EDMONTON POLICE SERVICE

REPORT TO THE EDMONTON POLICE COMMISSION

DATE: **2020 February 20**

SUBJECT: **2019 Q4 Reporting of EPS Response Time and Dispatch Call Volumes**

RECOMMENDATION:

This report be received for information

INTRODUCTION:

The Edmonton Police Commission receives semi-annual statistical reporting on EPS dispatch call levels and response times.

For this reporting period, the scope includes:

- 2009-2019 statistics for dispatch calls and response time patrol metrics
- Figures broken down by priority level 1 through 5
- City-wide and patrol division results
- Upcoming developments in patrol with linkages to patrol response times

EPS is currently changing various strategic planning activities to a 3-year time line, including the Strategic Plan, Corporate Business Plan and Operational Plans. There is a need to revamp EPS's performance framework, rooted outcomes, and how this is provided to EPC for clarity and oversight.

Further discussions will take place to clarify what EPC's performance reporting requirements are and whether this information can be consolidated with other reporting. This includes dispatch calls and response time data,

CONCLUSION:

For review and discussion.

ADDITIONAL INFORMATION ATTACHED:

- Attachment 1 – Statistical Reporting: Dispatch Call Volume & Response Times, 2019

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Jan 31/2020

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Chief of Police

Chief of Police: _____

Date: _____

Edmonton Police Service

Dispatch Call Volume & Response Times - 2019 Year-end Reporting

Submitted by:

Strategy & Performance Branch,
Value & Impact Division

Date: February 6, 2020

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Executive Summary

The following report provides the latest statistical results to the Edmonton Police Commission for two of EPS's traditional metrics, Dispatch Call Volume and Response Time Performance.

Dispatch Call Volume measures calls generated by the public which receive an on-scene police response, and as such is a useful workload indicator of patrol. Likewise, Response Time Performance measures the percentage of the time that this workload is responded to within a targeted amount of time. This report provides annual data from 2009 to 2019, with the following key 2019 results:

Dispatch Call Volume

- EPS attended 173,587 calls, a **2.2% increase** compared to last year. This corresponded to 3,700 more calls.
- This growth is line with what one would expect from annual population growth in Edmonton.
- Recent and long-term growth in Dispatch Call Volume has been exclusively in low-urgency P4 and P5 calls.
- Notable increases in call volume from 2018-2019 has been concentrated in **Theft from Vehicle**, **Trespassing**, **Fraud**, and **Mental Health Act Complaints**.
- Notable reductions in call volume from 2018-2019 have been concentrated calls related to **vehicle collisions**, **alarms**, and **escorting youth to the Edmonton Young Offenders Centre**.

Response Time Performance

- 69.8% of **Priority 1** calls were responded to within 7 minutes, compared to 72.4% in the same period in 2018.
- 90%+ of **Priority 2** and **Priority 3** calls are responded to within targeted time (12 and 17 minutes, respectively).
- 66.9% of **Priority 4** calls were responded to within 40 minutes, slightly below 67.7% in 2018.
- 45.8% of **Priority 5** calls were responded to within 3 hours, compared to 51.1% in 2018.

Patrol Division Response Times

- For P1 response times, South West and South East are the most challenged in meeting the 7-minute target (at 46% and 59% of the time, respectively). Downtown is the only division that consistently meets the 7-minute target, currently at 84%.
- Response Time Performance varies significantly across patrol divisions; P1 response time targets were met across divisions 46-84% of the time, while P5 response time targets were met 37-61% of the time.

Significance of Results

- EPS is challenged in meeting its response time targets, most acutely when it comes to responding to "non-urgent" priority 5 calls. While the public safety consequences of this result for P5 calls is minor, it nonetheless can inconvenience the public and could impact their perceptions and confidence in the EPS.
- Addressing response times sustainably in the long-run will ultimately require addressing the root-causes that are generating these calls for service.

Purpose of Report

The purpose of this report is to provide to the Edmonton Police Commission the latest available data for two primary metrics for EPS patrol: Dispatch Call Volume and Response Time Performance. This reporting is provided to the EPC semi-annually, and has taken place since late 2013.

The scope of this reports includes:

- Dispatch Call Volume and Response Time Performance data
- City-wide and patrol-division results
- A breakdown of Dispatch Call Volume by Event Type Groups
- A breakdown of results by each priority response level (1-5)

While this report puts the spotlight on our current ability to quickly respond to events, it should be recognized that this is simply one outcome of many which are desirable when responding, managing, and resolving the policing emergencies that callers depend on us for.

Measurement Definitions

Dispatch Call Volume

Dispatch Call Volume measures calls made by the public that are classified with a priority level from 1-5, which are dispatched to EPS patrol and receive an on-scene police response. This is a core indicator of the workload that patrol faces, and trends in this area is by far the strongest determinant impacting the availability of patrol to quickly respond to policing emergencies and non-emergencies.

Response Time Performance

Response times are measured as the time it takes for EPS to dispatch, travel, and arrive on-scene to an event. Response Time *Performance* measures the percentage of the events where this occurs within a targeted threshold of time, which varies depending on the priority level of the call.

Timely responses to high-risk policing emergencies are desirable because they have the potential to prevent or lessen harm to victims or property, increase the odds of successfully locating and apprehending a fleeing criminal suspect, and may result in better collection of evidence for follow-up investigation. It should be stressed that these benefits are highly dependent on the circumstances of a given policing event, and are more relevant for high-risk and high-urgent calls. The vast majority of policing events EPS respond to can be considered "low-urgent" or "non-urgent" and wait times for these types of events is more of a matter of inconveniencing the public, rather than generating any real adverse public safety outcomes.

EPS has established timed targets specific for each of its Priority 1 – 5 levels. A brief description of each priority level, and the associated response time target, is shown in Figure 1.

