

CITY OF CHICAGO OFFICE OF INSPECTOR GENERAL 20 23

Chicago Police Department 911 Response Time Data Collection and Reporting

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Acronyms

ACLU American Civil Liberties Union CAD Computer Aided Dispatch

CANA Central Austin Neighborhood Association

CBO Community-Based Organization
CFD Chicago Fire Department
CPD Chicago Police Department
MIS Management Information System

OEMC Office of Emergency Management and Communications

OIG Office of Inspector General

OPSA Office of Public Safety Administration PCAD Police Computer Aided Dispatch

PCO I Police Communications Operator I (Call Taker)
PCO II Police Communications Operator II (Dispatcher)

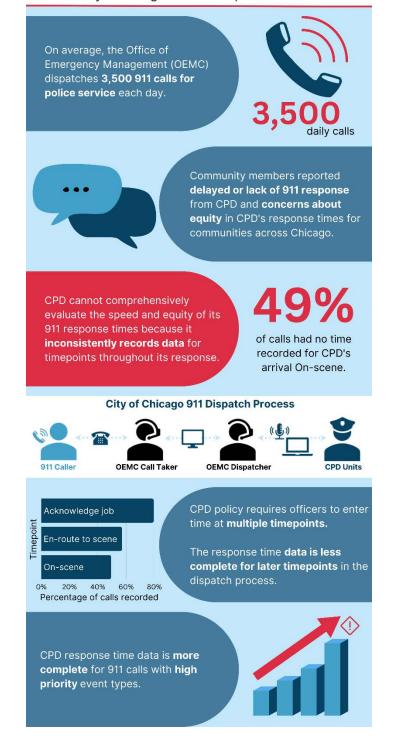
PDT Portable Data Terminal

PMIS Police Management Information System

RAP Radio Assignments Pending

The Chicago Police Department (CPD) Data Collection and Reporting for 911 Response Times

City of Chicago Office of Inspector General



I | Executive Summary

The Office of Inspector General (OIG) conducted an inquiry into the Chicago Police Department's (CPD or the Department) data collection and reporting of response times for 911 calls for emergency police service. The objectives of the inquiry were to determine the completeness rates of CPD response times recorded by CPD and the Office of Emergency Management and Communications (OEMC), and to identify factors contributing to missing response time data for 911 calls for CPD service.

As a result of this inquiry, OIG found that CPD's data collection of 911 response times is incomplete; the Department fails to record timestamps for various statuses throughout the dispatch and police response for a substantial number of 911 calls. Calls for high priority emergency events had a higher rate of recorded response times for all statuses that occur during a unit's response (Acknowledge, En-route, and On-scene) compared to calls for events with a lower priority classification. The timepoint in the police response process that is least often recorded is the Onscene time, or the time when the responding CPD unit arrives at the location of service; this remains true regardless of call priority level or geographic location. The On-scene status is the last timepoint in the sequence of events before responding members engage with an emergency event, which may contribute to the low On-scene time completeness rates. Additionally, the interface of the Computer Aided Dispatch (CAD) system, which records a timestamp when CPD members enter their response status, displays the response status buttons sequentially, and is dependent on the previous status in the process being entered.

When an individual calls 911 for police service in Chicago, the call goes first to a 911 call taker within OEMC's emergency call center who creates an event in the CAD, selects the appropriate event type, and sends the event to an OEMC dispatcher for assignment to a CPD unit or units. The dispatcher monitors the availability of CPD units in their geographic area and assigns dispatch jobs based on event priority and availability of CPD units. OIG found that in both policy and practice, CPD and OEMC align in assigning the responsibility of recording response statuses to dispatched CPD members. OIG confirmed that when timestamps throughout CPD's response to 911 calls are entered, it is primarily CPD members and not OEMC staff who record the times. OEMC dispatchers have the ability to record times but do so less frequently. CPD lacks monitoring systems to ensure dispatched CPD members adhere to the response status data entry requirements laid out in CPD directive "U01-06: Portable Data Terminal," and overall data entry for response status timestamps remains inconsistent. Highly incomplete response time data impedes any analysis of factors contributing to fast or slow response times; process failures and areas for improvement; and any disparities which might exist across the city in the timeliness of 911 responses.

Further, OIG found that the City's current public reporting of CPD 911 response times and plans for improvement of the collection of response times focus on the On-scene time but neglect other critical timepoints in the 911 response process needed for a comprehensive review of how long it actually takes for police to arrive at the scene of an emergency. OEMC and CPD report that they will be transitioning to a new CAD system recently procured by the City. The new system promises to bring an automated solution for the recording of On-scene times. The new system will not, however, offer technological solutions to automate the collection of other times in the police response process. Similarly, the public dashboard of CPD 911 response time data published by the Office of Public Safety Administration (OPSA) only reports completeness rates for the On-scene timepoint and only calculates the time from Dispatch to On-scene. A complete analysis of police

911 response times must evaluate all critical intervals in the process to assess areas of need for procedural improvements and to identify drivers of delayed response times.

