

Schedule 1 to the Minutes of the
Community Safety Committee
meeting of Richmond City
Council held on Tuesday,
January 11, 2022.



**Police Communications Operations and 9-1-1 Update
SMT Meeting with CAO - January 11, 2022**

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E-Comm 9-1-1
Helping to Save Lives and Protect Property

Agenda

- Police Communications Operations
 - 2021 Pressures
 - Police Communications Operations Review
 - 2022 Levy
- NG9-1-1



E-Comm Background

- ❑ E-Comm has been providing 9-1-1, police emergency/non-emergency call taking and dispatch services since 1999.
- ❑ An initial base of agency partners (e.g. MetroVan RD for 9-1-1 call-taking, VPD and Highway Patrol) dispatch was expanded on substantially between 2011 and 2019 to include 9 out of 10 independent police departments as well as four large RCMP detachments.
- ❑ Critically, E-Comm's 9-1-1 call-taking responsibilities grew to answering 99% of all 9-1-1 calls made in B.C, making E-Comm a province-wide business.
- ❑ In 2020 E-Comm received and down-streamed 1.85M 9-1-1 calls, and we answered 564K police emergency calls and 668K police non-emergency calls on behalf of its agency partners.
- ❑ Since 2019, E-Comm supports all independent municipal police departments in B.C. with communication services, except the Nelson Police Department.



Two Major Service Challenges

1. Non-emergency call taking answer delays
 - ❑ Started to miss service targets periodically in 2017
 - ❑ Significant answer delays experienced in 2018/19, but less in 2020 due to COVID
 - ❑ Conducted fulsome Operations Review to understand root causes
 - ❑ Working with police leadership on re-structuring and re-funding of service
 - ❑ Short-term improvements will require significant investment in the next few years

Two Major Service Challenges

2. Delays to 9-1-1 answering

- New problem starting in later spring 2021
- Rooted in increased calls for Ambulance service and staffing shortage at BCEHS
- Working with BCEHS to address impact on 9-1-1 service



Service Delivery Challenges

- ❑ In the summer of 2018 E-Comm started to exhibit difficulties meeting its service level objectives for non-emergency call taking, leading to periodic excessive wait times for callers.
- ❑ E-Comm last updated agencies (and in some cases their Board) in late 2019 on its assessment of the issues and its plans to address them, including an analysis of call-taker capacity shortfall in communication centre.
- ❑ In the autumn of 2019 E-Comm first presented a high-level capacity remediation plan to police chiefs and committed to a more robust analysis (“Operations Review”) to ensure a solid understanding of all underlying issues and proposed measures.
- ❑ E-Comm requested additional call-taker funding from all its police partner agencies for 2020 and made plans to conduct the Operations Review that year, but both objectives were deferred largely due to the COVID-19 pandemic.
- ❑ E-Comm re-grouped to launch the Operations Review in late 2020 in multiple stages.

Operations Review Purpose and Scope

Purpose

- ❑ Present a comprehensive information set concerning E-Comm's operational performance challenges
- ❑ Present the data for key indicators over several years (trending)
- ❑ Identify root causes for service performance challenges
- ❑ Demonstrate and quantify E-Comm's need for additional funding
- ❑ Show that the full range of issues has been explored and that there will be no further "catch up" funding requests as a result of areas of work not reviewed

Scope

- ❑ Police call-taking, dispatch and CPIC reporting activities in the Lower Mainland and on Vancouver Island
- ❑ Direct support activities such as supervisory/management, workforce planning/scheduling, training and mentoring, policy and application support services



Operations Review Approach

Phase 1: September – December 2020:

E-Comm operations self-study and internal operations review report. Delivered internally by E-Comm, with guidance on content and structure from our police partner agencies.

Phase 2: January – April 2021:

External validation of internal review findings. Conducted by PricewaterhouseCoopers “PwC” with representatives of E-Comm police partner agencies and qualified external contributors.

Phase 3: April – September 2021:

Engagement with municipal finance departments in 2022 pre-budgeting process. Funding proposals focused on addressing staffing and capability gaps identified in Phase 2 report.