Figure 1 – Police Priority Level Classification

| Priority Code	Definition/Example	Response Time Performance Target (80% of the time)
0	**Officer in Distress / Officer Needs Assistance**	
1	**In Progress Person At Risk** - Response will likely prevent or reduce harm to a person e.g., assault with a weapon *in progress*	Dispatch Time + Travel Time **≤ 7 minutes**
2	**In Progress Property At Risk** - Immediate response will likely prevent or reduce the further loss of property e.g., a neighbor observing an auto theft *in progress*	Dispatch Time + Travel Time **≤ 12 minutes**
3	**Just Occurred** - Immediate response will increase the likelihood of locating a suspect e.g., mischief that occurred very recently	Dispatch Time + Travel Time **≤ 17 minutes**
4	**The Nature of the Occurrence is Time Sensitive** e.g., a shoplifter is in-custody with security and is cooperative	Dispatch Time + Travel Time **≤ 40 minutes**
5	**General Service** - The nature of the offence is not time sensitive e.g., a business finds that they were vandalized the night before (i.e., the absence of *in progress* or *just occurred*)	Dispatch Time + Travel Time **≤ 180 minutes**
6	**The Occurrence is Minor in Nature** (e.g.) Bylaw	
7	**Hold Event** – A P5 general service call placed on hold until the EPS and the caller are both available to make contact. e.g., a business vandalism right before the business closes, which is put on-hold until next morning	
9	**Broadcast** - Information only	

City-wide Results

Priority 1 – 5
- Overall Dispatch Call Volume (P1-P5) **increased 2.2%** in 2019, compared to the same period in 2018. This corresponded to 3,700 additional calls.
- Overall Response Time Performance (P1-P5) fell to **61%**, compared **63.3%** in 2018.
- Overall Response Time Performance is driven by response time trends in in P4 and P5 call categories, as these calls make up more than 92% of total call volume.
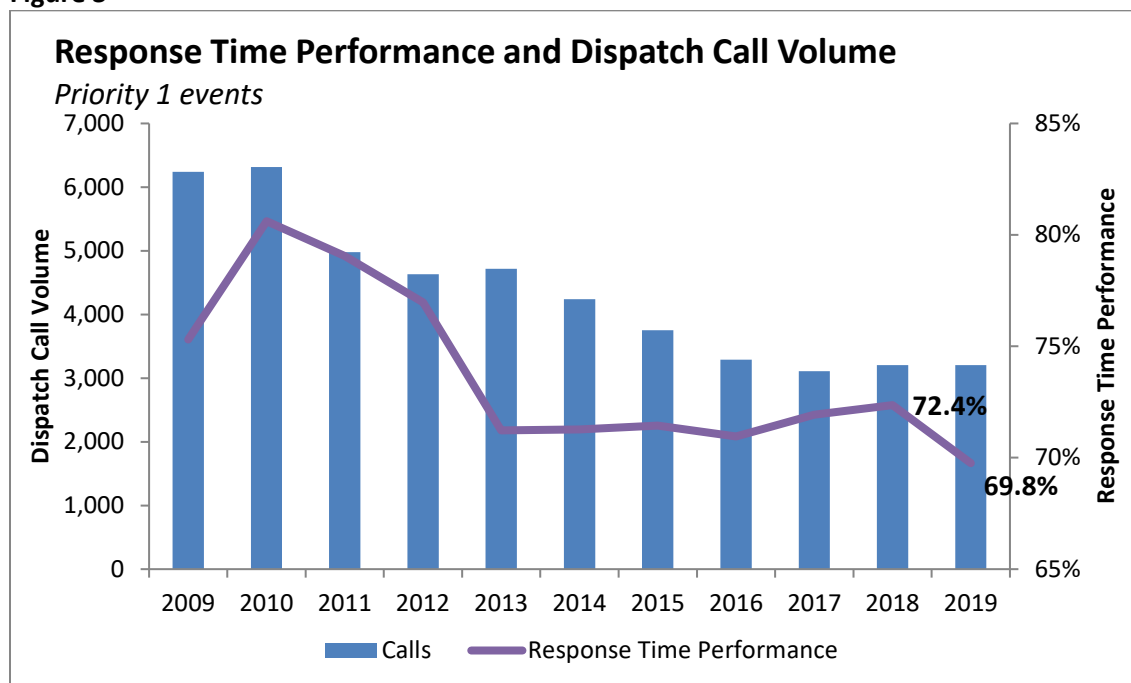
Figure 2

Response Time Performance and Dispatch Call Volume
*Priority 1-5 events*
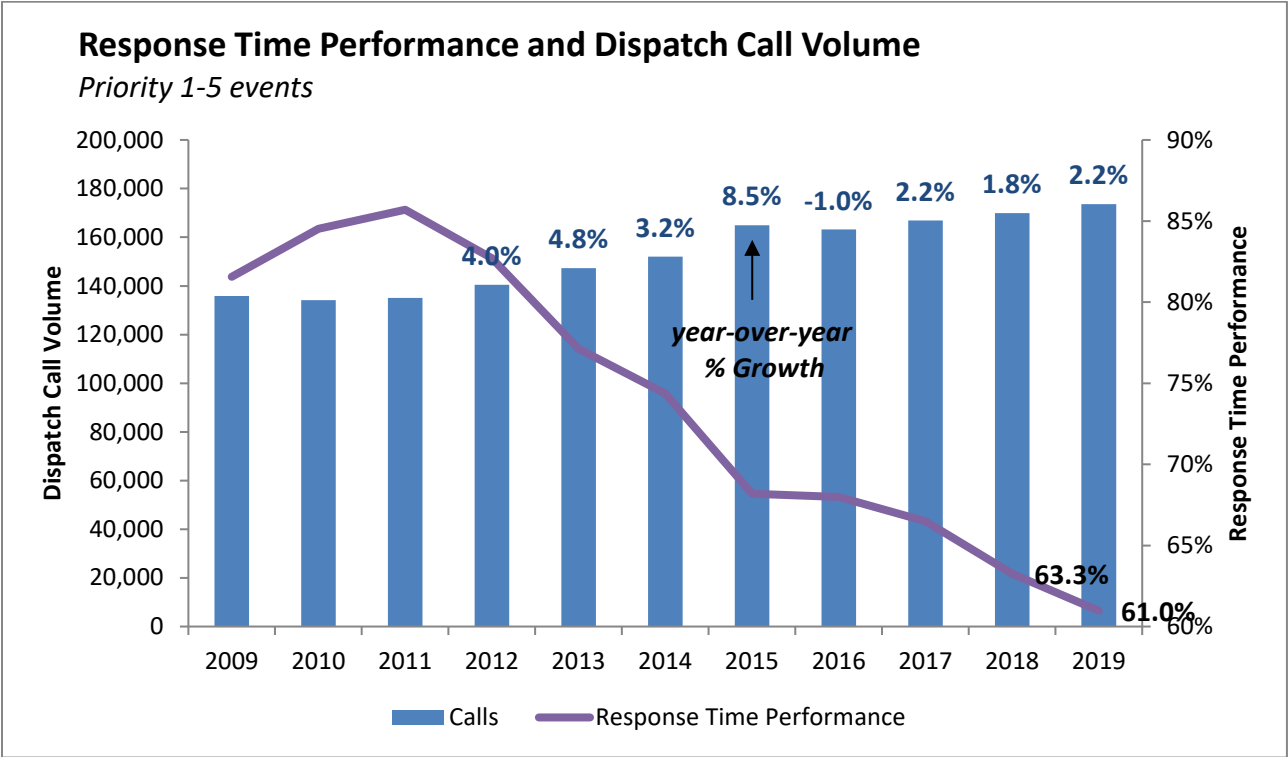
- P1 calls, at 3,204 in 2019, are unchanged compared to 2018
- P1 Response Time Performance fell to 69.8%, compared to **72.4%** in 2018

