

MEMORANDUM

To: Dennis Gallagher, Auditor

From: Kip Memmott, Audit Service Division Director

Date: June 17, 2014

Re: Analysis of Police Response Time for 2112 South St. Paul Street Incident

Summary

Overall, it appears that the Denver Police Department's (DPD's) response time of approximately 13 minutes to arrive at 2112 South St. Paul Street in response to the incident on April 14, 2014, is not outside the norm.¹ In 2013, on average, from when a 911 Operator picks up a call to when a DPD officer arrives on scene, police citywide responded to Priority 0-2 calls in 14.3 minutes. In District 3, response times to such calls averaged 15.6 minutes. Table 3 shows that in 2013, average response times to similar type calls ranged from 13.7 minutes to 17.6 minutes while overall Priority 0-2 calls averaged 14.3 minutes. These average times are all longer than the time it took police to respond to the 2112 South St. Paul Street incident, which was approximately 13 minutes. Taking into account district-specific response time, the response to the incident at 2112 South St. Paul Street was also quicker than average response time to Priority 0-2 calls in the same district.

The overall response time of approximately 13 minutes to this specific incident is in line with overall response times for calls handled by the Police Dispatcher who handled the call that sent officers to 2112 South St. Paul Street (see Table 5). On average, the Priority 0-2 calls handled by this Dispatcher had a response time of 15.2 minutes citywide, and 19.4 minutes for calls within District 3. These times are not statistically different than times of all other dispatchers. As we note in our audit of police response time, response times are heavily correlated with DPD staffing levels, which should be kept in mind while reading this memorandum.

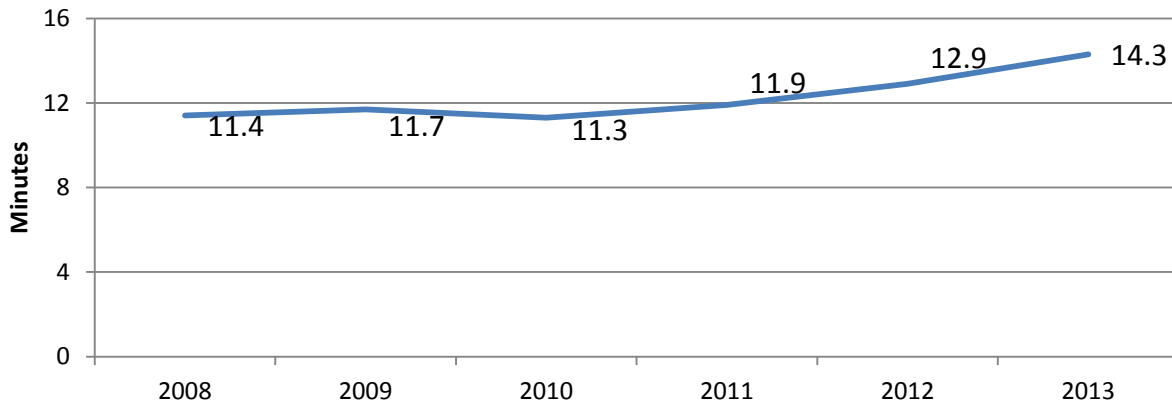
Overview of Response Times

As we report in our audit of police response times, from 2008 through 2013, response times for Priority 0-2 calls have been increasing due in large part to the decrease in DPD's effective strength. Effective strength is the number of sworn officers actively available to perform policing functions without supervision. Response time encompasses the time it takes from when a 911 Operator picks up a call to when a DPD officer arrives on scene. Priority 0-2 calls are high-priority calls for service where a person, property, or life faces imminent threat of danger, such as a robbery in progress.

¹ This memorandum provides information of limited review for a time critical assessment. While not in full compliance with rigorous audit reporting standards, this non-audit service furthers the accountability of the Audit Services Division by providing a reporting vehicle that is flexible, quickly issued, and focused on a singular issue.

In 2008, DPD’s effective strength averaged 1,540 officers, and response time for Priority 0-2 calls averaged 11.4 minutes. In 2013, effective strength averaged 1,354 officers and response times averaged 14.3 minutes. Figure 1 provides average response times by year for Priority 0-2 calls.

