



## EDMONTON POLICE SERVICE

### REPORT TO THE EDMONTON POLICE COMMISSION

**DATE:** 2018 January 9th

**SUBJECT:** 2017 EPS Response Time and Dispatch Call Volumes

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#### RECOMMENDATION:

1. That this report be accepted by the Edmonton Police Commission for information purposes.

#### BACKGROUND:

The Edmonton Police Commission has received an ongoing report and presentation of EPS's dispatch Response Time and Dispatch Call Volume statistics since 2013 Q3.

This semi-annual report, to be presented at the January 18, 2018 public meeting, provides statistics for Dispatch Call Volume and Response Time Performance for Priorities 1 through 5 for the years 2009 to 2017. In addition, this report provides information pertaining to:

- Response Time Performance for each priority level (P1-P5) at the divisional level
- The introduction of a P7 'Hold Event' code in September 2017: its background, purpose, and impact on calculating P5 Response Time Performance

#### CONCLUSION:

For review, consideration, and discussion.

#### ADDITIONAL INFORMATION ATTACHED:

- Attachment 1 – 2017 EPS Dispatch & Response Time (PowerPoint)

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**Chief of Police:** \_\_\_\_\_ 

**Date:** JAN 10 2018  
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# **2017 EPS Response Time and Dispatch Call Volumes**

**Presented to the Edmonton Police Commission  
January 18, 2018**

## Purpose



- To provide and discuss patrol workload and response times (2009 - 2017).
- Includes:
  - City-wide: Priority 1-5 Response Time Performance and Dispatch Call Volume
  - Division-level: P1-5 Response Time Performance
  - New Priority 7 “hold event” impact on P5 response time calculations

## Summary



- Dispatch Call Volume increased by 2.2% in 2017 (3,620 more calls)  
Long-term, volume closely follows population growth.
- 2017 saw marginal but encouraging improvement in P1 response times, a first since 2013. Performance is still below target.
- 2017 was on-track for improvement in P5 response times. The introduction of a new "hold event" code in Sept 2017 resulted in more accurate data, but has adversely impacted P5 response time comparisons.



## Background on our metrics

## Priority Levels & Response Time Targets



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

# What is Included in our Statistics



## Dispatch Call Volume (workload)

- Priorities 1-5
- On-view calls (< 30 second response time)
- Pre-empted calls (where we did not arrive)

### Excludes:

- Follow-up calls, Traffic Stops
- Priority 0 (officer in distress), 6 (bylaw), 9 (general information)

This reflected 163,158 records (2016)