II | Background

Each year, CPD members are dispatched to approximately 1.3 million emergency events from 911 calls made to OEMC.¹ This is, on average, approximately 3,500 dispatched calls per day, with an increase in call volume during the summer months (Figure 1).²

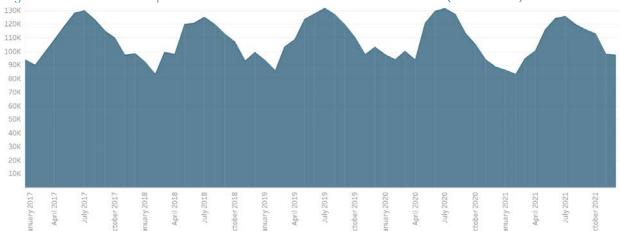


Figure 1: Number of Dispatched 911 calls for CPD Service Over Time (2017-2021)

Source: OIG analysis.

Shortening CPD's response times for 911 calls is of major interest to Chicago residents and community groups (see Subsection A below), and the collection of high-quality data on response times is a prerequisite to doing so. At present, much of the data which would permit a thorough analysis of response times is *not* recorded by CPD or any other City agency. To provide transparency to the public and enable a deeper understanding of these shortcomings in data quality, this inquiry evaluates the completeness of CPD's response time data for 911 calls where CPD was dispatched for service and assesses policy-based and operational factors contributing to incomplete 911 response time data.

A | Public Perception of CPD 911 Response and Requests for Data

For the purposes of this inquiry, OIG engaged 20 individuals, including residents and organizers, representing 12 different community-based organizations (CBOs). These groups included organizations with missions centered on youth, health, and violence reduction, hailing from community areas including Uptown, Englewood, and Austin. OIG solicited input from these individuals through a roundtable discussion where the organizations gathered together to discuss CPD's response to 911 calls, with some organizations inviting community members with an interest in the topic. Additionally, OIG held follow-up conversations with individual organizations. In these discussions, OIG inquired about the perceptions held and experiences had by these organizations and their constituents with respect to calling 911 and the quality of CPD's response. OIG also

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¹ OIG, "Dispatched 911 Calls for CPD Service dashboard," accessed March 10, 2022, https://informationportal.igchicago.org/911-calls-for-cpd-service/.

² Since the onset of the COVID-19 pandemic, call volume has declined slightly. OEMC dispatched 1,332,566 calls in 2019; 1,296,004 in 2020; and 1,275,796 in 2021. City of Chicago Office of Inspector General, "2021 Annual Report," accessed September 8, 2022, https://igchicago.org/2022/06/06/public-safety-section-annual-report-2021/.

collected specific examples of delayed responses for service. Several South and West Side organizations reported to OIG that they believe there to be geographic disparities in CPD's response to 911 calls and that they have experienced slow or no response to 911 calls in their communities. As seen below in Figure 2, the South and West Sides of Chicago have some of the highest rates of 911 calls for police service per population.

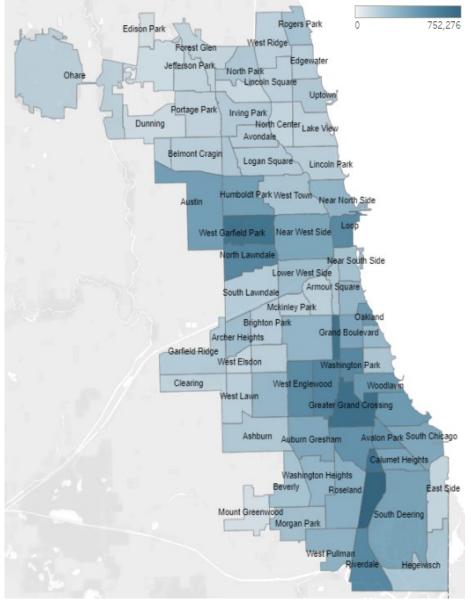


Figure 2: Volume of 911 calls by Community Area per 100K population (2017-2021)

Source: OIG analysis.

Every organization interviewed by OIG had one or more stories to share about long wait times for police response in their communities, or stories of the police never showing up at all. Multiple CBOs pointed to CPD staffing levels as a suspected factor in the slow response. Organizations also expressed frustration with their experience with OEMC when calling 911, citing examples where the operator did not express urgency or told the caller no police would be dispatched for the event.

Because of these concerns and frustrations, representatives from multiple organizations stated that their constituents do not have faith in calling 911, are hesitant to do so, and often seek to resolve incidents without the police.