Figure 1. Average Priority 0-2 Police Response Times, 2008 through 2013

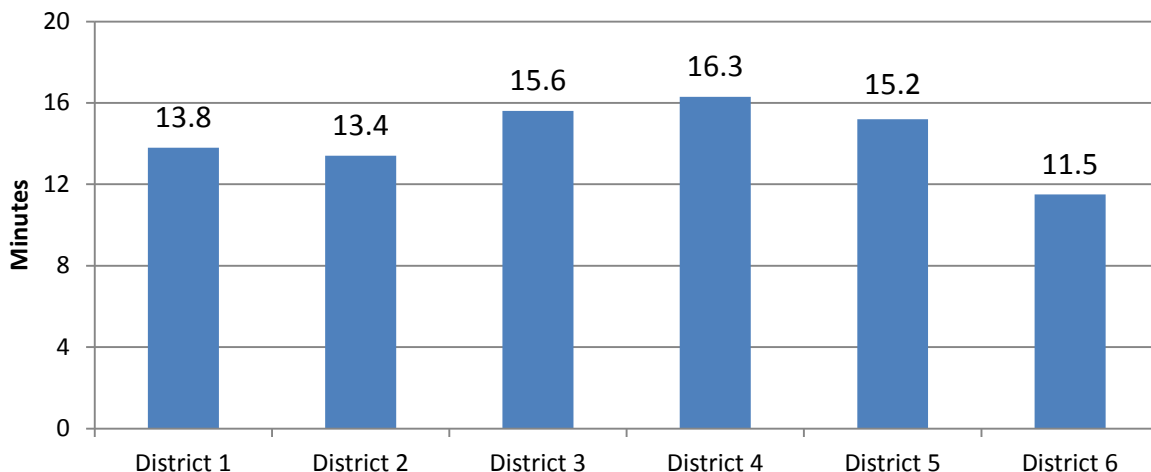


Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

In addition to reporting on the increase in response times, we also highlight in the audit that response times for Priority 0-2 calls differ by district. We note that District 3 has one of the longest response times, likely due to its larger geographic size. Figure 2 provides average response time by district for Priority 0-2 calls for 2013.

Figure 2. Average Priority 0-2 Police Response Times by District, 2013



Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

2112 South St. Paul Street Incident Response Time Versus Other Similar Call Response Times

According to the Department of Safety’s response to the Auditor’s request for information regarding police response to the domestic violence call at 2112 South St. Paul Street on April 14, 2014, and multiple *Denver Post* stories, it took police approximately 13 minutes to respond to this call, as measured by the time it took the 911 Operator to answer the call to when a DPD officer arrived on scene. This incident occurred in District 3, and was classified as a Priority 1 call. Auditors compared police responses to similar types of calls. For the purposes of this analysis, similar types of calls are defined as those classified as assaults, family disturbances, and domestic violence within the DPD’s Computer Aided Dispatch (CAD) system.

From 2008 through 2013, DPD received more than 132,000 of these types of similar calls that were also classified as Priority 0-2. This represents almost one-third of all Priority 0-2 calls received by DPD from 2008 through 2013. Table 1 provides a breakdown of the number of calls DPD received by type for 2008 through 2013.

Table 1. Number of Similar Type Priority 0-2 Calls Received, 2008 through 2013

Call Type	2008	2009	2010	2011	2012	2013	Total
Assaults	4,394	4,841	4,754	4,549	4,648	4,528	27,714
Domestic Violence	12,584	11,731	11,638	11,266	10,790	10,691	68,700
Family Disturbances	5,281	5,652	5,789	6,055	6,292	6,700	35,769
Total Similar Type	22,259	22,224	22,181	21,870	21,730	21,919	132,183
All Priority 0-2 Calls	72,905	69,423	70,054	64,115	65,819	65,857	408,173

Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

As shown in Table 1, in 2013, there were nearly 22,000 calls similar to the type of call that was placed to report the incident at 2112 South St. Paul Street. Broken out by district, District 4 received the most of these types of calls while District 5 received the least. Table 2 provides a count of the number of calls received by district for 2013.

Table 2. Number of Similar Type Priority 0-2 Calls Received by District, 2013

Call Type	District 1	District 2	District 3	District 4	District 5	District 6	Total
Assaults	823	785	583	666	294	1,377	4,528
Domestic Violence	1,953	2,164	2,042	2,410	1,088	1,034	10,691
Family Disturbances	1,222	1,480	893	1,944	889	272	6,700
Total Similar Type	3,998	4,429	3,518	5,020	2,271	2,683	21,919
All Priority 0-2 Calls	11,921	12,278	12,637	12,418	6,867	9,736	65,857

Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

As we note in our audit of police response time, response times are heavily correlated with effective strength levels. While this analysis does not factor in effective strength levels, this should be kept in mind in reading the following tables.