Phase 4: June – December 2021:

Develop and present multi-year plan to deliver services to expectations through review of public service needs, changes to our traditional operations practices and further funding

Operations Review Process – Phase 2

- ❑ Independent analysis of data by PwC; applied expertise in call centre management by using established tools and process evaluation techniques to determine needs as defined by our unique environment.
- ❑ Generated a “Current State Report”.
- ❑ PwC engaged with a Steering Committee comprised of senior police representatives on behalf of the agencies served by E-Comm and two of E-Comm’s board members.
- ❑ PwC finalized, across six broad categories, a series of recommendations that are designed to drive greater operational efficiency and maturity.
- ❑ PwC facilitated discussions with the E-Comm Executive Leadership Team to prioritize these recommendations.
- ❑ PwC’s final draft review and report delivered to E-Comm April 9, 2021.
- ❑ E-Comm shared outcomes with BC Association of Chiefs of Municipal Police and RCMP senior leadership.



Recommendations are summarised in 6 core groups

1. Rightsize

2. Build enterprise capabilities

3. Build core capabilities

4. Operational realignment

5. Optimise efficiencies

6. NG9-1-1 readiness

E-Comm is significantly understaffed. To hit service level and occupancy targets (while factoring in shrinkage) the ECC needs to significantly increase FTE in Call Taking and recruitment into Dispatch. Specifics of the increase and initiatives which could reduce the delta are outlined in Section 1.

Also, to support the recommendations in Section 2, E-Comm needs to allocate dedicated resources to manage change in the ECC. Resource 'rightsizing' should be considered on a 'per-project' basis depending on size and complexity.

E-Comm does not have the ability to evolve in its current structure. To drive change and optimise successfully, E-Comm needs to:

- Build foundational enterprise capabilities that will support operational planning, change and project management.
- Develop interactive governance frameworks with functional level Agency resources to collaboratively solve issues and build confidence.

We are recommending a 'start-small', 'finish-big' approach to developing critical enterprise capabilities and operational maturity.

Core capabilities of Workforce, Reporting, Training, and Quality Assurance are not evolved to support ECC needs.

E-Comm needs to:

- Configure NICE WFM.
- Enable Real-time Adherence.
- Start gaining efficiency from NICE WFM.
- Enhance Reporting.
- Modify and improve existing training.
- Design and deliver additional training.
- Develop proactive Quality assurance.
- Build soft-skills and competencies with Supervisors, Team Leads, Mentors and Managers.

There is a gap between the core services the ECC is designed to support and the services agencies expect the ECC to deliver.

E-Comm needs to reset service expectations by:

- Developing service catalogues and analysing service ability based on current funding.
- Re-baselining services with agencies.
- Developing data and reporting capabilities to track and forecast future shifts in demand.

Once resources are right-sized, the ECC will be in a position to leverage capacity and begin to optimise efficiencies across operations.

E-Comm should focus on:

- Review of Dispatch and strategies to reduce Dispatch demand.
- Review Call Taking for staffing and channel optimisations.
- Review technology for near and long term call deflection and self-serve techniques to lower the volume of contacts connecting to live Agents.
- Review future-state tech options for optimisation (inc. NG9-1-1).

Next-Generation 9-1-1 (NG9-1-1) will become a reality over the coming few years. While E-Comm is developing its operational maturity model it is crucial that NG9-1-1 readiness is a fundamental, line-of-sight consideration.

E-Comm should prepare for the transition by:

- Developing operational requirements that drive technical solution design.
- Creating a business readiness roadmap to support effective transition.
- Reviewing 'future-state' operating model options to drive optimisation efficiencies.

While ramping up, innovations can drive significant FTE reductions

**FTE requirements will change over time based on evolving demand & changing needs.*

ILLUSTRATIVE



** Current topic of E-Comm Board discussion as the main opportunity to ensure emergency service targets are maintained.

Key Considerations for E-Comm and its Partners

- ❑ **Ability To Fund:** all cities and police agencies are under pressure to maintain or even reduce current funding levels – are the levels of additional funding calculated by the Operations Review team realistically obtainable?
- ❑ **E-Comm’s Core Business:** E-Comm’s mission is to deliver exceptional emergency communication services. We need an active discussion about the place of non-emergency call-taking, as this is the source of greatest inefficiencies and new funding needs.
- ❑ **It’s not just about call taker FTEs:** E-Comm has a multi-year deficit of staff support investments, such as in mental health support, recruiting, training, mentoring and development. Before funding increases are reflected in additional call-takers and service level improvements, we need to invest in these support structures to sustain the change.
- ❑ **Radical Transformation / NG911:** to make the scope of services successful and support our employees’ well-being we need to drastically re-think our service delivery model.