Figure 3: Community feedback on police 911 response process

Experienced long wait times or no CPD response	All CBOs that participated in individual conversations with OIG reported first-hand experiences or those of their community members involving long wait times for police response to 911 calls or calls that never received a CPD response.
Hesitancy to call 911	CBOs reported distrust and discouragement in the speed and manner of police service received through 911, attempts to resolve issues without police, and fear of reprisal when calling 911, sharing examples where responding CPD officers had revealed callers' identities to subjects.
Frustration with the 911 experience	Organizers and community members expressed frustration with the 911 experience, including OEMC call taker demeanor and perceived lack of urgency.
Perception of CPD staffing as a driver of slow response	Reduced CPD staffing numbers was a common reason community members gave as to what they believe is driving long 911 response times.
Perception of disparity in response times by geographic area	Multiple CBOs reported that they believe response times are slower in the South and West Side neighborhoods than those on the North Side.

Source: OIG analysis.

Additionally, multiple interviewees told OIG that it is a common understanding in their communities that police will respond more quickly to an incident in which a gun is reportedly present, which creates an incentive for callers to tell the OEMC call taker that there is a gun at the scene, whether or not they have seen one. One interviewee described their understanding that there are incidents where callers are motivated to lie about the presence of a gun, such as domestic violence situations. In these circumstances, delays or a lack of police intervention can be deadly, so callers tell OEMC a gun is present to ensure their call is prioritized, even if there is no weapon. Although declaring the presence of a gun on-scene may accelerate the response time, the interviewee conceded that police get "pissed" when they realize there is no gun when they arrive. It appears OEMC is also aware of this issue; OIG observed training for new-hire call takers during which an OEMC trainer instructed trainees on asking follow-up questions and cautioned that callers may report guns at the scene to accelerate response times. This lack of community trust and the ensuing manipulation of the 911 system not only erodes the relationship between the police and the communities they serve, but also risks creating confusing or potentially dangerous 911 response situations with CPD members responding based on inaccurate information.

Addressing the concerns and experiences of community members would require CPD to be transparent about its 911 dispatch process, including providing response time data. In October 2021, the City and CPD reached a settlement with the Central Austin Neighborhood Association (CANA) and the American Civil Liberties Union (ACLU) of Illinois in a lawsuit filed in 2011 alleging

discriminatory police deployment.³ During the course of litigation, CANA and ACLU of Illinois obtained CPD response time data which showed highly incomplete data entry for the On-scene response time data field. The terms of the settlement therefore include obligations to increase the percentage of calls with a recorded time in which CPD arrived on scene and to publicly report 911 response time data. The City now publicly posts certain CPD response time data monthly on an online dashboard.⁴ Additionally, the settlement requires CPD to complete a workload analysis of CPD staffing in relation to emergency calls for service and "incorporate the principle of equitable police response...into any new staffing plan developed under the federal consent decree."⁵

While CPD has not published evidence that it has improved its response time data collection, the procurement of a new CAD vendor by the City may bring technological solutions to automate the recording of CPD's arrival on scene for 911 calls. Leadership at the City's Office of Public Safety Administration (OPSA), the agency that manages the CAD contract for the City, reported to OIG that the new system will be able to track the location of police vehicles using GPS and will automatically record a timestamp when the police vehicle is within a defined distance of the service location. OPSA reported to OIG that one anticipated benefit of the new CAD system will be to eliminate human error and improve the data completeness for response times. As of publication, OPSA reported to OIG that the new CAD system is expected to launch citywide in March 2024, with training for personnel expected to begin in September 2023.

B | CPD Dispatch Process and Response Time Data Collection

When an individual calls 911 for police service in Chicago, their call goes first to a 911 call taker within OEMC's emergency call center (see Figure 4 below and Appendix A). The call taker speaks with the caller on the phone and gathers relevant information about the incident being reported. The call taker creates an "event" in the Police Computer Aided Dispatch (PCAD) system, the section of the CAD system that pertains to police events specifically. Based on information provided by the caller, the call taker then assigns a single event type that they believe to best characterize the incident. Depending on the event type the call taker selects, a corresponding alphanumeric priority ranking (e.g., 1A, 2C, 3B, etc.) is automatically assigned to the event. Event types range in priority level from high (e.g. "battery in progress," "shots fired," "suspicious person") to low (e.g. "disturbance – noise/music," "parking violation," "fireworks"). Complicating the call taker's determination is the existence of over 350 event types, 74 of which are designated Priority 1A. Further, many event types overlap or are otherwise difficult to distinguish, for example, "attempt suicide" and "threatening suicide." Despite these overlapping or similar descriptions, these event

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³ Central Austin Neighborhood Association v. City of Chicago, 11 CH 37299, (COOCC 2011), accessed September 20, 2022, https://www.aclu-il.org/en/cases/cana-v-city-chicago.

⁴ Office of Public Safety Administration, "Central Austin Neighborhood Association Calls for Service Data Agreement," accessed November 8, 2022, https://cana-chicagopd.hub.arcgis.com. While the OPSA dashboard does calculate average response times, it still relies on underlying data in which a substantial number of calls are missing timestamps. ⁵ The consent decree entered in *Illinois v. Chicago*, in paragraphs 360 through 368, requires CPD to create a staffing model addressing unity of command and span of control. The City's settlement with CANA and ACLU of Illinois requires that any such model must address the equity of police response in Chicago.