From 2008 through 2013, average response times to similar type calls that were classified as Priority 0-2 ranged from 9.7 minutes to 17.6 minutes. For calls regarding assaults, response times ranged from 9.7 minutes to 13.7 minutes. For calls regarding family disturbances, response times ranged from 13.0 minutes to 17.6 minutes. For calls regarding domestic violence, response times ranged from 11.2 minutes to 14.1 minutes. Table 3 provides a breakdown of average response times by call type for 2008 through 2013.

Table 3. Average Police Response Time by Type for Priority 0-2 Calls, 2008 through 2013

Call Type	2008	2009	2010	2011	2012	2013	Average
Assaults	9.7	10.6	11.1	11.8	12.7	13.7	11.6
Domestic Violence	11.2	11.5	11.2	11.8	12.8	14.1	12.0
Family Disturbances	13.0	13.8	13.1	13.8	15.5	17.6	14.6
All Priority 0-2 Calls	11.4	11.7	11.3	11.9	12.9	14.3	12.2

Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

Table 3 shows that in 2013, average response times to similar type calls ranged from 13.7 minutes to 17.6 minutes while overall Priority 0-2 type calls averaged 14.3 minutes. These average times are all longer than the time it took police to respond to the 2112 South St. Paul Street incident, which was approximately 13 minutes. Taking into account district-specific response time, the response to the incident at 2112 South St. Paul Street was also quicker than other similar type calls in the same district.

As noted earlier, the incident at 2112 South St. Paul Street occurred in District 3, and District 3 has one of the longest average response times for Priority 0-2 calls. Table 4 breaks down average response time of similar type calls by district for 2013. As shown, District 3 had the longest average response time for domestic violence and family disturbance type calls. For domestic violence type calls, District 3 had an average response time of 15.8 minutes, which is almost three minutes longer than the response time to the incident at 2112 South St. Paul Street.

Table 4. Average Police Response Time by Type and District for Priority 0-2 Calls, 2013

Call Type	District 1	District 2	District 3	District 4	District 5	District 6
Assaults	13.3	13.7	15.4	15.9	15.0	11.7
Family Disturbances	16.7	15.2	19.9	19.7	16.9	14.1
Domestic Violence	13.1	12.5	15.8	15.6	14.5	11.8
All Priority 0-2 Calls	13.8	13.4	15.6	16.3	15.2	11.5

Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

Police Dispatcher Call for 2112 South St. Paul Street Versus Other Calls Handled

According to the Department of Safety’s response to the Auditor’s request for information on the 2112 South St. Paul Street incident, the Dispatcher who was responsible for the call failed to air important updates regarding the unfolding situation, which may have delayed police response to the incident. Below, comparisons are made to other calls this individual Dispatcher handled.

According to CAD data, the Dispatcher began handling calls in October 2013. For October, November, and December 2013, the Dispatcher handled nearly 1,100 calls, of which 380 (or 35%) were classified as Priority 0-2. Of the 380 Priority 0-2 calls handled by the Dispatcher, 126 were of similar nature to the incident at 2112 South St. Paul Street. Table 5 provides the count of similar type calls handled by the Dispatcher and the average response time.

Table 5. Call Count and Average Police Response Times of Dispatcher, Priority 0-2 Calls, 2013

Call Type	Citywide		District 3	
	Call Count	Avg. Response Time	Call Count	Avg. Response Time
Assaults	23	18.9	-	-
Domestic Violence	57	14.6	-	-
Family Disturbances	46	16.6	-	-
All Priority 0-2 Calls	380	15.2	40	19.4

Source: Auditors calculations using CAD data provided by the DPD Data Analysis Unit as of February 12, 2014.

Note: Call count and average response times for District 3 specific to the Dispatcher who handled the 2112 South St. Paul Street call into 911. The data is suppressed for similar type calls to the incident at the same location because there are fewer than ten observations. **Note:** Auditors used different methodology from the DPD Data Analysis Unit. As such, figures may be different from those reported by DPD.

As shown in Table 5, average response times for calls of similar nature and priority handled by the Dispatcher who handled the call at 2112 South St. Paul Street ranged from 14.6 minutes to 18.9 minutes. For calls specific to District 3, all other dispatchers’ average response times for Priority 0-2 calls averaged 19.4 minutes. A statistical test indicates that the response time of all Priority 0-2 calls handled by the Dispatcher, and those of similar nature, are no different than those handled by all other dispatchers in 2013.