Next Steps

- ❑ E-Comm will complete the Phase 4 deliverables and report on a multi-year plan for investment and transformation to return service levels to current targets.
- ❑ We will also demonstrate scenarios of investment need if some current key assumptions are changed, e.g. about service targets and service scope.
- ❑ E-Comm's Board of Directors will discuss the options at a strategic retreat in late December and provide guidance to management about the preferred future scenario of scope, service model and funding need.
- ❑ The Executive Team will subsequently be in touch with agencies and cities to discuss the Board's direction and work on a mutual multi-year implementation plan.
- ❑ E-Comm's Board of Directors has approved a 2022 funding increase to allow us to begin our foundational build-out.
- ❑ We are happy to come back later in the year or early 2022 to continue the discussion.



E-Comm 9-1-1

Dispatch Levies Summary

LMD Police

Call-Taking Increase based on Call Volume Allocation

Agency	2022 BUDGET						2022 vs 2021	
	2021 Approved Budget	2022 Forecast per SFP	2022 Allocate CT Increase %	2022 Allocate CT Increase\$	2022 BUDGET APPROVED	\$ Increase vs PY	% Increase vs PY	
Richmond RCMP	2,646,320	2,818,330	8.4%	320,550	3,138,880	492,560	18.6%	
TOTAL								

¹

¹ Allocation is based on pro-rata of current total dispatch levy for Richmond RCMP, R43, Squamish and Ridge Meadows as consolidated queue representing 21.2% of the total. Additional work to be done that may result in the % allocation for these 4 agencies shifting between themselves.



Next Generation 9-1-1

E-Comm 9-1-1
Helping to Save Lives and Protect Property

NG9-1-1 Summary

- ❑ A federally-mandated (CRTC) requirement for 9-1-1.
- ❑ Modern, resilient technology that will enable the 9-1-1 system to adapt to new technologies including voice, Real Time Text, images and video, as well as enhanced location information.
- ❑ Phased implementation, beginning in 2022 and ending in 2025.
- ❑ Requires telecommunications carriers as well as Primary and Secondary Public Safety Answer Points (PSAPs), like E-Comm, to update technology.
- ❑ Will require changes to call-handling procedures, dispatch and possibly police operating procedures.
- ❑ Costs to regional districts and municipalities is being developed – will be levied in 2023.
- ❑ Argument for provincial government role, including standards and funding.

What is NG9-1-1?

- A federally-mandated, complete modernisation of Canada's 30-year-old 9-1-1-1 telecommunications technology network, as operated by the telcos and used by E-Comm and other PSAPs.
- A set of functional improvements such as exact location determination, ability to transfer emergency calls across Canada, and sending texts to 9-1-1 operators.
- A platform for a wide range of further possible emergency response functionalities, which over time can improve:
 - diversity-specific responses;
 - health condition-specific responses (e.g. for mental health); and
 - greater service equity for rural and remote communities, including Indigenous communities.



Key NG9-1-1 Technology Milestones

- NG 9-1-1 voice service launch – March 1, 2022
- Ability to send texts to 9-1-1 made available by telcos – July 1, 2023
- Decommissioning of old 9-1-1 networks – March 4, 2025

NG9-1-1 Service Cost Impacts

- E-Comm incurring costs of technological change, not yet assessing operations impact
- Starting levy increase in 2023, more detailed numbers in mid-2022
- NG9-1-1 will impact 9-1-1 call downstreaming to municipal police and fire departments



Opportunities from NG9-1-1

- Improved public safety:
- Enhanced coordination between PSAPS
- Enhanced coordination between PSAPS and downstream agencies
- Richer information for 9-1-1 operators and downstream agencies
- New options for mental health and social emergency services
- Improved support for Indigenous communities and diverse populations
- Improved provincial management information opportunities

Risks to Successful NG9-1-1 Rollout in B.C.