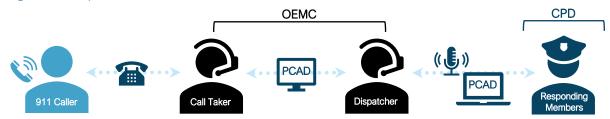
Consent Decree at ¶360 to ¶368, *State of Illinois v. City of Chicago*, No. 17-cv-6260 (N.D. III., Jan. 31, 2019). ⁶ For a full list of event types and associated alphanumerical codes, see the dashboard "Dispatched 911 Calls for CPD Service" on OIG's website. OIG, "Dispatched 911 Calls for CPD Service dashboard," accessed March 10, 2022, https://informationportal.igchicago.org/911-calls-for-cpd-service/.

⁷ The highest priority level in this ranking system is Priority 0, which is reserved for Police and Fire unit calls for assistance. Priority 1A is the next highest priority level.

types may have different corresponding priority levels which can impact the speed with which CPD is dispatched to the event.

After an event type is selected, the OEMC call taker routes the event in the PCAD system to the OEMC dispatcher assigned to the geographic Zone in which the event is taking place. The call taker can send the event to the dispatcher for dispatch to CPD while they are still on the line with the caller asking follow-up questions.

Figure 4: Dispatch Process Overview for 911 Calls for Police Service



Source: OIG analysis.

Depending on the call's priority, the OEMC dispatcher is given a varying amount of time in which they must dispatch the call to a responding CPD unit or units (see Figure 5 below).8 The five priority level classifications as defined in CPD's "General Order G03-01-01: Radio Communications" are listed below.9

<u>Priority 0 - Police and Fire Unit Calls for Emergency Assistance</u>: Involves any life-threatening circumstances which have the potential to compromise the safety and well-being of police, EMS, or fire units.

<u>Priority 1 - Immediate Dispatch</u>: A response to a call for service that involves an imminent threat to life, bodily injury, or major property damage/loss, or is deemed necessary by Department guidelines.

<u>Priority 2 - Rapid Dispatch</u>: A response to a call for service in which timely police action which has the potential to affect the outcome of an incident or is deemed necessary by Department guidelines.

<u>Priority 3 - Routine Dispatch</u>: A response to a call for service that does not involve an imminent threat to life, bodily injury, or major property damage/loss, and a reasonable delay in police action will not affect the outcome of the incident.

<u>Priority 4 - Administrative Dispatch</u>: Used to process requests for service that the field unit initiates (e.g., beat community meeting, beat team meeting, problem solving, foot patrol, etc.) [or that the] dispatcher generates for administrative purposes.

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⁸ If there are no available CPD units and a dispatcher cannot dispatch a job in the allotted time, this is known as a Radio Assignment Pending (RAP) and the dispatcher is required to notify CPD and OEMC supervisors and announce the RAP to CPD units over the radio. See page 12 for more on time allotted for dispatch and RAP procedures.

⁹ Chicago Police Department, "General Order G03-01-01: Radio Communications," July 13, 2016, accessed September 8, 2022, http://directives.chicagopolice.org/#directive/public/6601.

<u>Priority 5 - Alternate Response</u>: A response to a call for service that conforms to Alternate Response Section strategies enumerated in the Department directive entitled "Alternate Response Section Case Reporting Policy" and does not otherwise require the dispatch of a field unit.

To understand the frequency of 911 calls by priority level, OIG analyzed records from OEMC's Management Information System (MIS) database, which houses data for events created and dispatched in the CAD system. Similar to the PCAD section of the CAD system, 911 call data for CPD events specifically are stored in the Police Management Information System (PMIS) section of MIS. OIG found that most dispatched calls for CPD are classified as Priority Levels 1A (37%), 3D (15%), or 3B (13%) as shown in Figure 5 below. Very few dispatched 911 calls were classified as priority levels 4 or 5. Priority 4 – Administrative Dispatch is used for requests for service typically initiated by the CPD field unit, not a 911 phone call; these events therefore do not appear in OIG's analysis of 911 calls. Similarly, because Priority 5 - Alternative Response calls do not typically require a dispatched field unit, few are seen within OIG's analysis of 911 calls where CPD units were dispatched. Because of these considerations, the finding and associated recommendations in this report focus on calls with Priority Levels 0–3.

