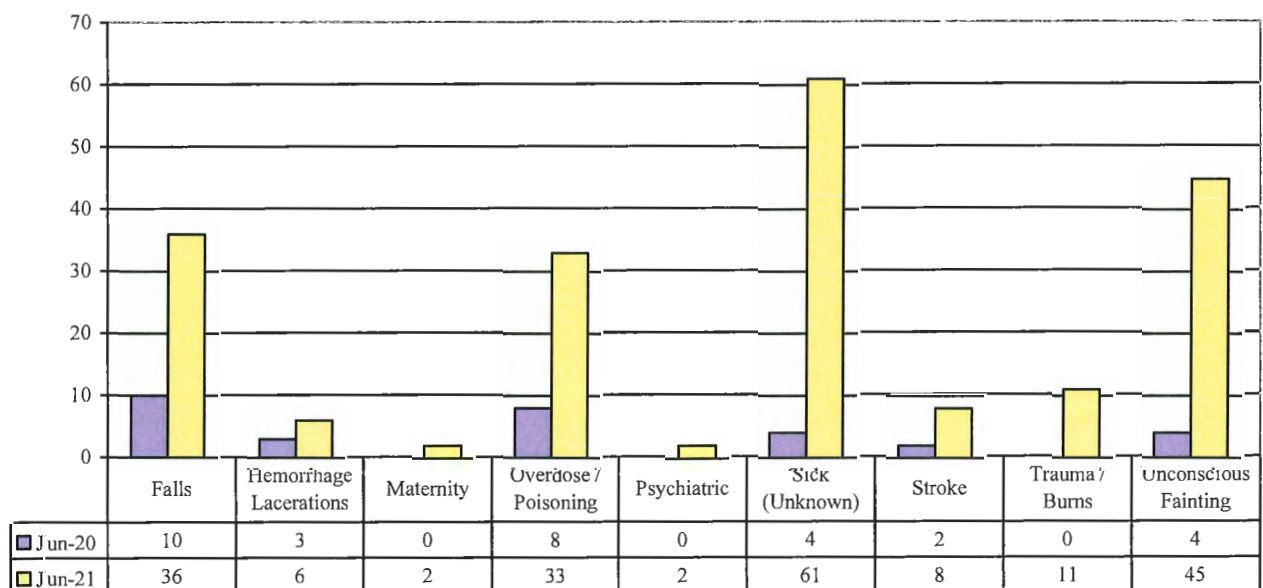


Table 4b: June 2020 & June 2021 Medical Calls by Type



Fire Investigations

The fire investigation statistics for June 2021 are listed below:

Table 5: Total Fire Investigation Statistics – June 2021			
	Suspicious	Accidental	Undetermined
Residential - Single-family	-	1	-
Residential - Multi-family	1	3	-
Commercial/Industrial	1	3	1
Outdoor	-	30	1
Vehicle	1	1	1
Totals	3	8	3

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 – June 2021	
	Details
Flammable / Combustible Liquids	1
Natural Gas / Propane Leaks (small)	4
Hazard Misc.	1
Standby / Support for other Agency	1
Toxic / Infectious Substances	2
Unclassified	3
Totals	12

Figure 1: Location of reportable fires attended in June 2021 (total 44)

