



# Fire and EMS Standard of Cover Options

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Vancouver City Council Workshop

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CITY OF  
**Vancouver**  
WASHINGTON

# Presentation Overview

## Objectives of Presentation:

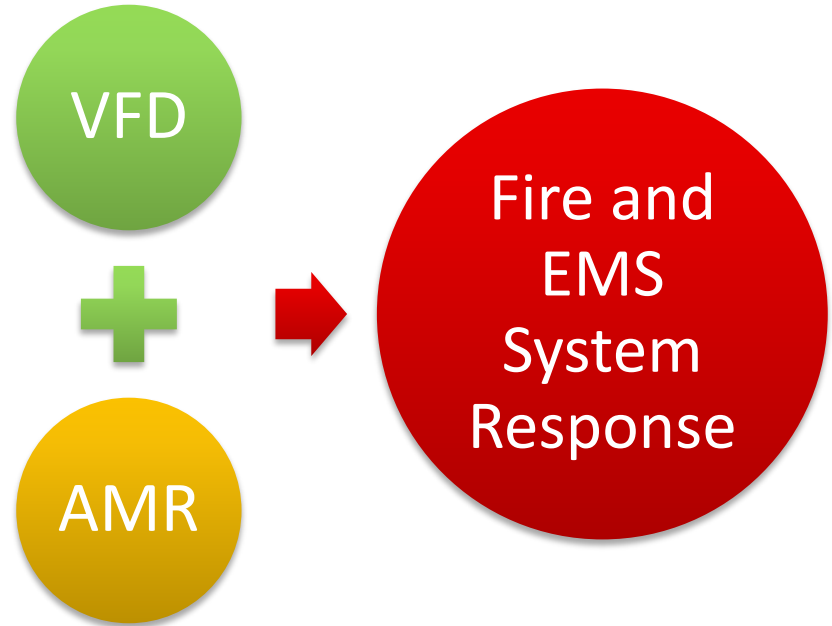
- Establish fire & EMS system context
- Inform Council of service vulnerabilities
- Brief Council on system resiliency goals
- Review recommended resources to improve service delivery
- Review financial considerations
- Next steps

# Target Workshop Objectives

- Establish understanding of and direction on:
  - Recommended approach to closing VFD service level gaps
  - Revenue options
  - Desired next steps