Figure 3

Response Time Performance and Dispatch Call Volume
Priority 1 events

- P2 calls decreased **2.1%** year-over-year (y/y).
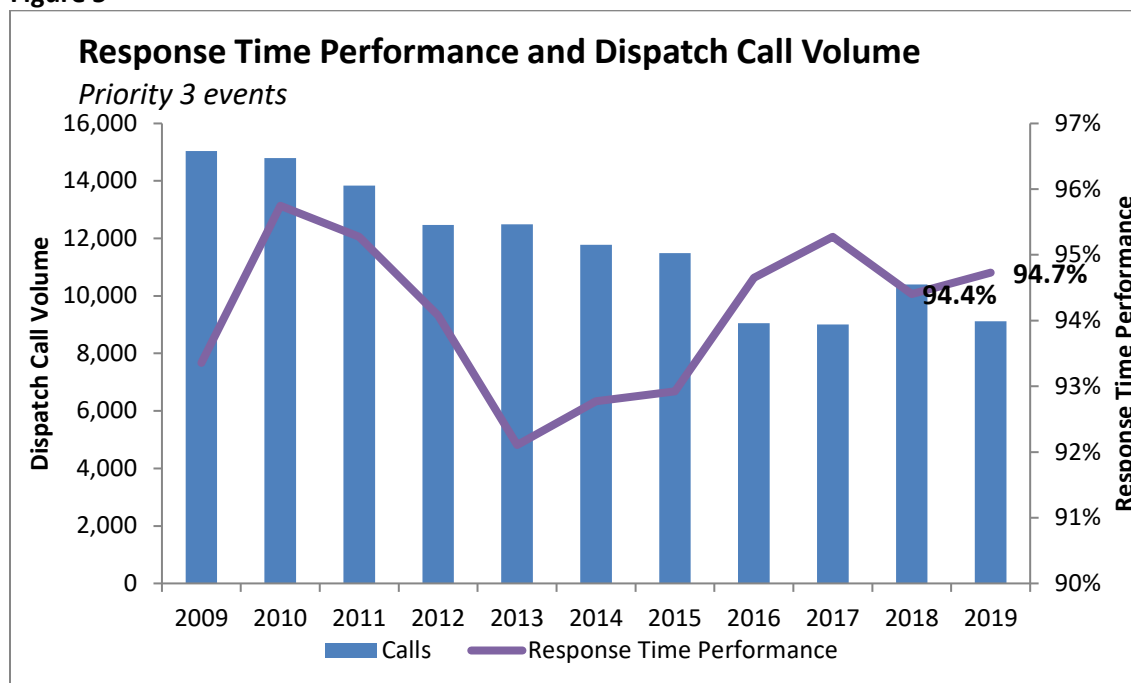- P2 Response Time Performance fell modestly to **91.7%**, compared to **94.9%** in 2018.

Figure 4

Response Time Performance and Dispatch Call Volume
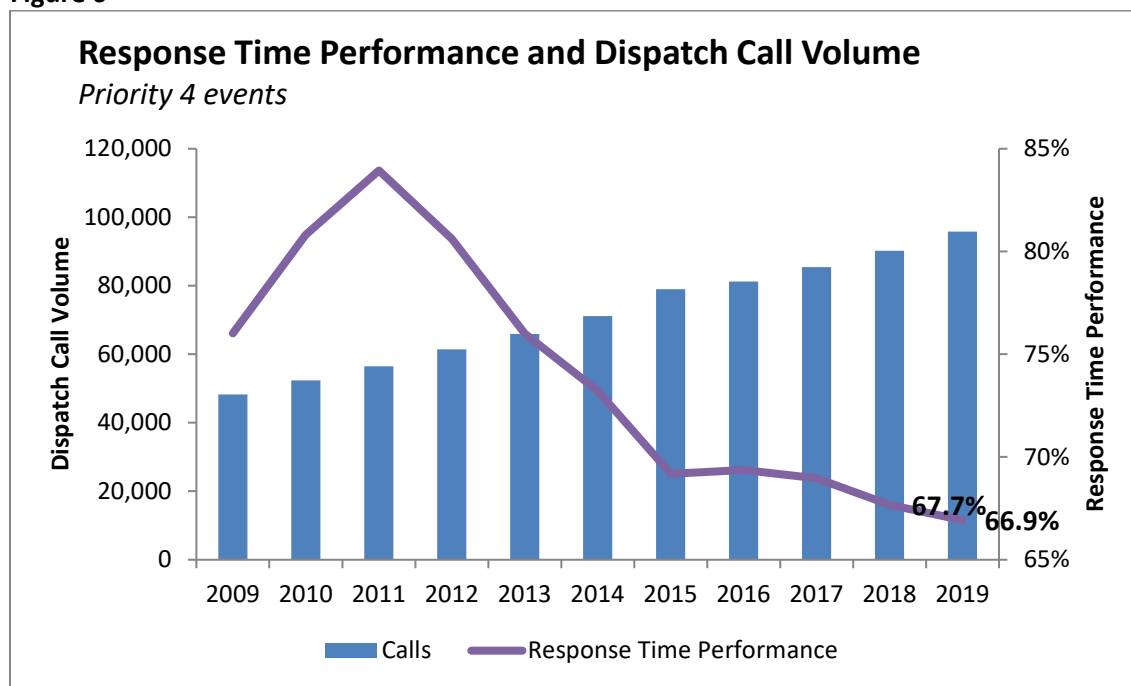*Priority 2 events*
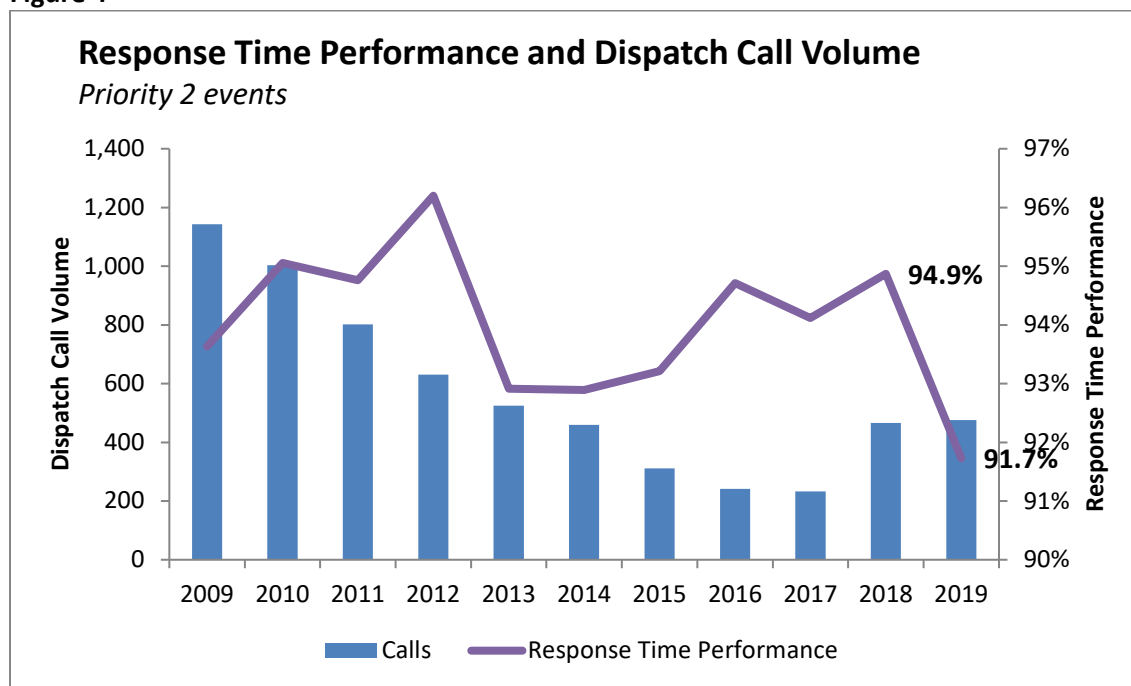
- P3 calls decreased 12.3% y/y.
- P3 Response Time Performance was **94.7%**, compared to 94.4% in 2018.