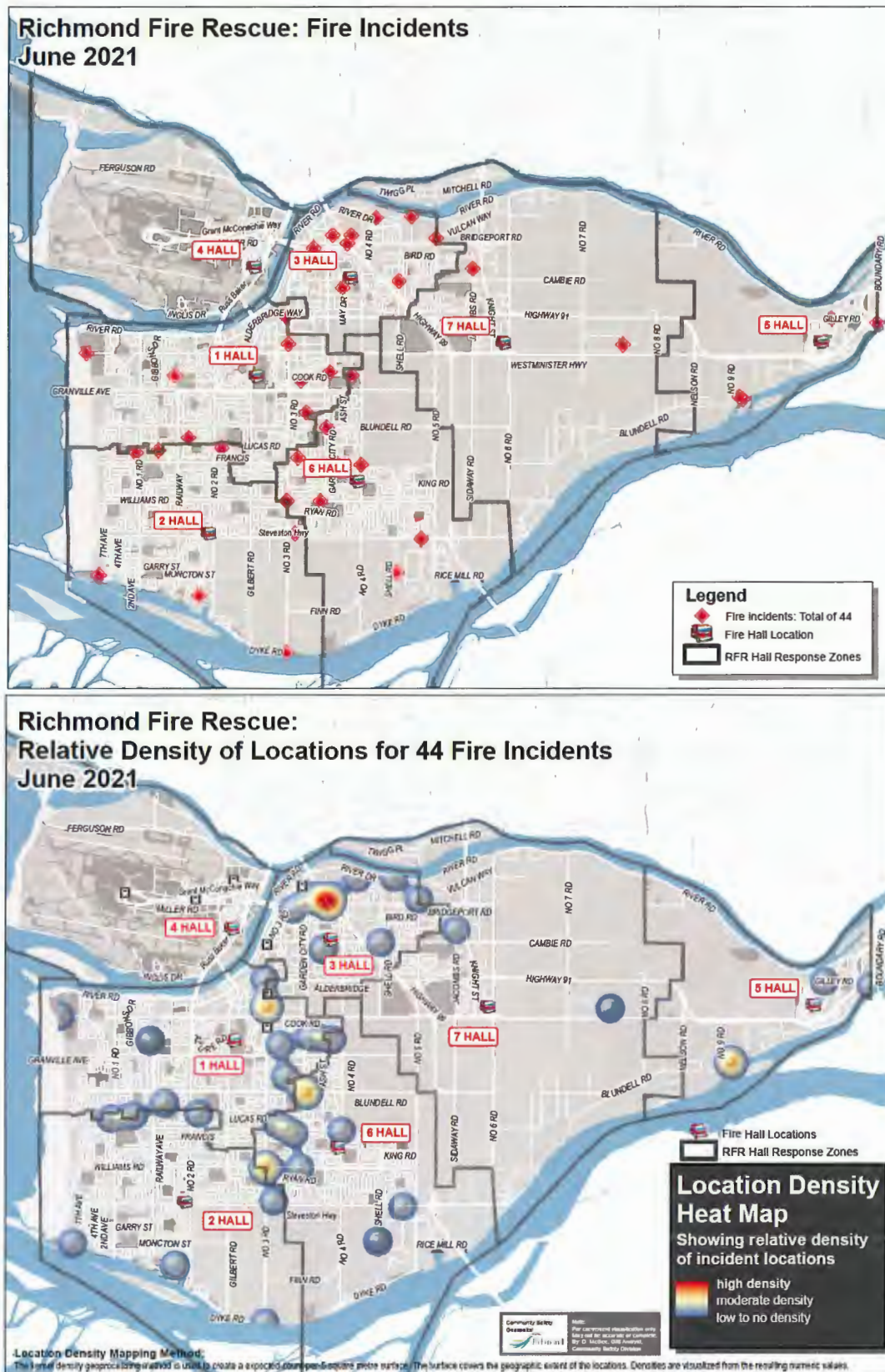


Figure 2: Location of medical Incidents in June 2021 (total 390)