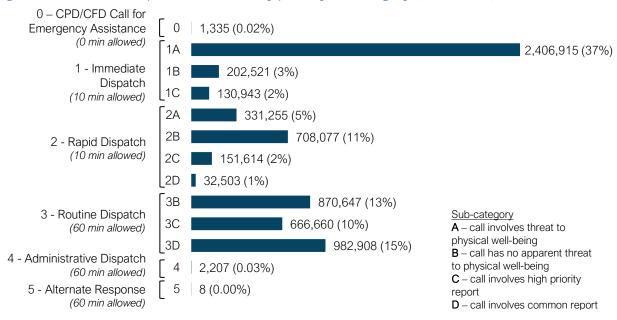


Figure 5: Number of dispatched 911 calls by priority-subcategory (2017–2021)

Source: OIG analysis.

For most calls to 911 (Priority Levels 1 and 2), the OEMC dispatcher is given 10 minutes to dispatch the call to responding CPD units; for calls with Priority 3 or lower, the dispatcher has 60

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¹⁰ Of the 2,207 911 calls categorized as Priority 4, the majority (85%) were for police escort, service to a fire alarm, routine vice complaints, or service to carbon monoxide alarm.

¹¹ The small number of Priority Level 5 calls, eight instances, possibly indicate calls where the event type was initially incorrectly coded for dispatch for CPD service and later changed to "Alternative Response." Recoding the final event type can occur for calls of any priority level and may be reflected here.

minutes to dispatch CPD units.¹² Within the allotted time, the dispatcher must assign the event, or "job," to an available CPD unit in the event's police District. During a Radio Assignment Pending (RAP)—when no CPD vehicles in a District are available, and the dispatcher has reached the allotted time to dispatch the event—the dispatcher must alert their OEMC supervisor and the CPD field supervisor and read out the events over all radio frequencies, or the "Simulcast," every 15 minutes. An OEMC dispatcher reported to OIG that this is done in case nearby units are available to respond.

During dispatch, the dispatcher assigns the event to the unit electronically within the PCAD system and verbally over the radio. If the assigned CPD unit is equipped with a Portable Data Terminal (PDT), the in-vehicle computer through which CPD members can access PCAD, they must acknowledge receipt of the job both within PCAD and verbally over the radio. ¹³ Upon proceeding to the event location, CPD units are responsible for updating their status using the PDT when they are in transit to the location and when they arrive at the scene.

When call takers, dispatchers, and responding units enter event information in the PCAD system, corresponding timestamps of when actions were taken are also recorded. The data record for a 911 call can contain multiple timestamps for certain timepoints in the dispatch process because more than one party may make entries related to an event. For example, both the CPD unit and the OEMC dispatcher can record the unit's status for arrival On-scene, or, when multiple CPD units are dispatched to a single event, each unit enters a unique time for their arrival On-scene. Outlined below in Figure 6 is a sequential list of timestamps recorded in PCAD and the actions that generate the timestamp.

Figure 6: Recorded Timepoints in the CPD Dispatch Process

Timestamp Data Field	Agency *primarily responsible	How Timestamp is Generated
Call Received	OEMC	Timestamp generated by an incoming 911 call to OEMC.
Event Created	OEMC	Timestamp generated when the call taker creates an event in the PCAD system, causing the event to appear in the dispatcher's Pending Events list.
Dispatched	OEMC	Timestamp generated when the dispatcher assigns, or dispatches, a CPD unit to an event.
Acknowledge	CPD*	Timestamp generated when the responding CPD unit acknowledges receipt of the event by pressing "Acknowledge Dispatch" on the PDT.
_	OEMC	Timestamp generated when the dispatcher changes a unit's status to "Acknowledge" for the event.

¹² OEMC dispatchers must immediately dispatch units to an event involving police or fire in need of emergency assistance, or Priority 0, events. There is no time allotted for dispatch for these events.

¹³ Chicago Police Department, "Uniform and Property U01-06: Portable Data Terminal," Section III.E., February 22, 2012, accessed September 8, 2022, http://directives.chicagopolice.org/#directive/public/6280.

¹⁴ In this inquiry, a complete timestamp is defined as at least one status entry made by any user for that timepoint per 911 call. For example, a recorded "En-route" timestamp signifies that at least one PCAD user associated with the 911 call, such as responding units or dispatchers, recorded this status during the event. In contrast, an incomplete timestamp for "En-route" signifies that no PCAD users associated with the 911 call entered an "En-route" status.

En-route	CPD*	Timestamp generated when the responding CPD unit marks themselves as in transit to the scene, by pressing "ENROUTE" on the PDT.
OEMC		Timestamp generated when the dispatcher changes a unit's status to "En-route" for the event.
On-scene ¹⁵	CPD*	Timestamp generated when the responding CPD unit marks themselves as arrived at the scene, by pressing "ONSCENE" on the PDT.
OEMC		Timestamp generated when the dispatcher changes a unit's status to "On-scene" for the event.
CPD*		Timestamp generated when the responding CPD unit marks themselves as cleared from the event, by entering the disposition and other details, such as whether they were the paper car, in the Clear Job screen on the PDT. ¹⁶
OEMC		Timestamp generated when the dispatcher marks a unit as "Clear" for the event, returning their status to "Available."
Event Closed	OEMC	Timestamp generated when the event is closed in PCAD, once all responding units have cleared.