Figure 5

- P4 calls increased **6.0%** compared to 2018.
- P4 Response Time Performance increased slightly to 66.9% compared to 67.7% in 2018
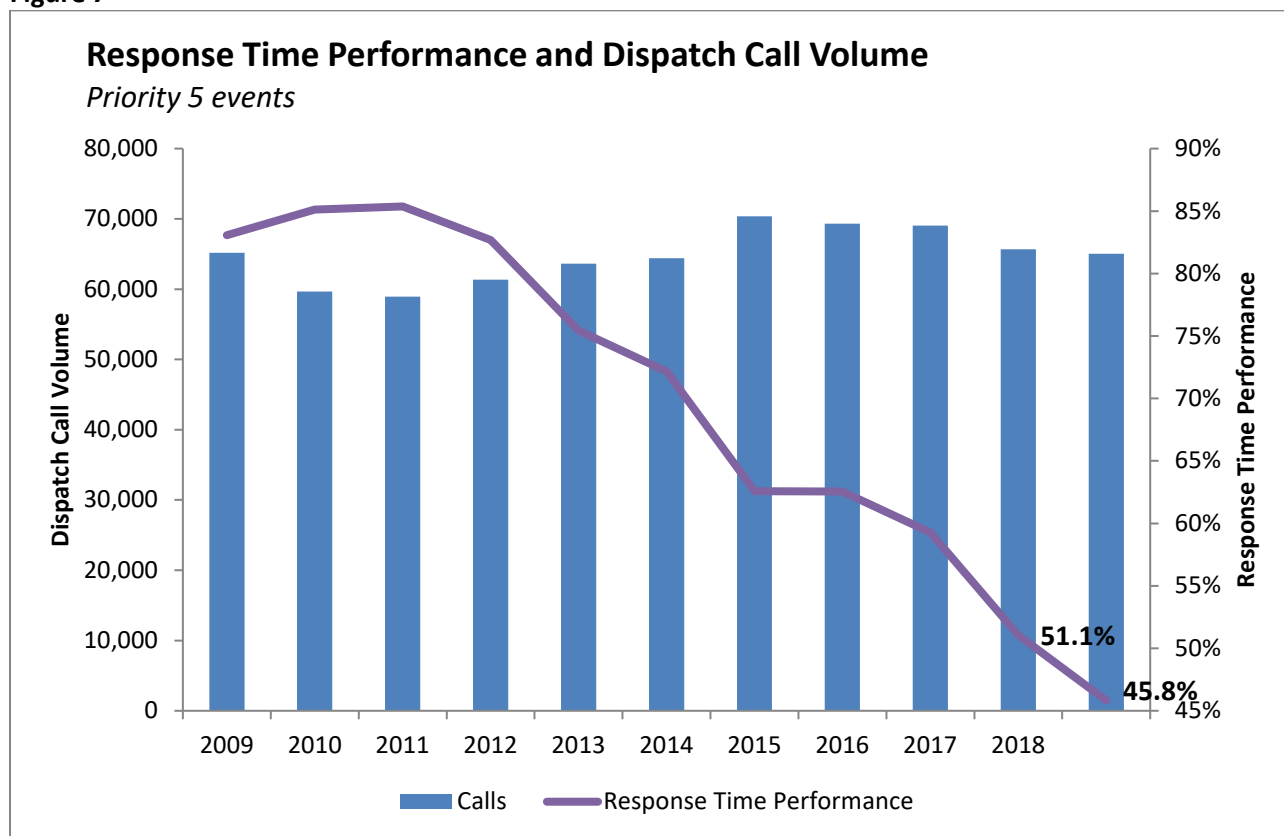
Figure 6

- P5 calls dropped 1% compared to 2018
- P5 Response Time Performance fell to **45.8%** compared to **51.1%** in 2018.

Figure 7

Response Time Performance and Dispatch Call Volume
Priority 5 events

Breaking Down Dispatch Call Volume

Given the complexity of policing, there is a naturally a large inventory of CAD event codes (160+) that capture the varying types of events that EPS responds to.

Figure 8 breaks down the 173,587 dispatch calls EPS attended in 2019 by one category layer.

Figure 8 – CAD Event Group Call Volume

CAD Event Groups	2018	2019	% Change Y/Y
ASSAULTS	5076	5231	3.1%
BREAK & ENTER	6835	6574	-3.8%
DISORDER	42706	45624	6.8%
FAMILY VIOLENCE	12525	12692	1.3%
OTHER	86079	87281	1.4%
ROBBERIES	1270	1272	0.2%
SEXUAL OFFENCES	1169	1196	2.3%
THEFT FROM VEHICLE	2139	2768	29.4%
THEFT OF VEHICLE	1727	1722	-0.3%
THEFT OVER $5,000	399	403	1.0%
TRAFFIC	9962	8824	-11.4%

Also relevant is Figure 9, which selects out 9 CAD event codes that have shown the largest changes in call volume over the 2018-2019 period.