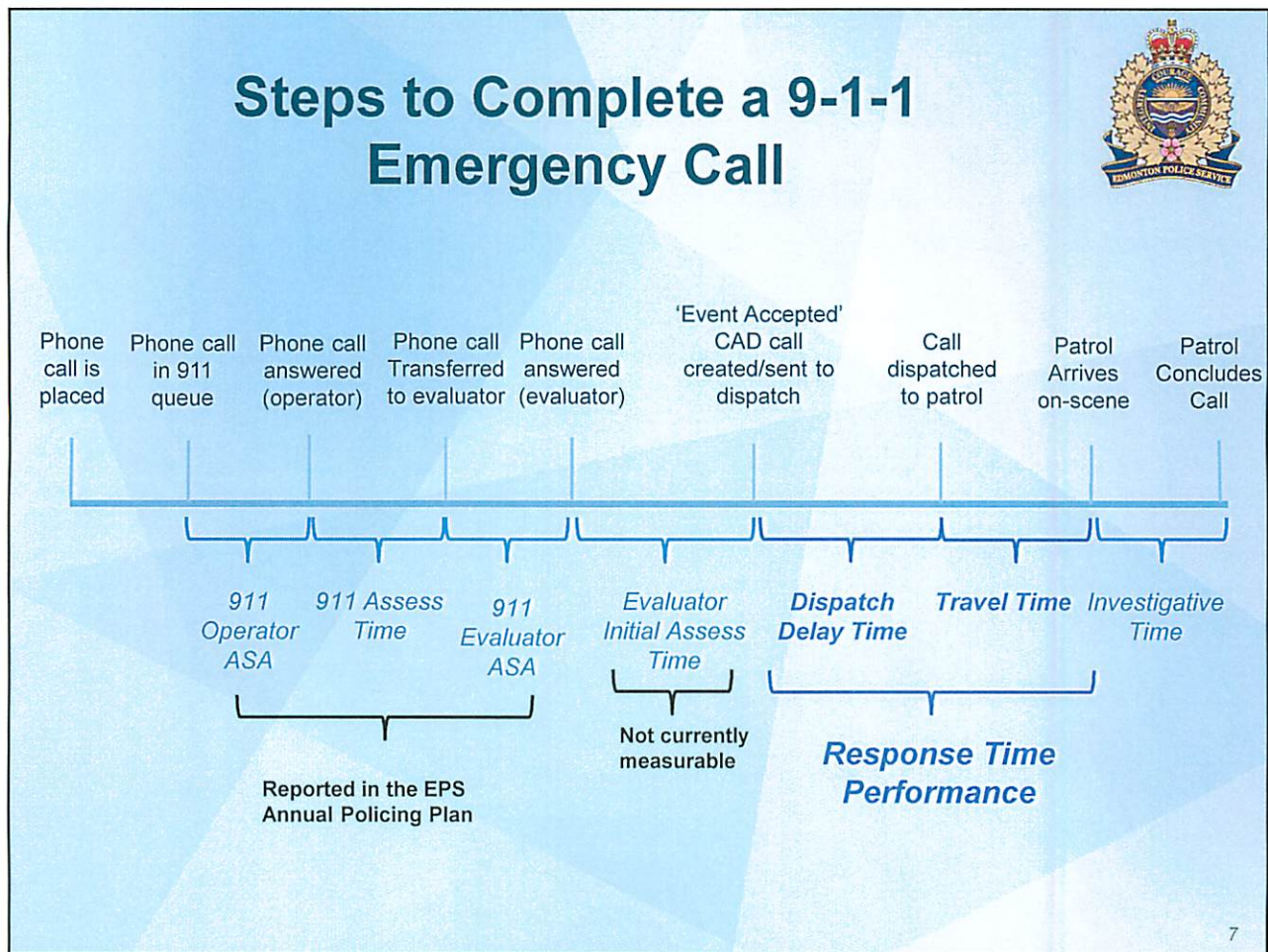


## Response Time Performance

Calculates from the above, that additional excludes:

- Priority 1 impaired driving calls
- Pre-empted calls
- On-view calls
- Calls where the final priority level was more urgent than the original level (~2.5% of calls in 2016)

This reflected 139,711 records (2016)

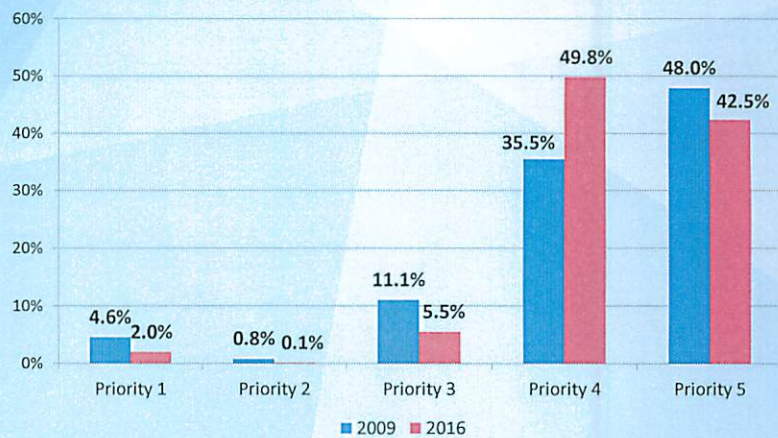


## Distribution of Priority Levels



- The majority of dispatch call events are of low urgency (P4,P5).
- Only 7.6% of calls in 2016 were highly urgent (P1-P3). In 2009, this was 16.5%.
- All growth in calls since 2009 have been in low priority (P4,P5).

Percentage of EPS Dispatch Calls by final priority level



# Response Time Drivers



Response time is driven by a number of factors:

- **Police strength**
  - Number of resources
  - Resources committed to other calls
- **Geographic size**
  - Distance
  - Urban sprawl
- **Environmental factors**
  - Traffic conditions
  - Construction zones
  - Weather
  - Traffic Congestion
  - Travel Speeds
- **Dispatch Call Volume**
- **Population growth**

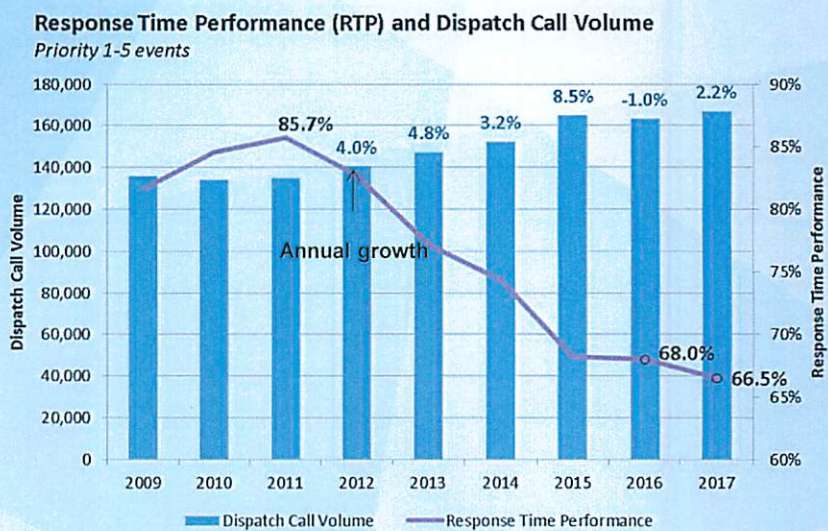


## City-wide Trends

## P1-P5 Response and Dispatch Call Volume



- P1-P5 Dispatch Call Volume increased **2.2%** from last year.
- P1-P5 Response Time Performance declines since 2011. This year's decline was due to a change in data collection.
- 2017 P1-P5 Response Time Performance was **66.5%** in 2017, compared to **68.0%** last year.