Source: OIG analysis.

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¹⁵ The City plans to launch a new CAD system in March 2024 which promises to automate the recording of On-scene times.

¹⁶ A unit is "cleared" from an event when they have completed all necessary actions associated with the event, including any required reports or transport. In the event that the completion of a police report (for example, an arrest report) is required at the conclusion of an event, the unit responsible for completing the report is known colloquially as the "paper car." Because completion of reports and transport can be time-intensive, there may be significant time lags between one unit clearing from an event and another responding unit clearing from the same event.

III | Objectives, Scope, and Methodology

A | Objectives

The objectives of this inquiry were to determine:

- the completeness rates of CPD response times recorded by CPD and OEMC, and
- contributing factors for missing response time data entry for CPD dispatch to 911 calls

B | Scope

The scope of this inquiry included all dispatched 911 calls for CPD service from January 1, 2017 to December 31, 2021. For these records, OIG analyzed the completeness of timestamp entries for 911 calls by timepoint in the response process, priority level, type of call, CPD District of service, and user category that recorded the timepoint. OIG also examined the 911 call dispatch process, including the roles and responsibilities of call takers, dispatchers, and responding CPD members, the training of OEMC and CPD personnel, the functionality of the technology used during dispatch, and the division of responsibilities between CPD and OEMC.

C | Methodology

To assess the completeness rates of CPD response times recorded by CPD and OEMC, OIG analyzed 6.5 million 911 calls dispatched for CPD service from January 1, 2017 through December 31, 2021, to determine the completeness of data entry for the Dispatch, Acknowledge, En-route, On-scene, and Clear timestamps for 911 calls, by:

- Priority level
- Event type
- CPD District
- User category who recorded the timestamp

To examine the contributing factors for missing response time data entry for CPD dispatch to 911 calls, OIG interviewed the following agency personnel:

- General Counsel, CPD
- Executive Director, OEMC
- Executive Director, OPSA
- Director of Information Systems, OPSA
- Managing Deputy Director of Information Technology, OPSA
- Operations Manager, OEMC

OIG conducted observations of CPD and OEMC practices pertaining to dispatch, including:

- 45.5 hours of new-hire and promotional training for the role of OEMC dispatcher (PCO II)
- 56 hours of ride-alongs with CPD units across Districts and watches
- 18.5 hours of live dispatch with dispatchers (PCO IIs) at the OEMC call center
- 2 hours of PDT training administered to CPD recruits in the Academy

To understand public priorities and interests related to the topic of this inquiry, gather testimonials of lived experience, and establish legal obligations as it pertains to collecting and reporting CPD response times, OIG:

- Engaged 20 community members representing 12 community-based organizations in Chicago by facilitating a roundtable panel with the organizations and community members and by conducting individual conversations with each organization, and
- Interviewed plaintiffs Central Austin Neighborhood Association and ACLU of Illinois regarding the settlement of *Central Austin Neighborhood Association v. City of Chicago.*

D | Standards

OIG conducted this inquiry in accordance with the Quality Standards for Inspections, Evaluations, and Reviews by Offices of Inspector General found in the Association of Inspectors General's *Principles and Standards for Offices of Inspector General* (i.e., "The Green Book").

E | Authority and Role

The authority to perform this inquiry is established in the City of Chicago Municipal Code § § 2-56-030 and -230, which confer on OIG the power and duty to review the programs of City government in order to identify any inefficiencies, waste, and potential for misconduct, and to promote economy, efficiency, effectiveness, and integrity in the administration of City programs and operations, and, specifically, to review the operations of CPD and Chicago's police accountability agencies. The role of OIG is to review City operations and make recommendations for improvement. City management is responsible for establishing and maintaining processes to ensure that City programs operate economically, efficiently, effectively, and with integrity. Further, Paragraph 561 of the consent decree entered in *Illinois v. Chicago* requires OIG's Public Safety section to "review CPD actions for potential bias, including racial bias." ¹⁷

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¹⁷ Consent Decree ¶ 156, State of Illinois v. City of Chicago., No. 17-cv-6260 (N.D. Ill. Jan. 31, 2019).

IV | Finding and Recommendations

CPD's data collection of 911 response times is incomplete, limiting analyses of CPD's 911 response and hindering data-informed operational improvements, including to the efficiency and equity of police service.

OIG examined timestamp data for response statuses recorded in PCAD for dispatched 911 calls for police service from January 1, 2017 through December 31, 2021. As seen below in Figure 7, timestamps for several statuses were often missing from 911 call records in OEMC's database of dispatched events.