Figure 9 – Select CAD Event Codes with large yearly variance

CAD Event Codes	2018	2019	% Change
Vehicle - Mischief or Theft From	3487	4401	26%
Trespassing	2609	3283	26%
Fraud Related Calls	4130	4759	15%
Mental Health Act Complaints	4167	4726	13%
Trouble with Persons	25384	27820	10%
Check on Welfare	5656	6169	9%
Vehicle Collision Related Calls	7629	6534	-14%
Alarm Related Calls	1544	1294	-16%
Escorting Youth to cells at the EYOC	943	557	-41%

Patrol Division Response Time Results

Response time results can be considered for each of EPS's six patrol divisions. When staffing for each division is balanced against each division's unique call workload, call complexity, and geography, response times can be expected to be relative consistent across the city. When large and persistent deviations in response times span across divisions, it warrants consideration and discussion if patrol resources need to be reallocated more equitably.

In summarized form, Figure 8 displays for each level the Response Time Performance for each division, covering the 2019 period.

Figure 8
Response Times Performance, %, 2019

	P1	P2	P3	P4	P5
Downtown	84	96	97	72	50
North East	74	94	95	65	40
North West	76	93	95	67	47
South East	59	92	94	73	61
South West	46	81	90	64	38
West	69	97	96	61	37

Green: ≥ 80% of events met timed target
Orange 70 – 80%
Red: < 70%

Observations:

- **Downtown** division has historically been the least challenged in meeting its response times. However, Downtown saw considerable deterioration in 2019 in its P4 and P5 Response Time Performance. This can be attributed to a significant 7% increase in call volume year-over-year for the division.
- **South West** division has the slower P1-P5 response times overall
- **West** division has the slower P4 and P5 response times than other divisions, but mid-range P1 response times.