Time is of the essence:

- The tight timelines for change recently announced by CRTC will require quick action by multiple stakeholders.

It's difficult:

- The technologies are new and require provincially-consistent practice standards, information formats, system integrations and operational process changes to be agreed, developed, tested and rolled out.

B.C. is complicated:

- Policies and standards are legally owned by over 100 regional districts, independent municipalities and indigenous nations.
- Service providers such as TELUS, E-Comm and the RCMP must reach agreements for service with all of them in very limited time.

Recommended Action

Establish a provincial-level 9-1-1 authority for policy and standards of service:

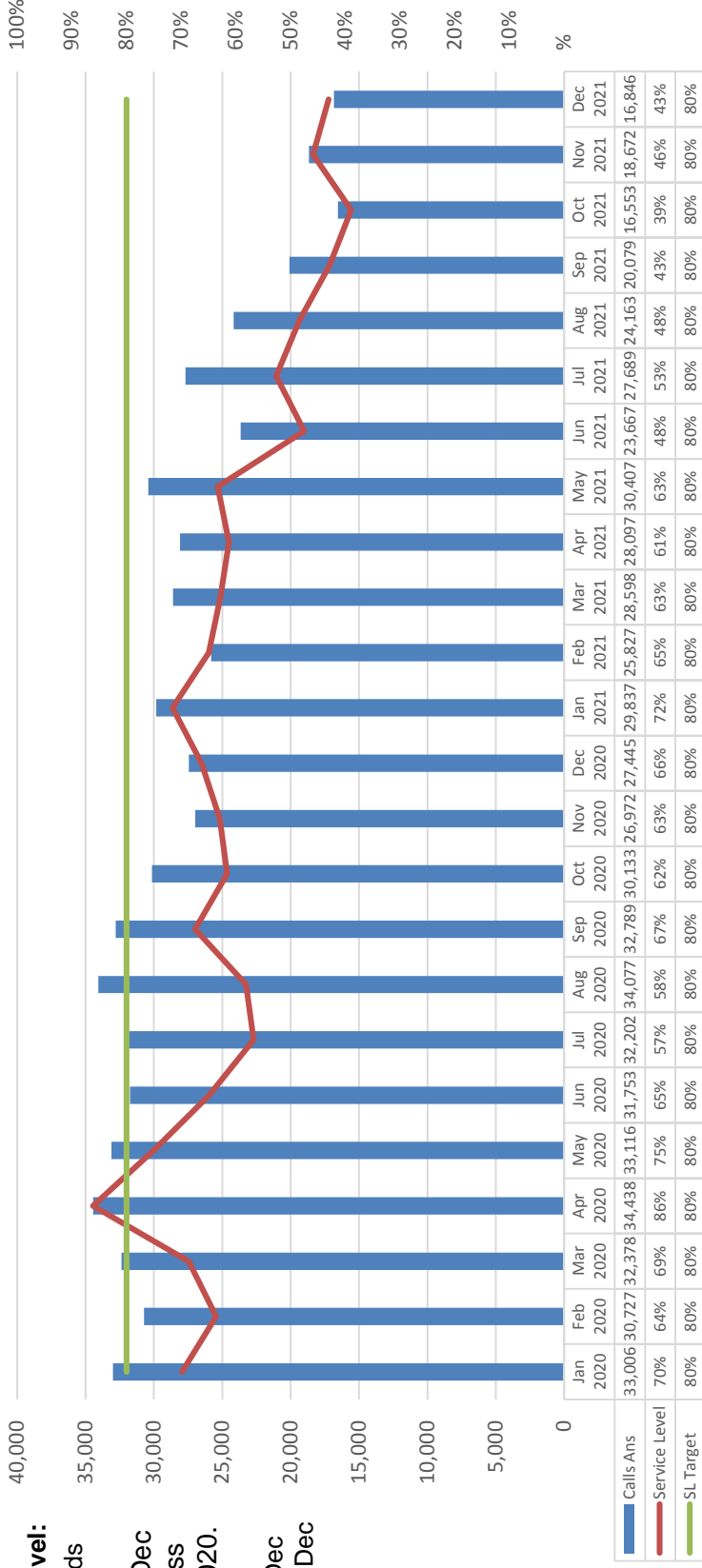
- Relieve all 27 regional districts, which are currently responsible for policy setting, to create more a consistent service and provide more equitable support for communities;
- Include consistent guidelines to ECC operators in police, fire and ambulance to help ensure a safe technical change-over to NG9-1-1; and,
- Develop and steward a provincial roadmap to take full advantage of NG9-1-1 opportunities that can improve emergency communication services for all British Columbians.
- Similar to Technical Safety B.C. in terms of mandate and governance.
- Additional funding to establish the NG9-1-1 service and integrate additional responder options.