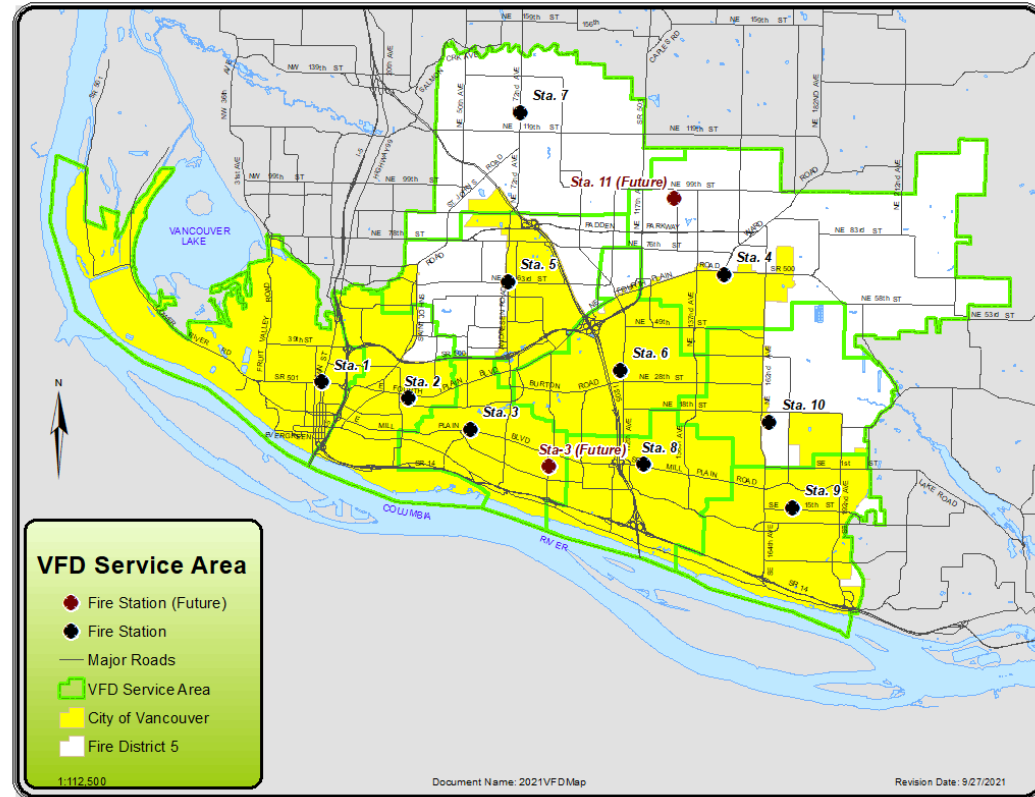
# Fire & EMS System Context

- City of Vancouver – service provider – fire suppression, EMS and fire prevention
- Fire District #5 – funding partner
- AMR: contract service provider – EMS and ambulance transport



# Fire & EMS System Context

- Service area characteristics
  - 89.2 square miles
  - 288,218 population



# Fire & EMS System Context

- Personnel
  - 182 Suppression
  - 17 Fire Marshal's Office
  - 15 Admin and Support staff
- Stations
  - 10 stations – 11<sup>th</sup> opening 2022
- Apparatus
  - 10 engines
  - 2 trucks
  - 1 rescue

# Fire & EMS System Context

- Current biennial budget

2021	2022
\$50.57 m	\$50.12 m

- Cost share:
  - 77.2% City (general fund)
  - 22.8% District #5

# VFD Current Service Level

- Service Level Vulnerabilities:
  - VFD is not meeting council adopted service level standards in two key areas:
    - Response times to Priority 1 and 2 EMS
    - Response times to full alarm structure fires
  - Surge capacity and system resiliency
  - Firefighting effective force
  - Truck apparatus coverage



# VFD Response Time Performance

Alarm Type	Standard	2020	2020 % met Standard	Number of Calls Received in 2020	% Change over 2019
Priority 1 and 2 Except Marine	7:59	8:23	87.22%	12,160	0.0%
Priority 3 and 4 Except Marine	10:59	8:31	94.91%	8,307	-1.1%
Priority 5 Non-Medical	15:59	10:54	97.91%	3,974	-11.6%
Priority 5 Emergency Medical - Ambulance Only	17:59	16:15	94.22%	8,444	-6.5%
Fire Suppression Full Alarm	15:59	18:45	85.39%	89	45.9%
Aircraft Rescue and Firefighting	15:59	N/A	N/A	0	0
Technical Rescue	60:00	N/A	N/A	0	0
Hazardous Materials	60:00	N/A	N/A	0	0

# Plan to Reduce Response Times/Call Concurrency

- Response times are trending up in part due to increasing call volume, call concurrency, and population growth in the VFD service area.
- Adding additional units into the system help with call concurrency and result in decreased overall response times to Priority 1 and 2 calls.
- Adding additional units into the system will allow for a more flexible fire call response, resulting in decreased overall response times to Fire Suppression Full Alarm calls.
- Recommend the addition of three paramedic squads and one ladder truck strategically located into existing fire stations.