The following next five figures provide, by priority level, 2011 to 2019 Response Time Performances for each patrol division:
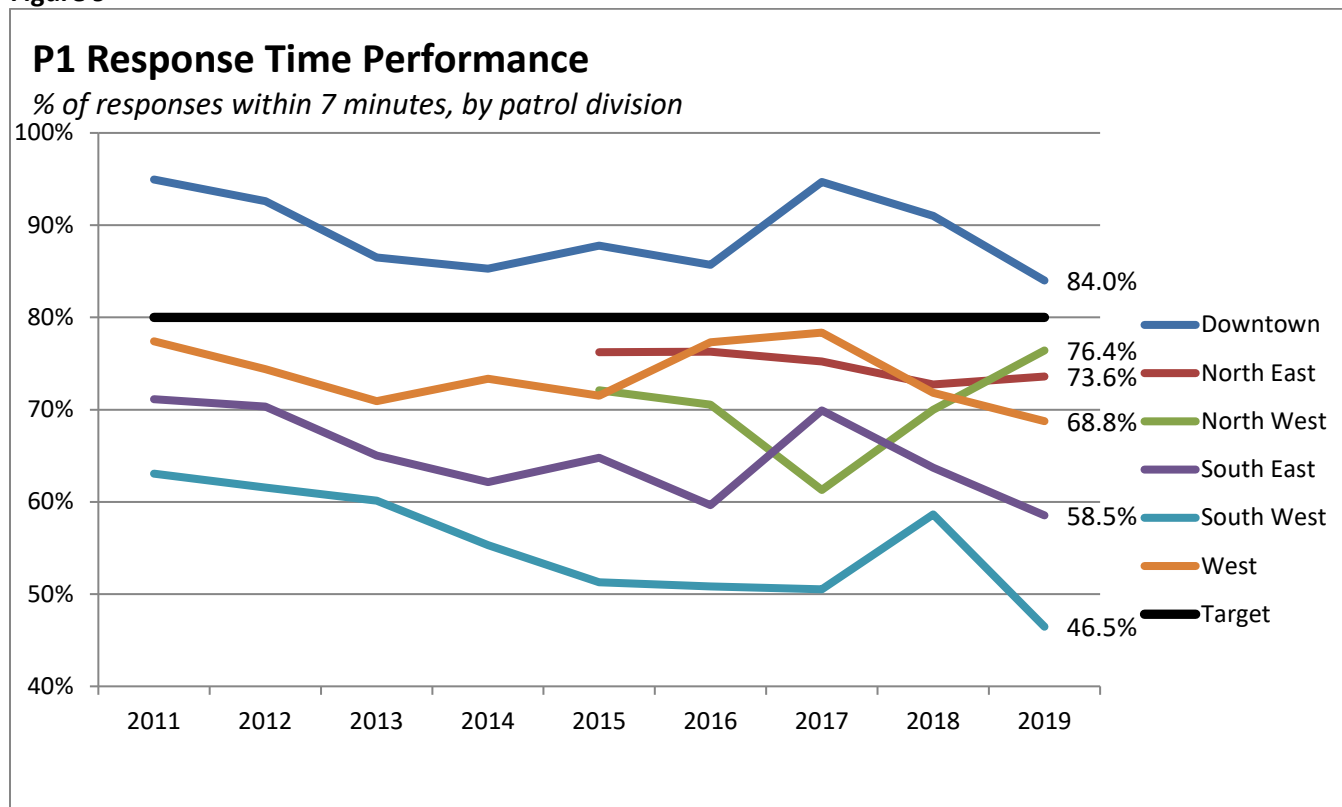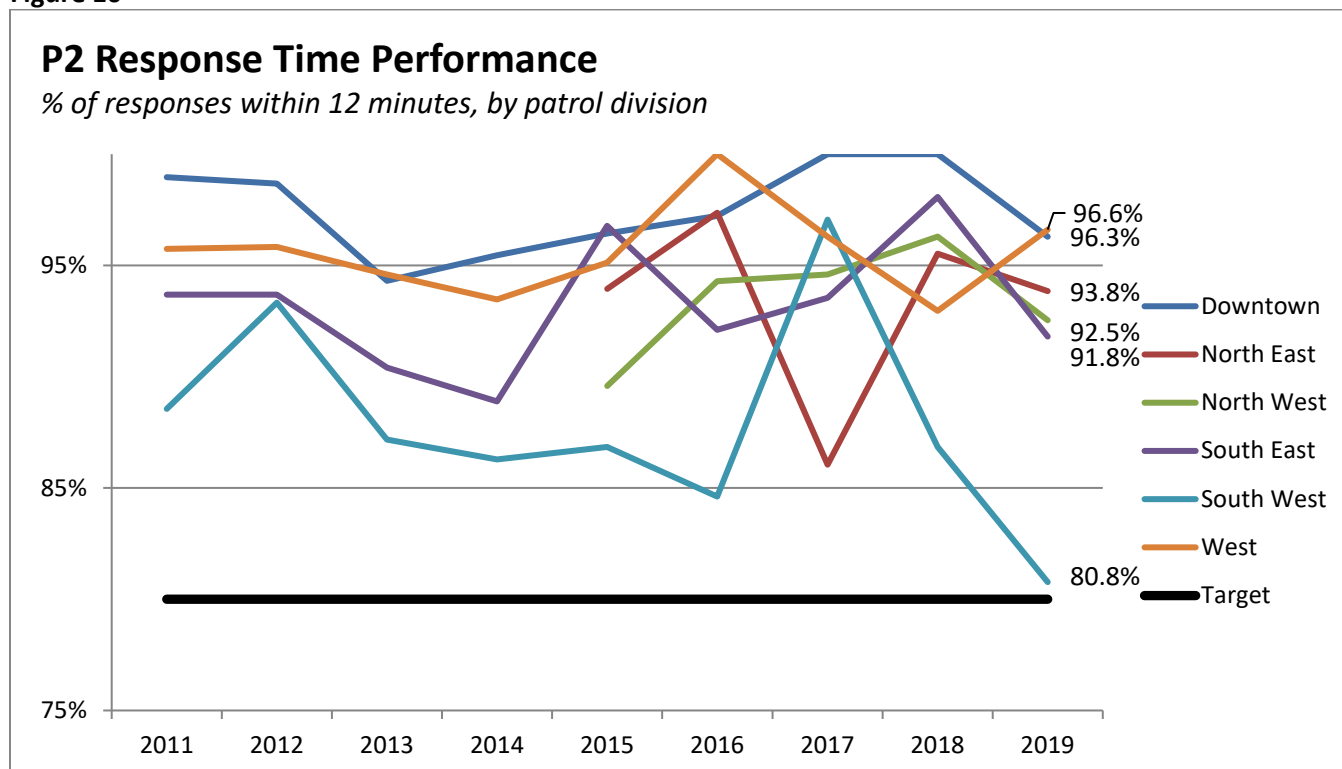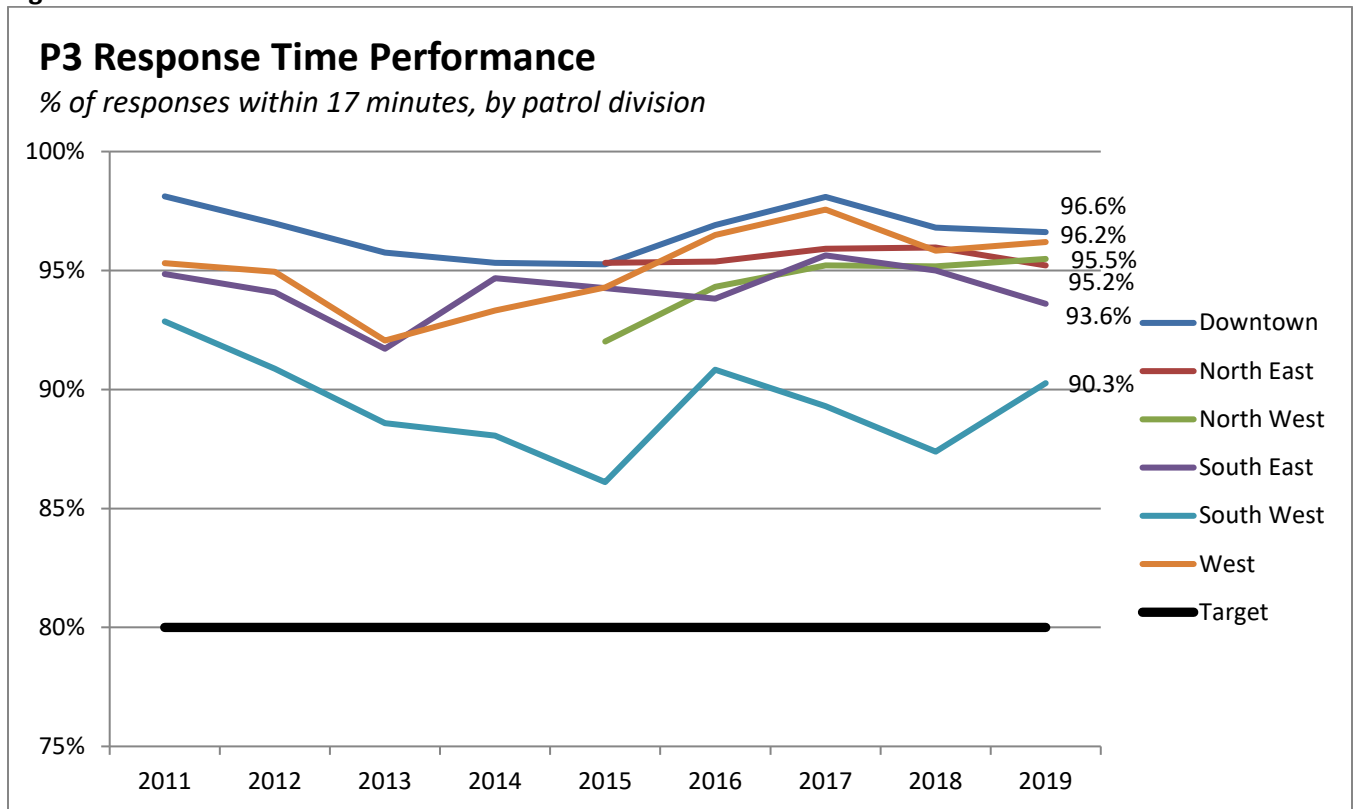
Figure 9

P1 Response Time Performance
% of responses within 7 minutes, by patrol division

Data labels (2019): Downtown 84.0%, West/North West 76.4%, North East 73.6%, 68.8%, South East 58.5%, South West 46.5%

Legend: Downtown, North East, North West, South East, South West, West, Target

Figure 10

P2 Response Time Performance
% of responses within 12 minutes, by patrol division

Data labels (2019): 96.6%, 96.3%, 93.8%, 92.5%, 91.8%, 80.8%

Legend: Downtown, North East, North West, South East, South West, West, Target

Figure 11

P3 Response Time Performance
% of responses within 17 minutes, by patrol division

Figure 12

P4 Response Time Performance
% of responses within 40 minutes, by patrol division