APPENDIX “A”
Police Non-Emergency Call Statistics

LMD Non-Emergency Service Levels – 53.5% YTD Dec 2021 (66.5% YTD Dec 2020)

LMD Non-Emergency Calls Answered and Service Level to December 31, 2021

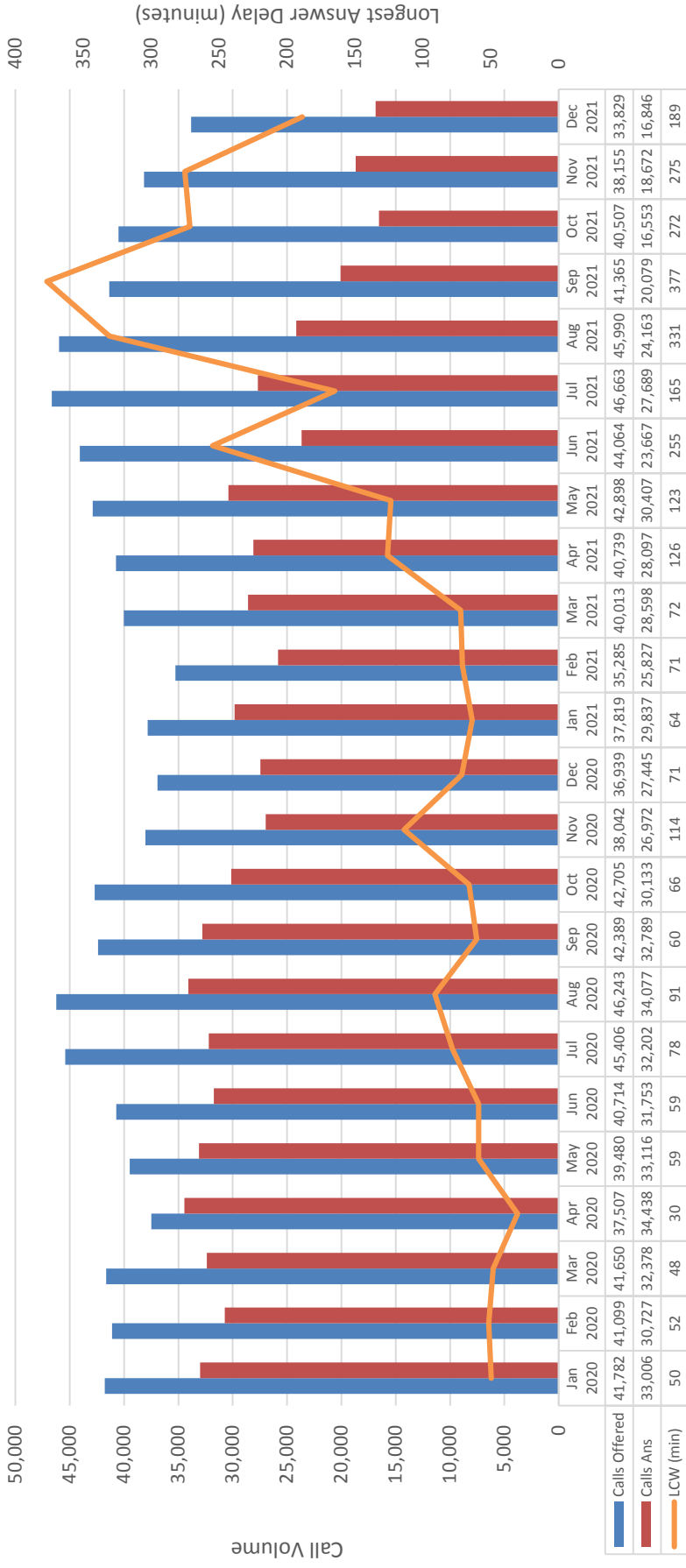


Target Service Level:
80% / 180 seconds

Calls offered in Dec 2021 is 8.4% less than from Dec 2020.