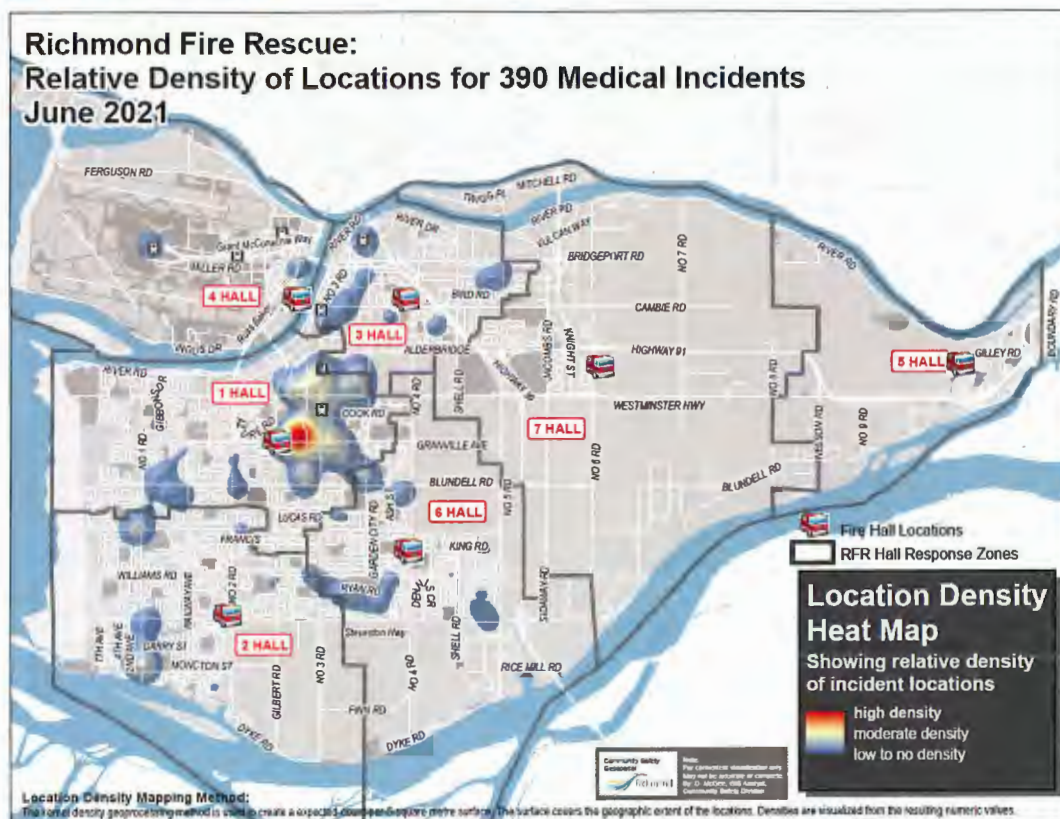
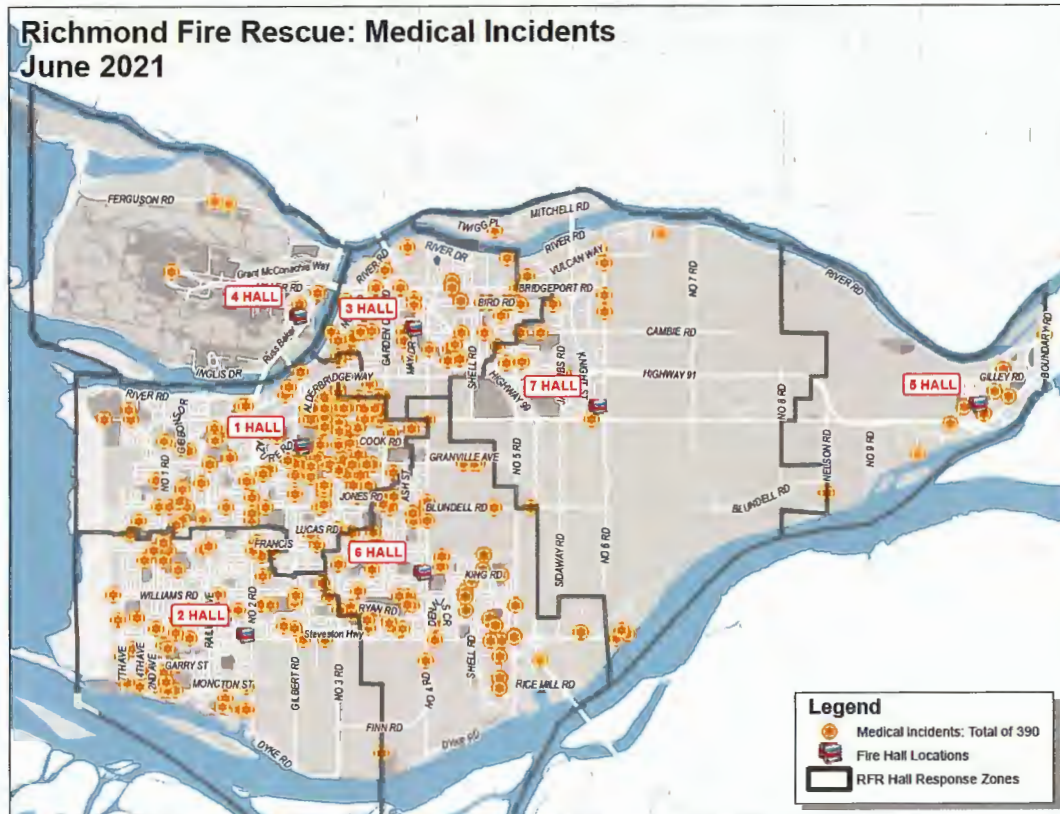


Figure 3: Location of MVI Incidents in June 2021 (total 66)