# Fire Vehicle Differences



## Paramedic Squad

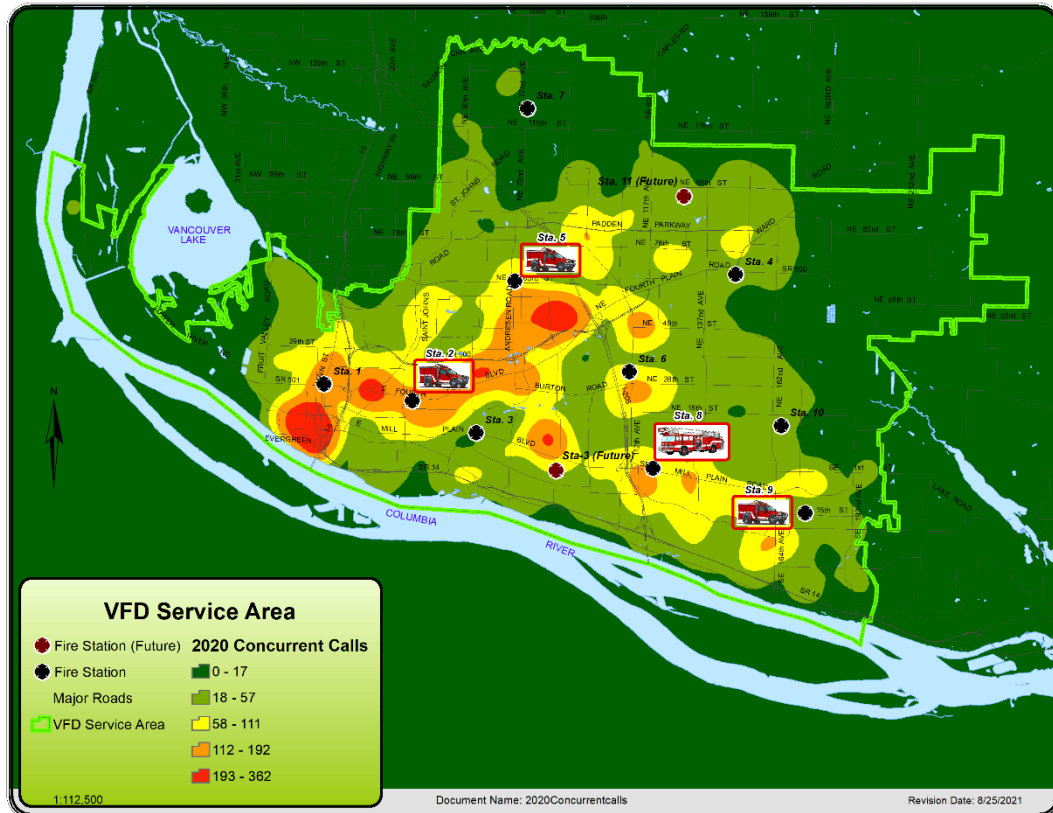
- 2-person staffing
- Quick response vehicle for EMS and Fire Support
- 24/7 readiness