Figure 13

P5 Response Time Performance
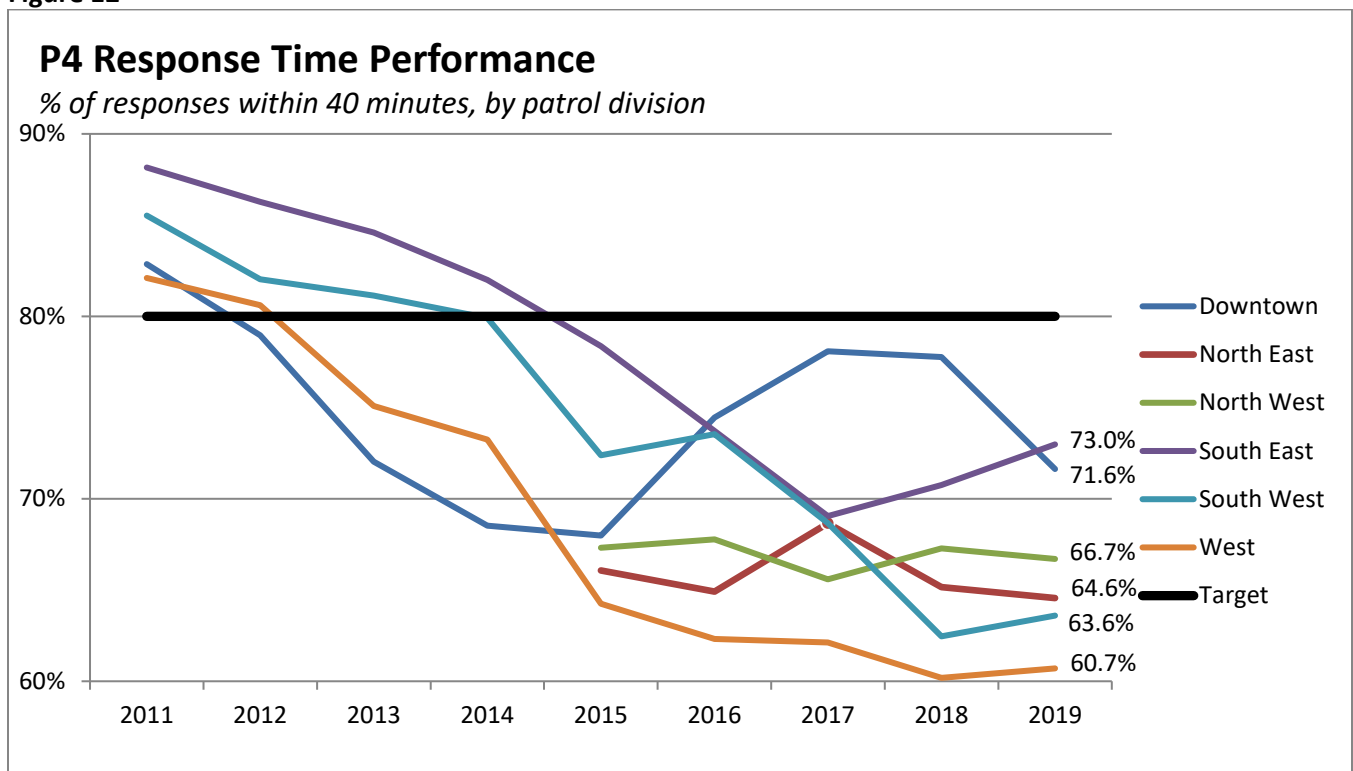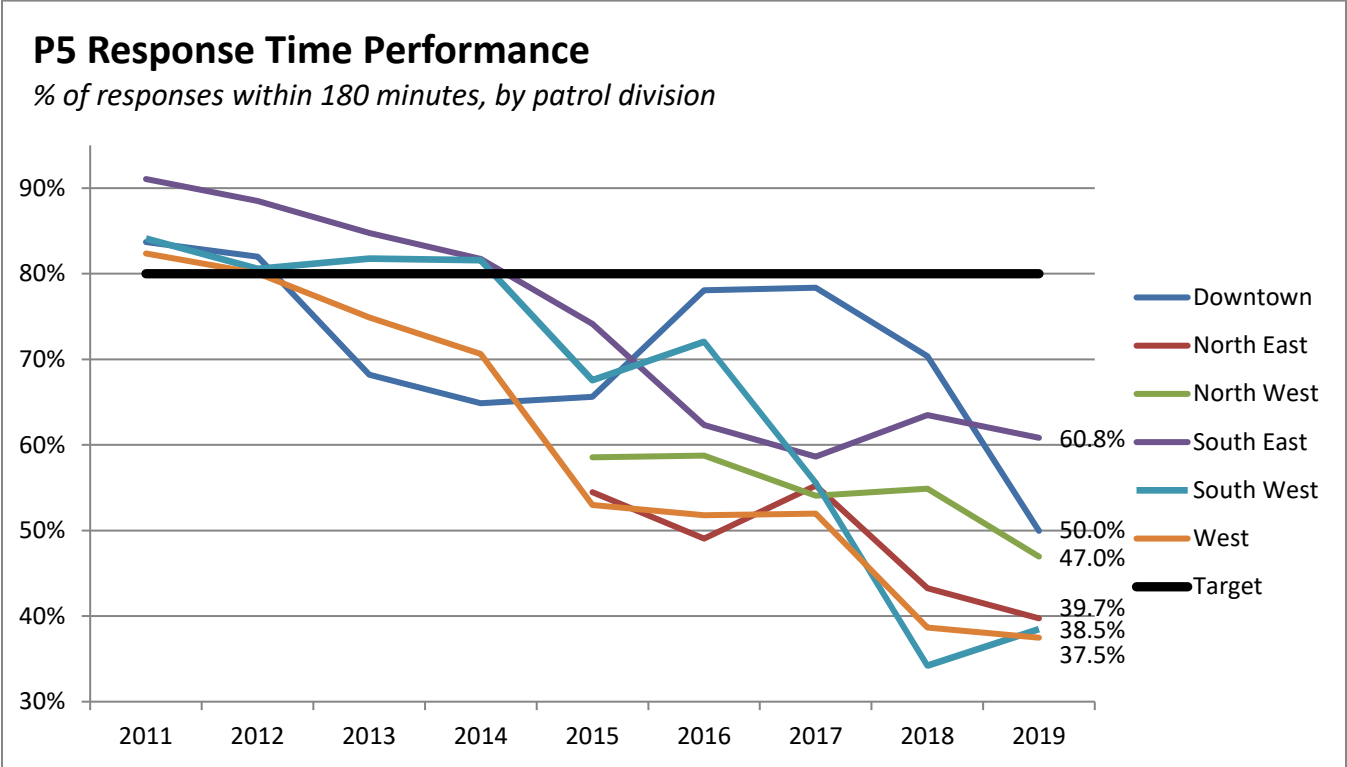
% of responses within 180 minutes, by patrol division

Conclusion

EPS faces ongoing challenges in meeting its response time targets, especially when it comes to responding to "non-urgent" priority 5 calls. The public safety consequences of these non-urgent calls are relatively minor, but they do nonetheless inconvenience the public and can test their patience and confidence in the EPS.