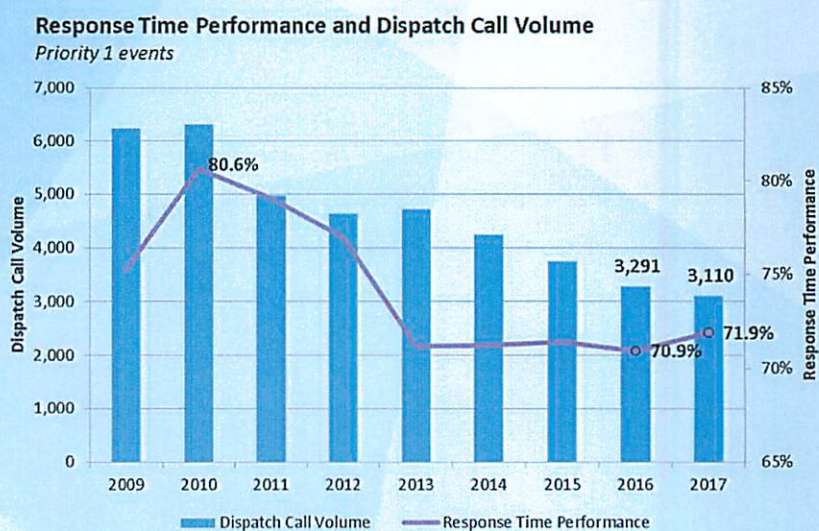
Response Time Performance: % of events with Dispatch Time + Travel Time ≤ Priority Target Time

11

## P1 - Response and Dispatch Call Volume



- P1 Dispatch Call Volume decreased **5.5%** from last year.
- P1 Response Time Performance **71.9%** in 2017, compared to **70.9%** last year.

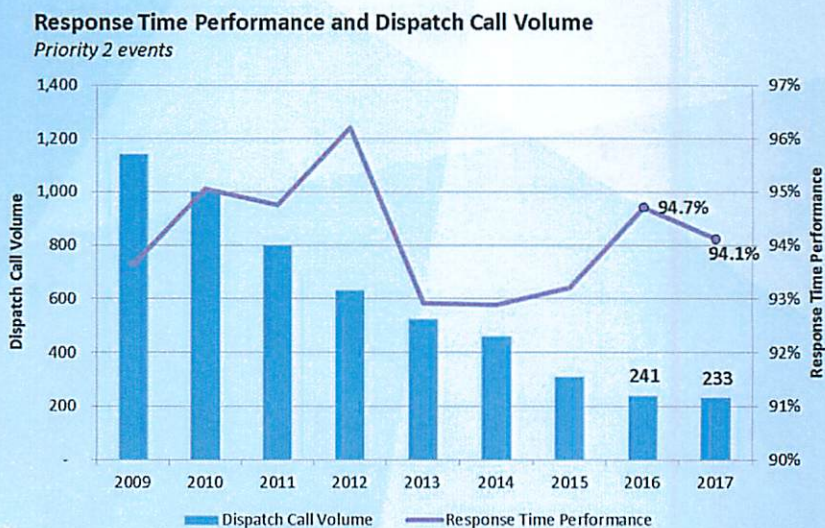


P1 Response Time Performance: % of events with Dispatch Time + Travel Time  $\leq 7$  min

## P2 - Response and Dispatch Call Volume



- P2 Dispatch Call Volume decreased **3.3%** from last year.
- P2 Response Time Performance **94.1%** in 2017, compared to **94.7%** last year.

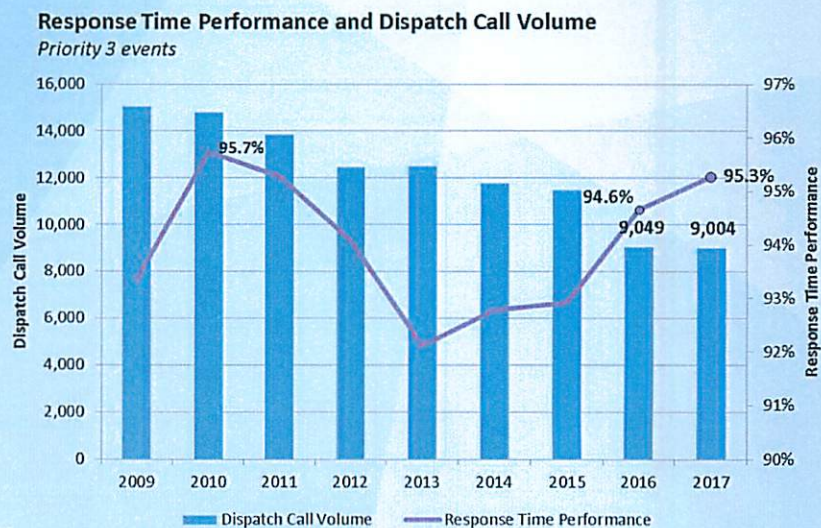


P2 Response Time Performance: % of events with Dispatch Time + Travel Time  $\leq$  12 min

## P3 - Response and Dispatch Call Volume



- P3 Dispatch Call Volume decreased **0.5%** from last year.
- P3 Response Time Performance **95.3%** in 2017, compared to **94.6%** last year.