Figure 7: Response status timestamp entry rate for dispatched 911 calls for CPD service

Status	Percent of dispatched calls with timestamp recorded for status	Timestamp can be recorded by:
Dispatch	100.0%	OEMC dispatchers
Acknowledge	79.5%	CPD responding members and OEMC dispatchers
En-route	57.1%	CPD responding members and OEMC dispatchers
On-scene	49.3%	CPD responding members and OEMC dispatchers
Clear	100.0%	CPD responding members and OEMC dispatchers

Source: OIG analysis.

OIG examined records in PMIS which contained either a recorded Dispatch time or a flag-identifier noting the event as "dispatched," and thus the near-100% completeness of the Dispatch times reported here reflects the sample of call records analyzed. The high completion rate seen for Clear times is likely due to the PCAD dispatch process, wherein a unit must first be marked "Clear" from the previous job before the OEMC dispatcher can assign the CPD unit to a new job. For the intermediary times of Acknowledge, En-route, and On-scene, OIG found that the later the timepoint occurs in the emergency response process, the less complete the data is. That is, "En-route" data is less complete than "Acknowledge" data, and "On-scene" data is less complete than "En-route" data.

While dispatchers interact with the PCAD system on stationary computers at the OEMC 911 call center, CPD members access the PCAD through in-vehicle computers, or Portable Data Terminals (PDTs). CPD reported to OIG that most, but not all, patrol vehicles are equipped with PDTs. The completeness of the data decreasing in sequential order appears due, at least in part, to the interface of the PDT. After a dispatcher assigns a unit to a job in PCAD, the event message will appear on the assigned unit's in-vehicle PDT, covering almost the entire screen. There is a large

button that appears on the touchscreen that says, "Acknowledge Dispatch." When pressed, the unit's status changes from "Dispatch" to "Acknowledge," and a corresponding timestamp is generated for the Acknowledge time. Because the event message covers nearly the entire PDT screen, members in the assigned unit are unable to use other aspects of the PDT without first interacting with the message to acknowledge the dispatch. This design encourages CPD members to acknowledge events as soon as they are assigned to a job and may explain the higher data completeness for Acknowledge time compared to the En-route and On-scene times. In contrast, the button to update an officer's En-route and On-scene status is a small, static field on the PDT screen. Although it does not fill the screen, the button changes color as the status becomes applicable in the life cycle of a response event. Specifically, the button turns teal to prompt CPD members to press En-route and then it turns to yellow to prompt them to press On-scene.

Decreasing data completeness throughout the 911 response process occurs in all Districts, as seen below in Figure 8.

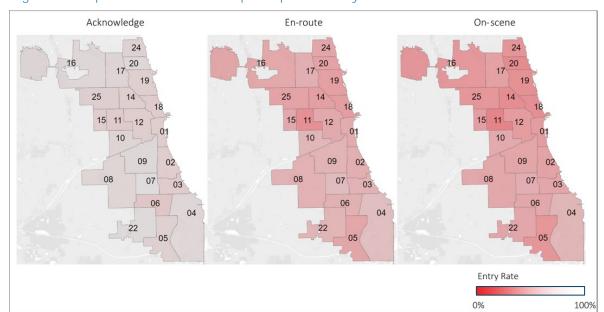


Figure 8: Response status timestamp completeness by CPD District

Source: OIG analysis.

This pattern of decreasing timestamp completeness throughout the response process also holds for all emergency response priority levels (0, 1, 2, and 3), as seen below in Figure 9. Also visible in Figure 9 is the trend that the completeness rates for *every* timestamp are higher for the higher priority level calls. Priority 0 calls exhibit the highest completeness rates for Acknowledge, En-route, and On-scene times, while Priority 3 calls exhibit the lowest completeness rates. That is, for more urgent or higher priority call types, response time data is entered more consistently than for lower priority call types.

In a meeting with CPD, OEMC, and OPSA, the agencies suggested to OIG that the missingness of response time data is largely due to the urgent nature of emergency events, and the resulting fact that the manual process of entering status updates on a PDT would not be the most pressing concern of responding CPD members. The data displayed in Figure 9, however, demonstrates the opposite; status updates are more likely to be entered on more urgent calls.

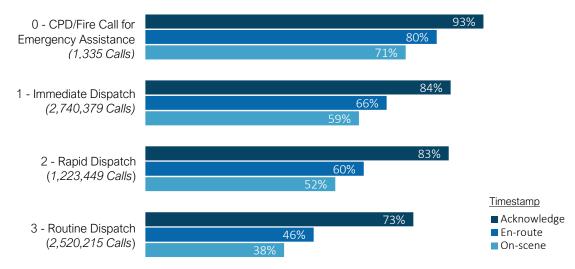


Figure 9: Percent of calls with response status timestamp recorded by Priority Level

Source: OIG analysis.

Higher data completeness for higher priority calls might be explained, in part, by the fact that OEMC dispatchers are more actively involved in monitoring the progress of a response and recording data for the highest-urgency calls. OIG found that among Priority 0 calls (calls from CPD or Fire units for emergency assistance), OEMC dispatchers accounted for more data entry completed during the response than among all other calls. Specifically, of On-scene timestamps recorded for Priority 0 calls, OEMC dispatchers accounted for 15.3% of the data entry. For all other calls, OEMC dispatchers accounted for just 3.4% of the data entry for On-scene timestamps.