Poor response times are a consequence of multiple years of rising call volume that has exceeded the capacity of patrol members to respond promptly. Addressing the shortages of patrol through a focus on demand reduction is one of the core outcomes being sought with EPS's recent organizational review - Vision 2020. The EPS will be spending the next several years implementing the 50+ recommendations arising from Vision 2020. As progress is made in modernizing the organization and reducing policing demand, improved response times will follow.
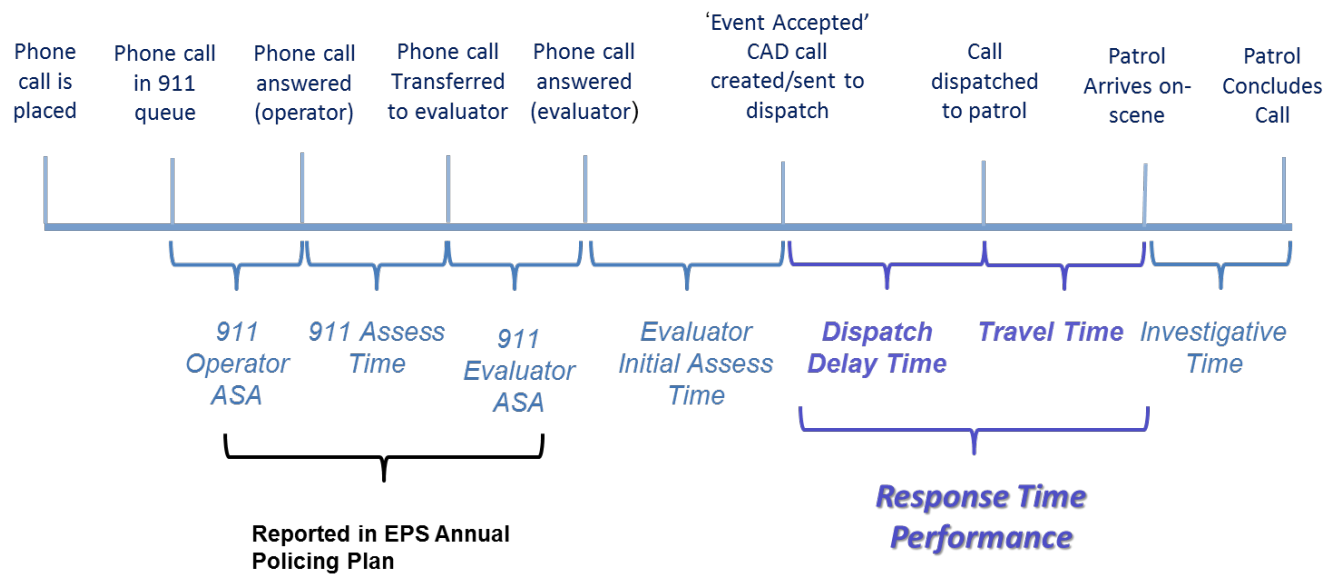
Appendix

Work Flow for 911 Emergency Calls

Figure 14 shows the primary stages that take place from intake of a police 911 call, to the point of patrol arriving on-scene and concluding the call. Correspondingly, this shows the starting point for when response times are calculated, and what aspects of the call fall outside of that calculation.

Figure 14

Measuring Methodology for Dispatch Call Volume and Response Time Performance

The counting of Dispatch Call Volume, as reported here, includes or excludes calls (CAD events) based on the following attributes:

Calls included	Calls excluded
• Priorities 1-5 codes • On-view calls (calls with less than 30 second response times) • A police unit arrived on-scene	• Pre-empted calls (an on-route police unit was redirected and did not arrive on-scene) • Follow-up calls (follow-up investigations beyond the initial on-scene response) • Traffic Stops • Priority 0 (officer in distress), 6 (bylaw), 9 (general information)

Likewise, the calculation of response times is based on the criteria of Dispatch Call Volume, with the following additional restrictions (*italicized*):

Calls included	Calls excluded
• Priorities 1-5 codes • A police-unit arrived on-scene	• Pre-empted calls (an on-route police unit was redirected and did not arrive on-scene) • Follow-up calls (follow-up responses beyond the initial response, for investigative purposes) • Traffic Stops • Priority 0 (officer in distress), 6 (bylaw), 9 (general information) • *On-view calls (calls with less than 30 second response times)* • *Calls where the final priority level was more urgent than the original*

2019 EPS Response Time and Dispatch Call Volumes

Presented to the Edmonton Police Commission

February 20, 2020

Deputy Chief Al Murphy, Community Policing Bureau

Director Lori Solon, Strategy and Engagement Branch

Key Results

- EPS has seen a 2.2% increase in calls since 2018

- Since 2013, patrol response times have declined

- This continued into 2019, with an overall drop in response time performance of 2.3% from 2018

Take away

- Increase in calls in line with population growth

- The increase in call volume is from:

  - Theft from vehicle

  - Trespassing

  - Fraud

  - Mental health complaints

- P2 and P3 are still meeting their target, despite a decrease in performance

- P1, P4 and P5 response times continue to drop

Response Time Summary – Divisions

Response Times Performance, %, 2019

	P1	P2	P3	P4	P5
Downtown	84	96	97	72	50
North East	74	94	95	65	40
North West	76	93	95	67	47
South East	59	92	94	73	61
South West	46	81	90	64	38
West	69	97	96	61	37

Response Times Performance (%), 2018

	P1	P2	P3	P4	P5
Downtown	91	100	97	78	70
North East	73	96	96	65	43
North West	70	96	95	67	55
South East	64	98	95	71	63
South West	59	87	87	62	34
West	72	93	96	60	39

Green: ≥ 80% of events met timed target
Orange ≥ 70%
Red: < 70%

2020 Initiatives

- Reviewing geographic boundaries

- Operational Intelligence Command Center (OICC

- Increase patrol capacity

- Predictive analytics

Environmental Scan

Outcome

Outcome:

- **Reduced harm to person and property**

  Indicators:

  - *Criminal activity is prevented*

  - *Victims are supported appropriately*

  - *Police are effectively and efficiently responding to calls*

  - *Criminal matters and disturbances are dealt with appropriately*

Questions?