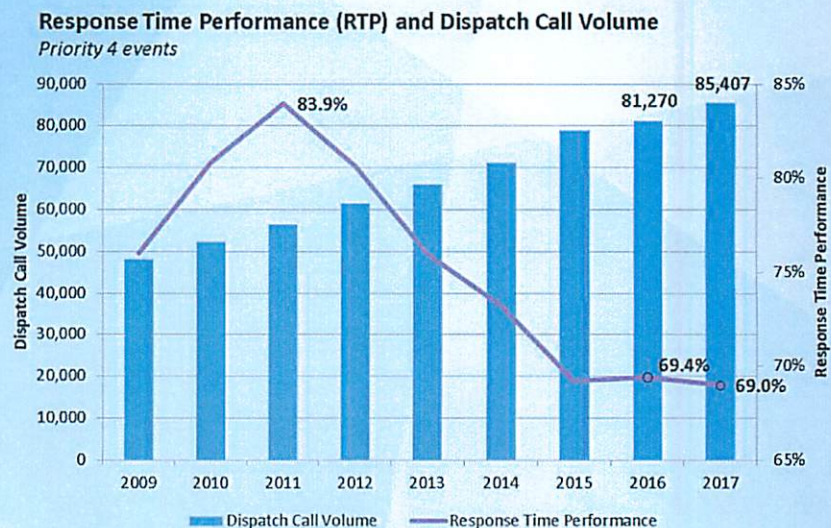


P3 Response Time Performance: % of events with Dispatch Time + Travel Time ≤ 17 min

## P4 - Response and Dispatch Call Volume



- P4 Dispatch Call Volume increased **5.1%** from last year.
- P4 Response Time Performance **69.0%** in 2017, compared to **69.4%** last year.

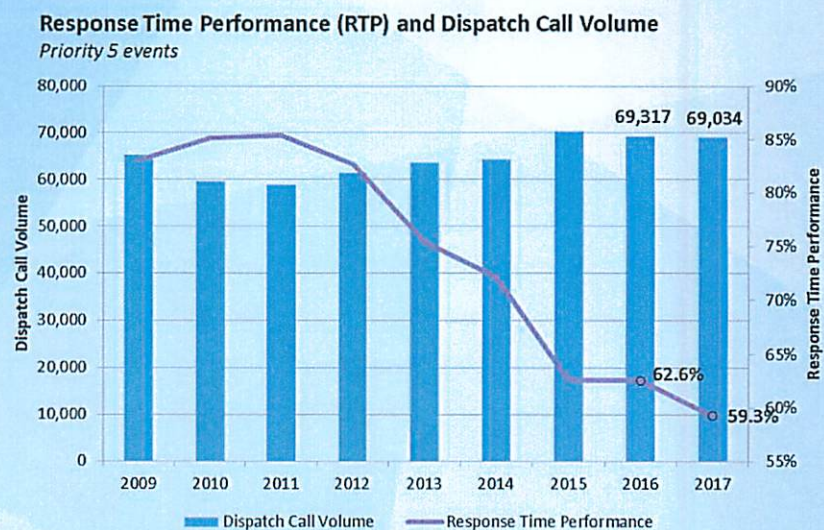


P4 Response Time Performance: % of events with Dispatch Time + Travel Time ≤ 40 min