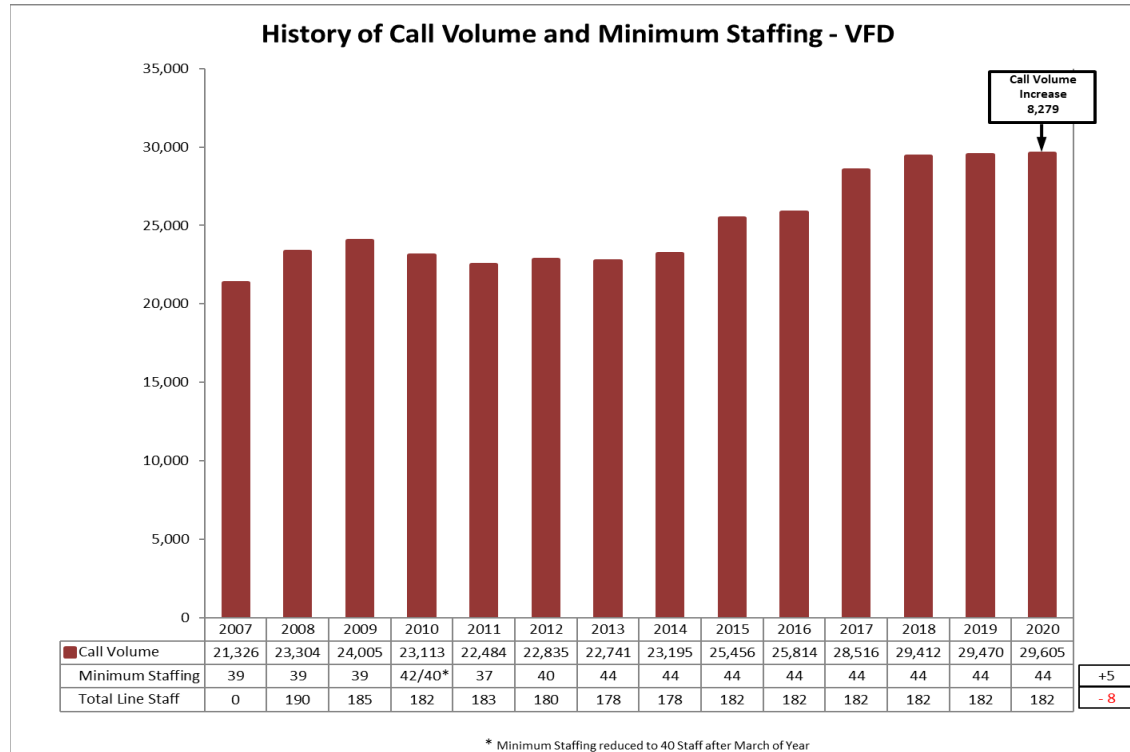
## Ladder Truck

- 4-person staffing
- Elevated hose streams
- Ladder access to upper floors
- Vehicle extrication and special rescue