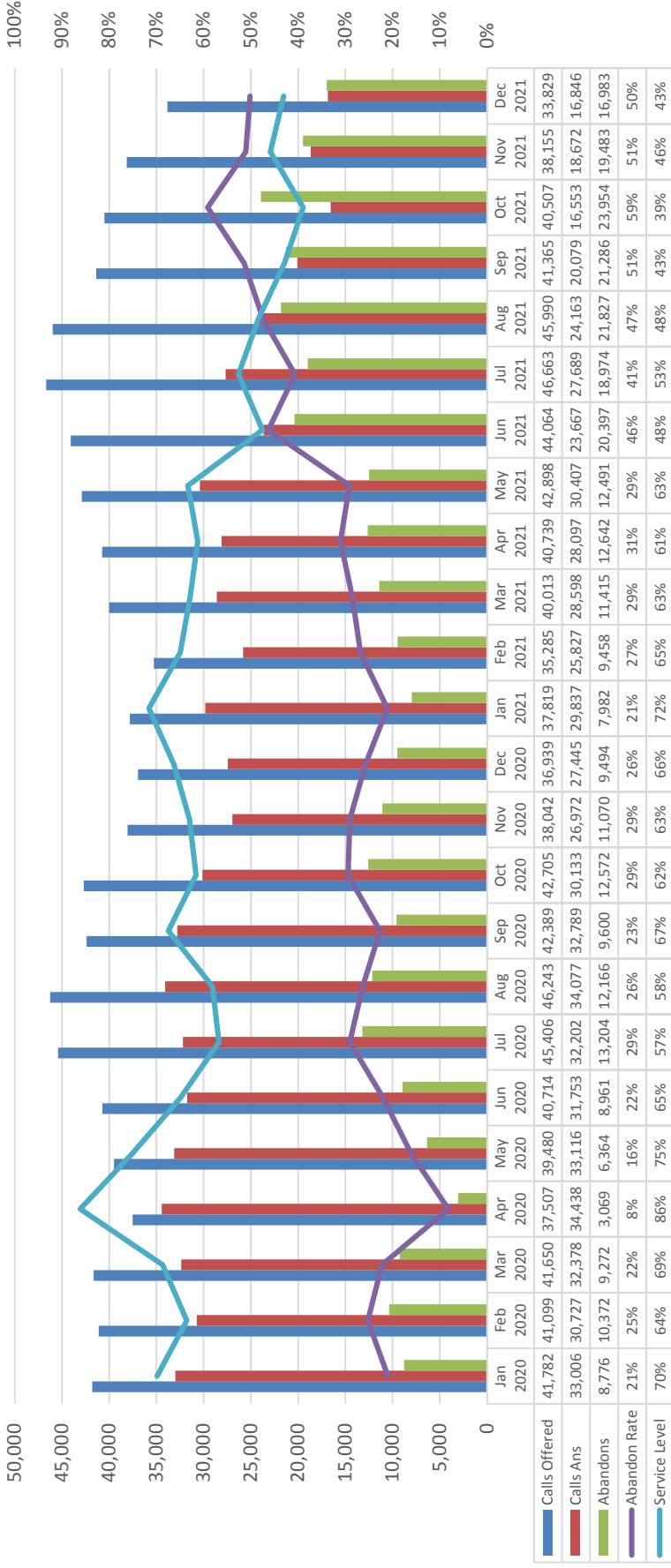
AHT: 474.3s in Dec 2021 vs. 436.7s in Dec 2020

LMD NE Longest Call Waiting – 2021 YTD trend



LMD NE Volume/Abandonment/SL – 2021 YTD trend

ECLMD NE Abandon Rate & Service Level



A night scene featuring an ambulance and a fire truck with their emergency lights flashing. The ambulance is on the left, and the fire truck is on the right. The scene is dark, with the primary light sources being the red and blue emergency lights of the vehicles. The ambulance has the number 62760 and the word 'AMBULANCE' visible on its side. The fire truck has a 'FIRE' sign on its side. The overall atmosphere is one of urgency and emergency response.