## P5 - Response and Dispatch Call Volume



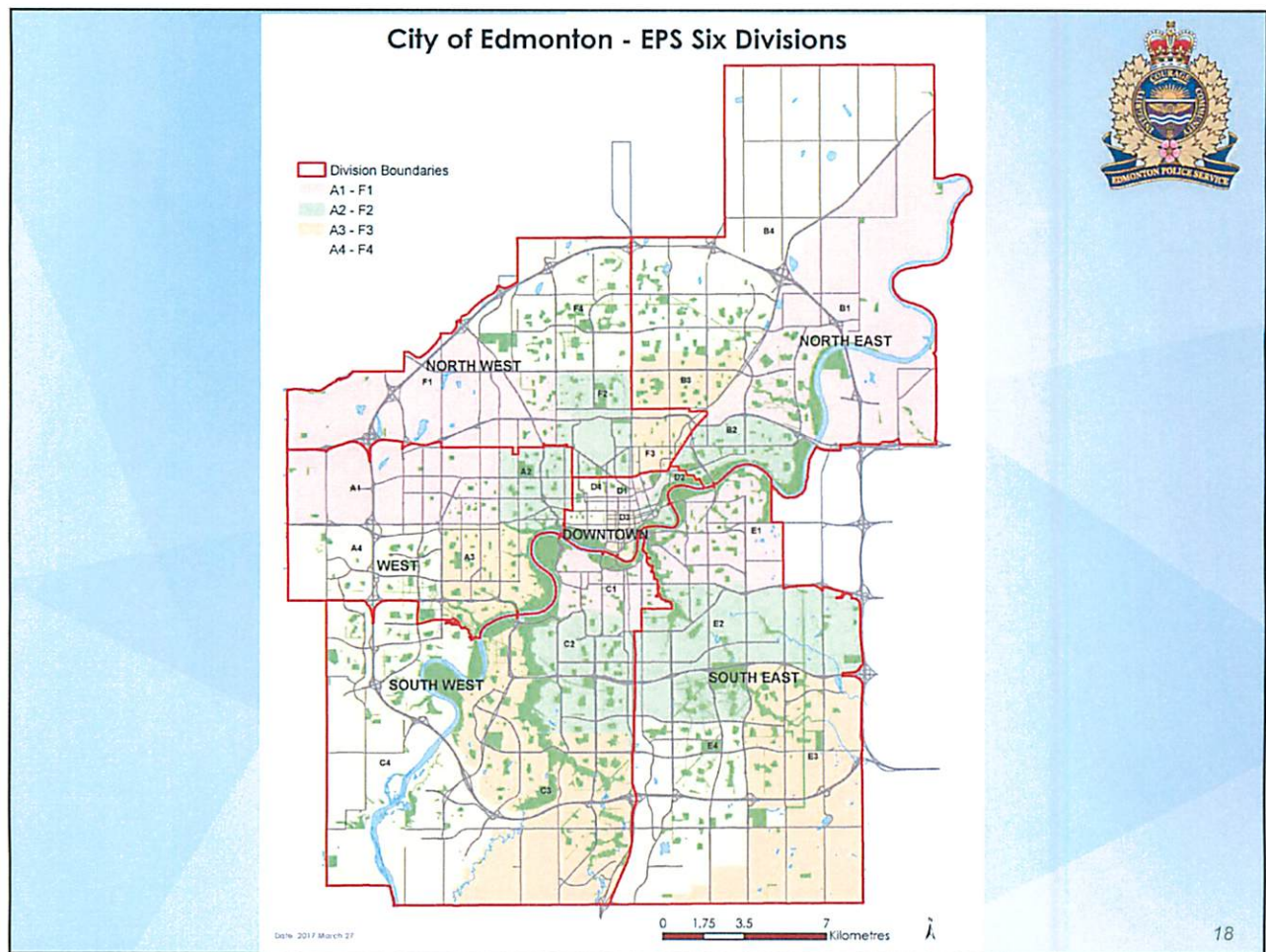
- P5 Dispatch Call Volume decreased **0.4%** from last year.
- P5 Response Time Performance **59.3%** in 2017, compared to **62.6%** last year.



P5 Response Time Performance: % of events with Dispatch Time + Travel Time  $\leq$  180 min