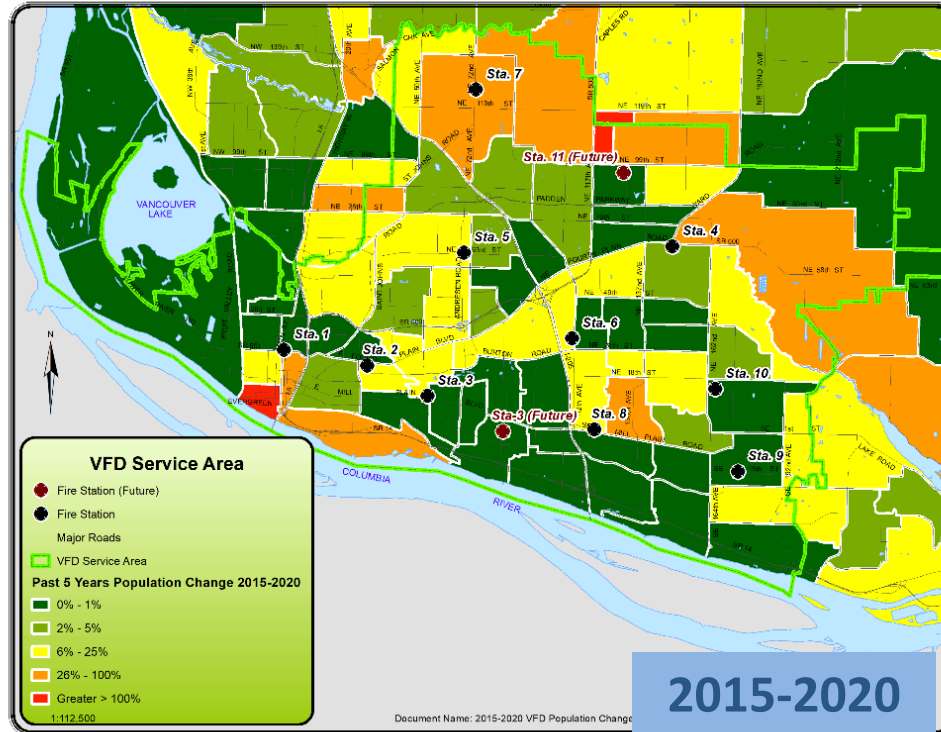
# VFD 2020 Call Concurrency



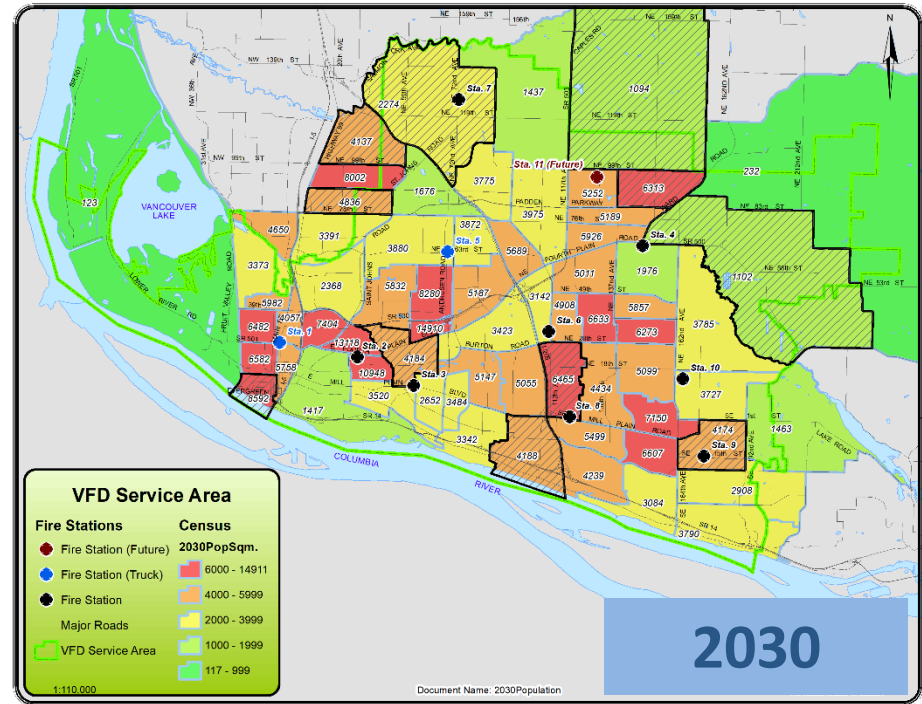
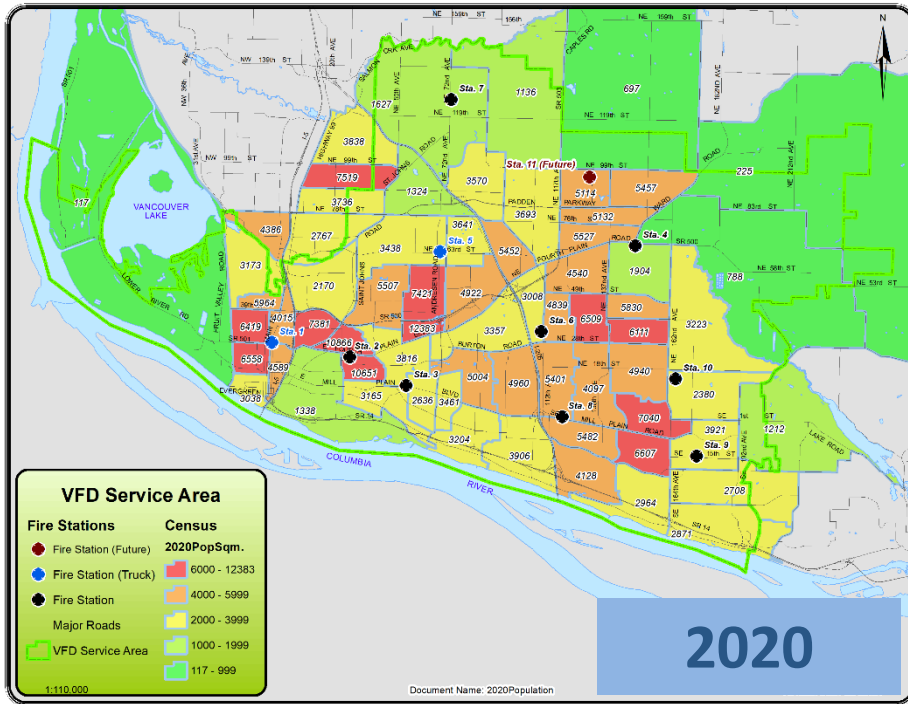
# VFD 2020 History of Call Volume and Staffing