APPENDIX “B” 9-1-1 Call Volumes and Downstream Wait Times

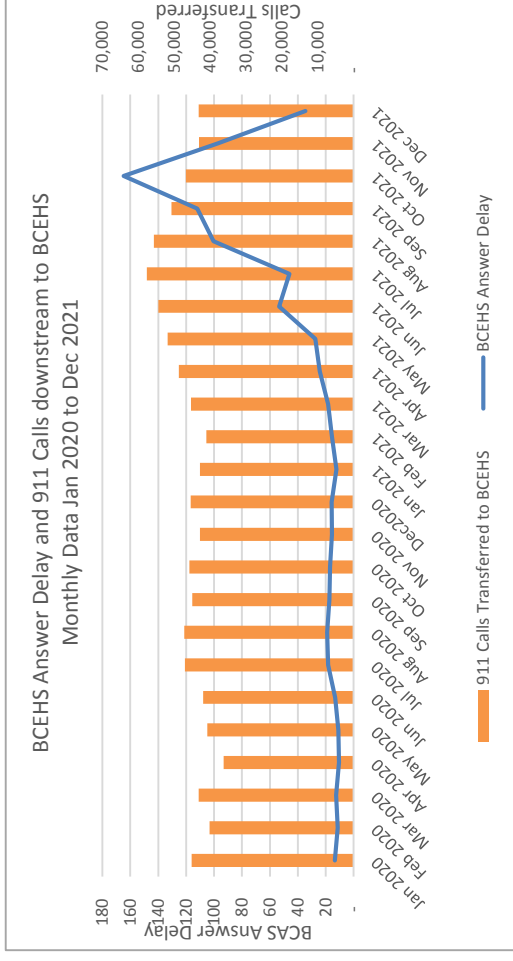
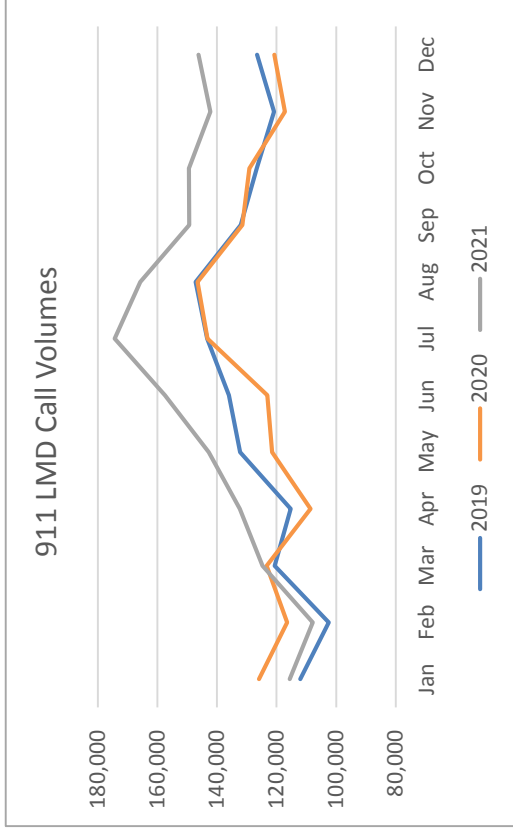
9-1-1 Volumes and Downstream Wait Times

2. Delays to 9-1-1 answering

- New problem starting in later spring 2021
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- Working with BCEHS to address impact on 9-1-1 service



911 Volumes and Downstream Wait Times Increased



- All regions 9-1-1 call volumes have increased 13.3% over 2020 from 2021 Jan-Dec
- BCEHS volume has been significantly increasing over the last 2 years, 11.7% higher (Jan-Dec) when compared to 2020 and 27.7% higher when compared to 2019.

- 2019 avg. answer delay was 15 secs
- Since Apr 2021, answer delay has exceeded 20 secs with Oct 2021 at 165 secs; The frequency and duration of long delays have reduced in December.

2 new processes implemented: Priority queue and abandoned calls form to reduce 9-1-1 backlog or impact to the public and E-comm call takers. If call volumes and wait time persist, 9-1-1 Service level performance will be at risk without additional 9-1-1 resources or a revision in policy or target. Further efforts underway with BCEHS to identify efficiencies.