# Division Response Times

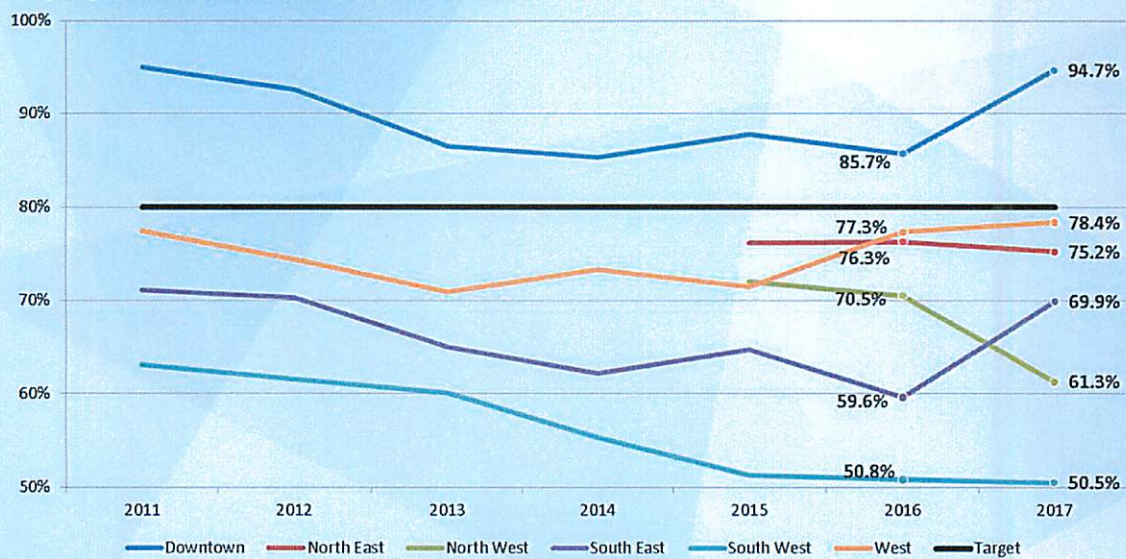


## Response Time – Divisions



### P1 Response Time Performance

% of responses within 7 minutes, by patrol division

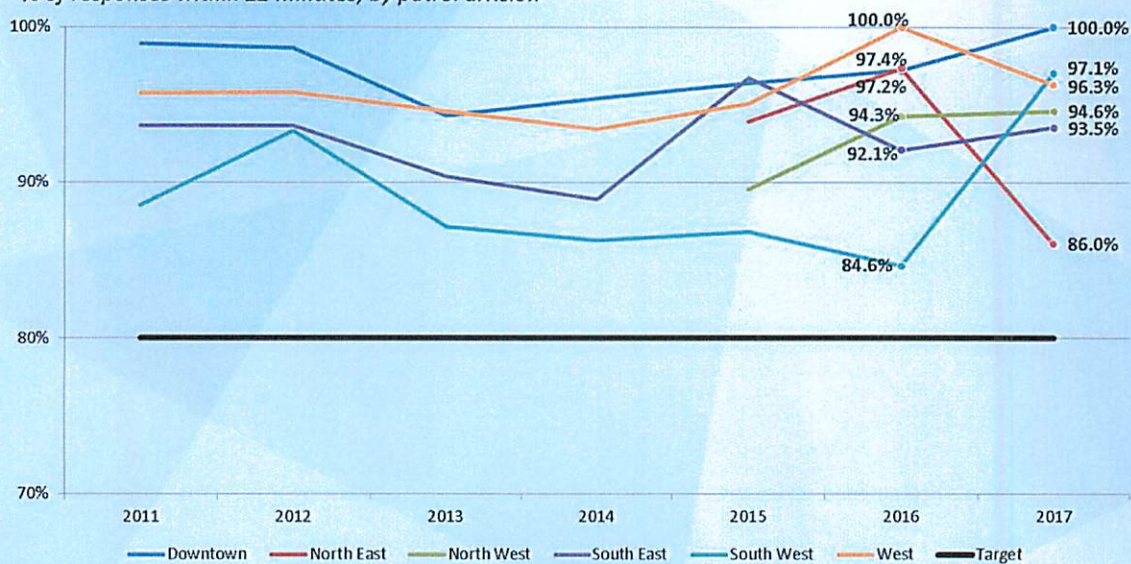


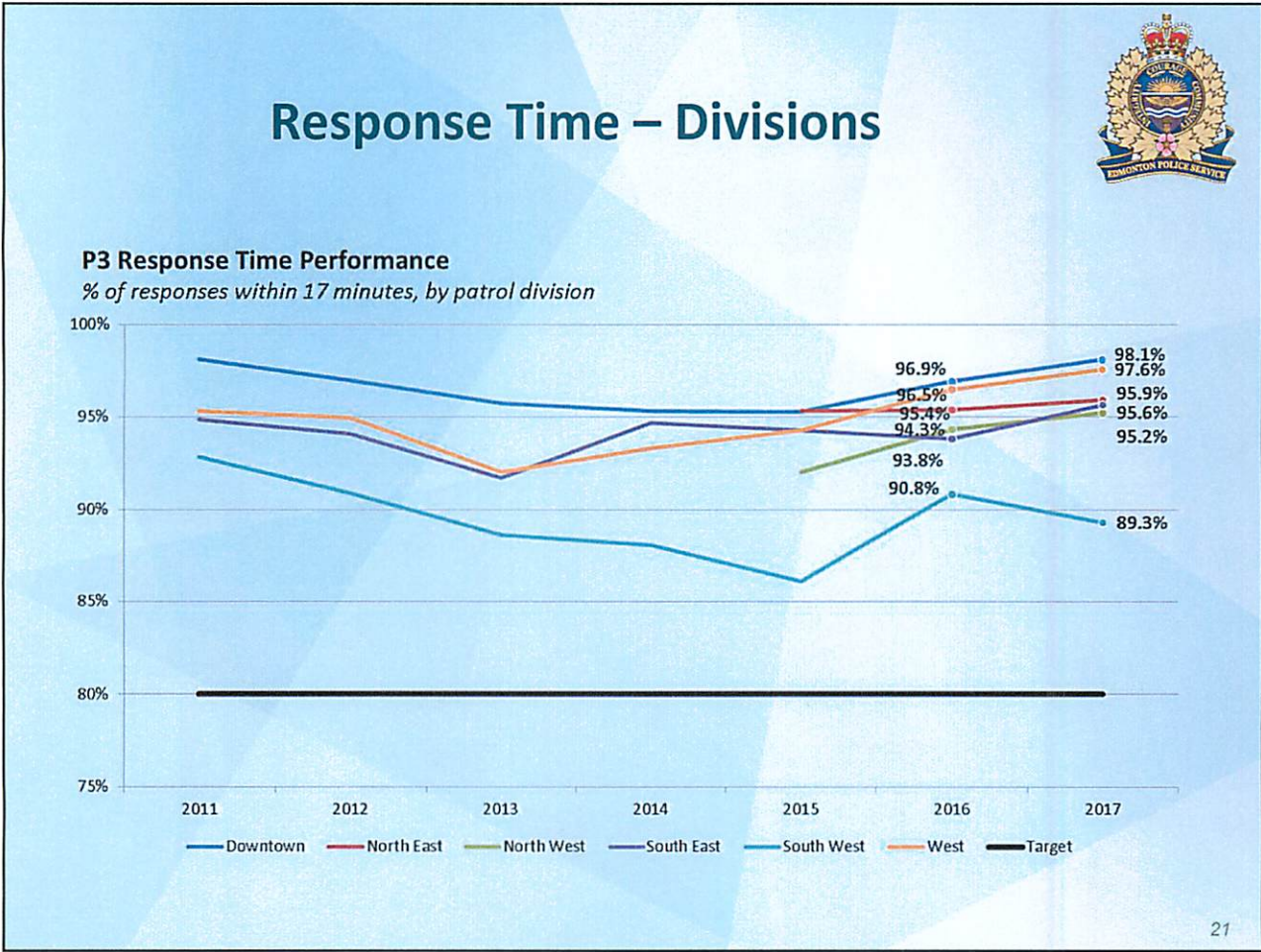
## Response Time – Divisions



### P2 Response Time Performance

% of responses within 12 minutes, by patrol division



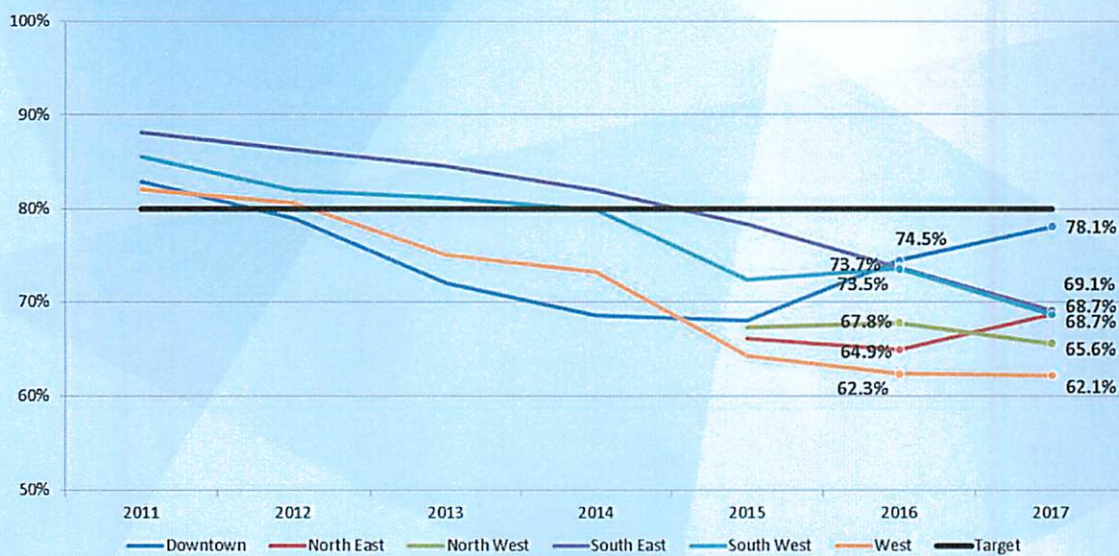


## Response Time – Divisions



### P4 Response Time Performance

% of responses within 40 minutes, by patrol division

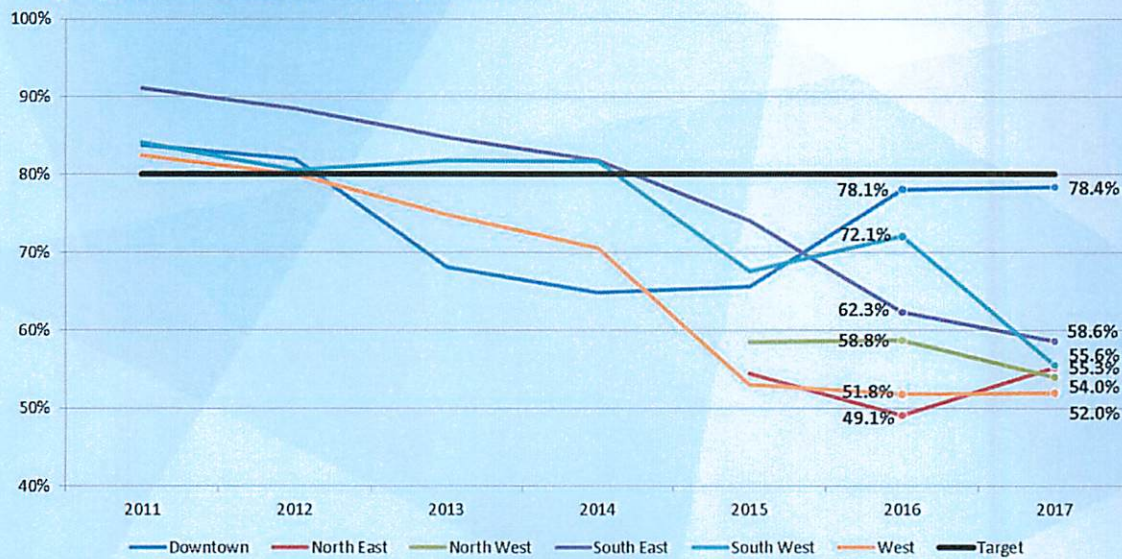


## Response Time – Divisions



### P5 Response Time Performance

% of responses within 180 minutes, by patrol division



## Priority 7 HOLD EVENTS



### Background

- Response Times can only be calculated on calls that we arrive for. We exclude "cancelled" calls.
- Instances where patrol would temporarily cancel general service P5 calls and create a new call record when patrol was available. Most common for busy late evenings when EPS and the caller agree to resume the call in the morning.
- This practice created data quality issues. P5 Response Time calculations could only be based on the 2<sup>nd</sup> call record, not capturing the time that had passed when the call first originated.
- Historical P5 Response Times calculations appeared better than what was taking place.