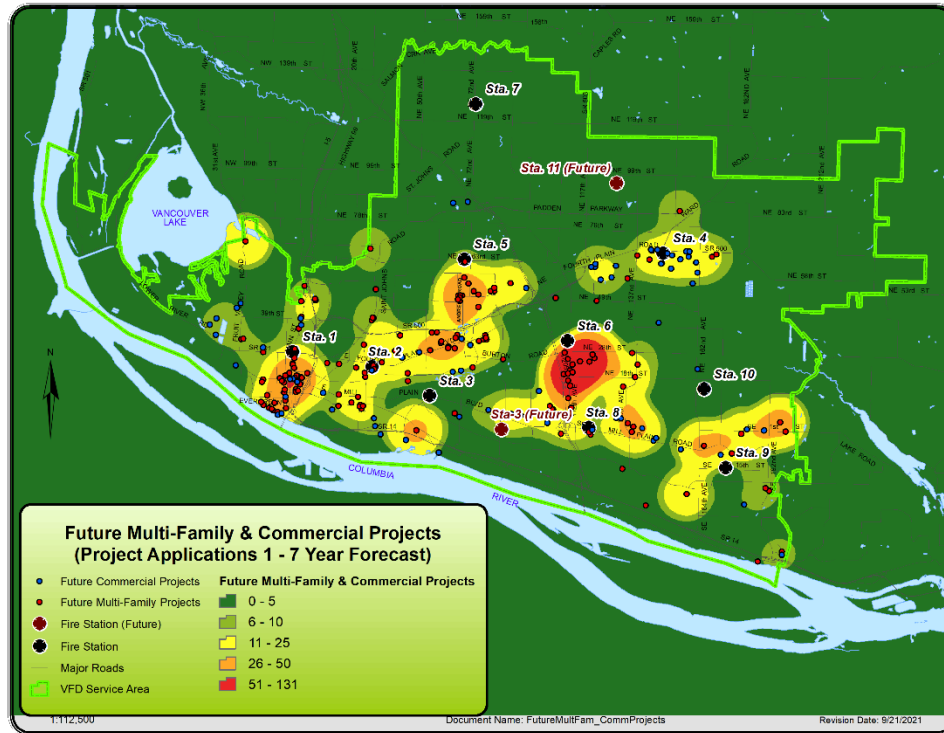
# VFD Service Area Past 5 Years Growth



# VFD Service Area Population Density



# VFD Service Area – Population Projections and Developments





# Plan to Address System Resiliency

- Current staffing levels: When VFD has one full alarm fire event along with other typical response incidents, there are only 2-3 units left in the system to cover the Vancouver service area.
- The Fire Department is under resourced to meet minimum service levels, with little capacity for expected city growth.
- Additional units are needed to meet demand.

# Plan to Address Firefighting Effective Force

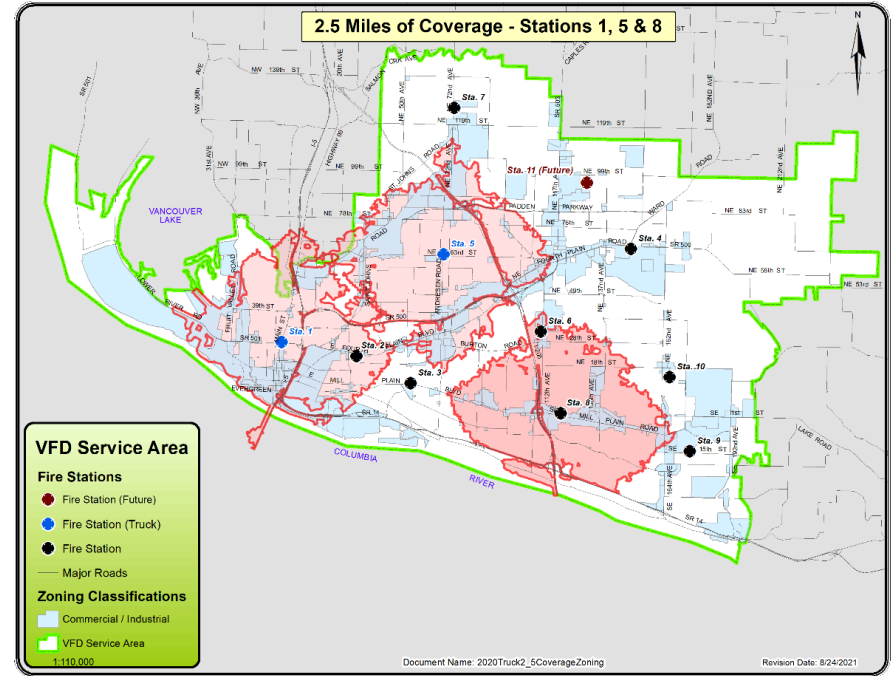
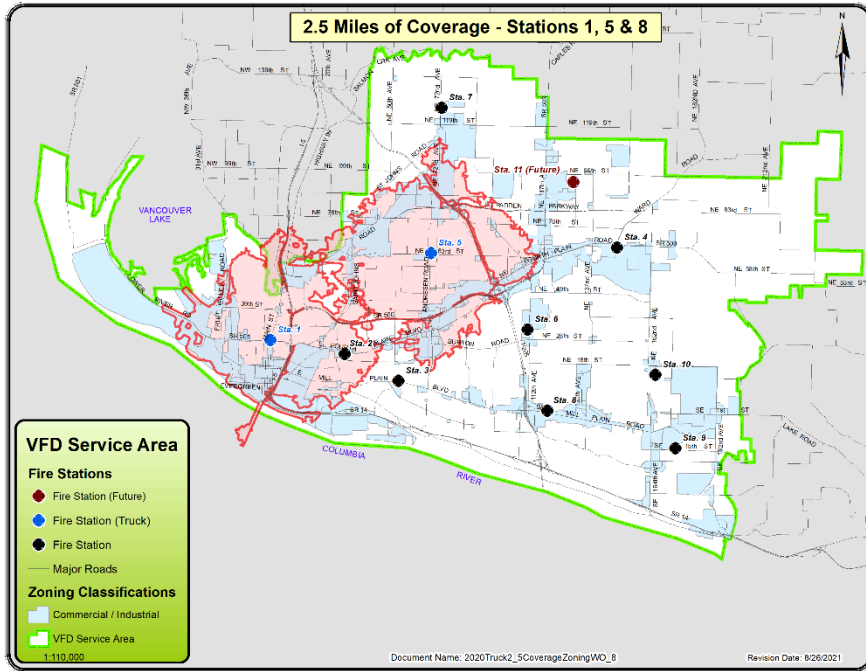
- NFPA recommends a minimum of 15 firefighters for a full alarm assignment.\*
- Current VFD Deployment to full alarm: 1 Battalion Chief, **4 fire engines** and 1 truck company = 17 firefighters
- The addition of squads is expected to decrease overall response times and keeps engines in service for other emergencies.

\*National Fire Protection Association is a guiding resource and provides best practices. Many jurisdictions do not meet the NFPA response standards.