## Priority 7 HOLD EVENTS



### Solution

- Sept 2017: P5 calls now have the option to be temporarily coded as a P7 "hold event", and switched back to P5 when patrol is available to respond. This insures only one record is created and proper time tracking can occur from beginning to end.
- New Policy & Procedure was created and communication to patrol and 911 Communications for operational consistency.
- Designating as a P7 requires the clear consent from the caller.
- EPC was briefed on this business change Sept 8 2017 (TS # 9989).

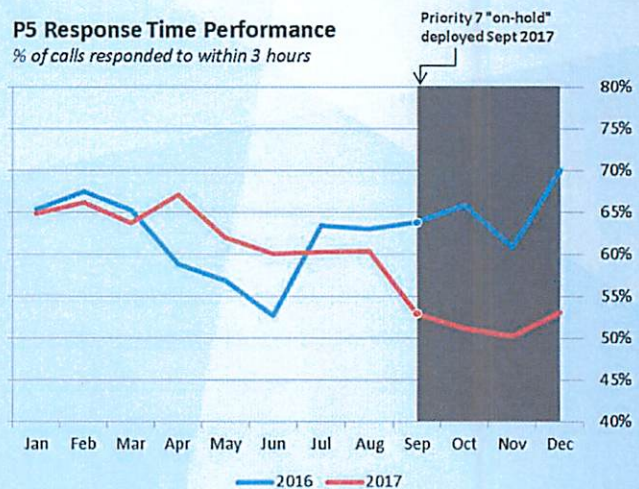
## Priority 7 HOLD EVENTS



### Impact on P5 Response Time Performance

- Before the P7 code was introduced, P5 performance in 2017 was on-track for improvement. *Jan-Aug:*
  - 2016: 61.6%      2017: 63.1%
- After the P7 code was introduced, P5 performance is now more accurate, but substantially lower when compared to previous years. *Sept-Dec:*
  - 2016: 65.2%      2017: 51.9%

**P5 Response Time Performance**  
% of calls responded to within 3 hours



# EPS Action Items



## Communication Strategy to Patrol:

- **Patrol focus on district policing and geographic deployment.**
- **Reduce self-dispatching.** Response times can be affected when members self-dispatch and become out of position. Communication stressed to members to defer to the guidance of the Watch Commander.
- **Time tracking.** The importance of accurately tracking time and booking off on calls is being stressed to members.