# Plan to Address Truck Coverage

- Currently if we have one commercial fire in the VFD service area, both Trucks are committed. This leaves VFD vulnerable to other incidents requiring a truck response.
- NFPA recommends 1 truck for every 2.5 miles of coverage within a city.
- The addition of a truck at Station 8 will:
  - Reduce full alarm response time on the east side of the VFD service area
  - Add capacity and resiliency to the system

# VFD Truck Response Coverage



# Options

## Reinforce current system

- Heavier reliance on AMR + VFD relationship
- Strained LOS
- Lower cost/user pays

## Expand VFD resources

- Improved LOS
- Stronger position to serve future growth
- Increased cost requiring substantial new revenue
- Debt financing required
- District #5 partnership implications

## Expand and Enhance VFD Resources & Resilience

- Improved LOS
- Stronger position to serve future growth
- Improved facility resilience
- Increased cost requiring substantial new revenue + debt
- District #5 partnership implications

# Recommendation – Expand VFD Resources

- Three(3) – Squads
  - 24/7 staffing of 2 fire personnel
  - Proposed locations Stations 2, 5, 9
- One(1) – Truck
  - 24/7 staffing of 4 fire personnel
  - Proposed location Station 8 (requires station remodel to accommodate)
- Three(3) Support staff FTE positions to support
  - Training Support
  - Administration Support
  - Logistics Support
- Station alerting enhancements to improve turnout times

# Recommendation - Daily Minimum Staffing

Fire Department Daily Minimum Staffing					
Current		Station 11		Proposed	
Resources	Personnel	Resources	Personnel	Resources	Personnel
10 Engines	30	11 Engines	<u>33</u>	11 Engines	<u>33</u>
2 trucks	8	2 Trucks	8	3 Trucks	<u>12</u>
2 - 10hr Rescues*	2	2 - 10hr Rescues*	2	3 Squads	<u>6</u>
Battalion Chief	2	Battalion Chief	2	Battalion Chief	2
<b>Totals</b>	<b>42</b>		<b>45</b>		<b>53</b>

\* (2 peak hour rescue units with 4 personnel at 10 hour shifts roughly equates to 2 personnel for 24 hours)

# Financial Considerations – elements of cost

- Capital costs
  - Apparatus
  - Station remodel
- Ongoing operating costs
  - Personnel
  - Equipment
- Debt Service
- Fire station #11 operating costs (2025 and beyond)



# Financial Considerations – projected costs

Cost Component		One-time Capital Costs (assumes debt financing)	TOTAL ANNUAL COSTS (including annual debt service)
Operating Costs	Staffing and other operating costs		8,992,000
	Vehicle- related annual costs		285,000
Capital Costs	Squad vehicle (1 new)	302,000	
	Ladder truck company (1 new)	2,156,000	
	Station 8 remodel	3,151,000	
	Debt Service to fund Equipment and Facility Remodel		692,000
Station 11	On-Going Funding to Sustain beginning in 2025 Staffing and other operational costs		2,823,000
	TOTAL PROJECTED ANNUAL COST		12,792,000

**Total costs represent all-inclusive costs to the system, using 2025 as an example of a full year**

# Financial Considerations – funding options

- Levy lid lift
  - Single year
  - Multi year
- Fire Impact Fee
  - Rate
  - Applicability
  - Eligible expenses
- District #5 partnership considerations

# Summary

- Vancouver Fire has very well-trained firefighters and support staff that provide excellent service to the citizens in the VFD service area.
- Significant investment in fire department system improvements are needed to meet current and future demand.
- This recommendation is to address current system vulnerabilities.
- Ongoing strategic planning is needed to further guide future growth service models.

# Next Steps

- City Council direction on service level delivery.
- Further explore & mature funding options
  - Potential ballot 2022?
- Implement system improvements as resources allow.
- Continue to monitor and report system performance and look for improvement opportunities.
- Strategically plan for future growth and improvements.

# Questions and Discussion

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