- Technology enhancements have been completed at Old Scona station (SW) and Ottewell station (SE); assisting members to stay dispersed rather than clustering at a divisional station.
- Improved training and policy guidelines to Dispatchers to reduce inappropriate cross-district dispatching.
- Patrol staffing model (MPP) is being run in Q1 2018. Methodology is being fully reviewed for improvements in 2018. Results will help equalize workload and response times among divisions based on the latest call trends.

## Summary City-wide Stats



EPS Response Time		2009	2010	2011	2012	2013	2014	2015	2016	2017
Priority 1	Performance	75.3%	80.6%	79.1%	77.0%	71.2%	71.3%	71.4%	70.9%	71.9%
	# Calls	6,238	6,315	4,977	4,634	4,718	4,238	3,754	3,291	3,110
Priority 2	Performance	93.6%	95.1%	94.8%	96.2%	92.9%	92.9%	93.2%	94.7%	94.1%
	# Calls	1,143	1,003	802	631	525	459	311	241	233
Priority 3	Performance	93.4%	95.7%	95.3%	94.1%	92.1%	92.8%	92.9%	94.6%	95.3%
	# Calls	15,039	14,798	13,843	12,472	12,494	11,782	11,490	9,049	9,004
Priority 4	Performance	76.0%	80.8%	83.9%	80.6%	76.0%	73.2%	69.2%	69.4%	69.0%
	# Calls	48,261	52,355	56,489	61,436	65,949	71,130	78,978	81,270	85,407
Priority 5	Performance	83.1%	85.1%	85.4%	82.7%	75.4%	72.2%	62.6%	62.6%	59.3%
	# Calls	65,172	59,665	58,939	61,344	63,629	64,393	70,347	69,317	69,034
Total # Dispatched Calls		135,853	134,136	135,050	140,517	147,315	152,002	164,880	163,168	166,788

Source: Cognos R15-091, generated January 2, 2018



**QUESTIONS ?**