OIG did not find trends in the missingness of response time data by any other factors, including geographic location. Because response time data is more likely to be complete for higher-priority calls, Districts with a higher proportion of 1A calls generally have higher overall response time completeness rates. However, OIG did not identify any pattern of response time completeness rates by District or geographic area independent of the pattern in completeness by call priority level.

A | In accordance with Department policy, dispatched CPD members are ultimately responsible for response time data entry. However, CPD lacks monitoring systems that could ensure full compliance with its policy.

In accordance with CPD directive "U01-06: Portable Data Terminal," CPD members are responsible for keeping OEMC dispatchers aware of their availability for assignment via radio communication by verbally Acknowledging and Clearing themselves from a job. 18 If equipped with a PDT, CPD members are also required to enter their Acknowledge and Clear status, in addition to En-route and On-scene status, on the PDT in their vehicles. CPD's policy places the responsibility for entering response statuses on the responding member, not on any OEMC staff. This allocation of responsibility was echoed during OIG observations of OEMC dispatcher training, during which

¹⁸ Chicago Police Department, "Uniform and Property U01-06: Portable Data Terminal," February 22, 2012, accessed September 8, 2022, http://directives.chicagopolice.org/#directive/public/6280.

trainers characterized the duty to record an updated status as the responsibility of an assigned CPD member. OEMC's relevant Standard Operating Procedure outlines the roles and responsibilities of dispatchers and charges the OEMC dispatcher with checking in on field units and requesting statuses if they have not been given "for extended periods of time," but neither OEMC nor CPD policies charge the dispatcher with the entry of response statuses. ¹⁹ Further, dispatchers are not expected to make corrections when an officer fails to enter a status, nor are they tasked with ensuring CPD members enter status updates.

While an OEMC dispatcher *can* update and maintain a CPD unit's status reported via radio, there is no guarantee that a status being updated this way is being reported in real time. In calculating CPD response times, any analysis must consider that timestamps recorded by dispatchers are not necessarily as accurate as status updates entered by the responding units themselves. Because of these data accuracy concerns, OIG finds that OEMC and CPD policies appropriately place the responsibility for response time data collection primarily on dispatched CPD members. OIG also found that the applicable policies are reflective of what happens in practice; when timestamp entries for Acknowledge, En-route, and On-scene statuses *are* recorded, they are typically entered by the responding officer (see Figure 10 below). The Clear time, which occurs after the CPD response is complete, has a combination of data entry by CPD members and OEMC dispatchers. As stated previously, this is likely because dispatchers may not assign a unit to a new Priority 1 call (the most common priority group) within the PCAD system until a unit has been cleared from its previous job.

100% 54% ■ CPD Unit(s) Only 88% 91% OEMC Dispatcher Only 92% 100% ■ Both CPD Unit(s) and OEMC Dispatcher ■ Other user type 5% 0% Dispatch Acknowledge En-route Clear On-scene

Figure 10: Percentage of 911 calls with entered response status timestamps by user(s) recording the timestamp²⁰

Source: OIG analysis.

¹⁹ Office of Emergency Management and Communications, "Police Standard Operating Procedure P010-001, Primary Roles and Responsibilities of Zone Dispatchers and Power Relief Dispatchers," Section III.J., February 15, 2010.
²⁰ In its analysis of recorded timestamps, OIG identified two scenarios displayed here as an "Other" user entering the time. The first includes timestamps that were entered by a user ID other than a CPD member or OEMC dispatcher, for example, an OEMC call-taker; that is what accounts for the majority of "Other" entries for the Dispatch and Clear times. In the second scenario, OIG identified recorded timestamps for En-route, but no associated user ID for the personnel who entered the En-route status/command; instead, it appears these En-route times were generated by the system as a result of a user entering a related command in the CAD system, such as updates to location.

While responding CPD members are primarily the generators of recorded Acknowledge, En-route, and On-scene times when they *are* recorded, there is still a significant number of calls where these times *are not* recorded (see again Figure 7 above).

CPD does not currently have an accountability or review process in place to ensure response time data is recorded in compliance with its policy, nor does OEMC. PCAD data is housed within OEMC's PMIS database. OEMC reported to OIG that they do not audit or correct MIS data, either on their own or in coordination with CPD. CPD's lack of access to OEMC's data system to monitor data completeness rates means that CPD supervisors are unable to consider individual member data entry in reviewing member performance to identify a need for training or coaching or accurately identify processes that need reinforcement. Further, training on response time data entry reviewed by OIG did not explicitly define the expectations for data entry for responding CPD members.

OIG observed the two-hour training offered to new CPD members by the Education and Training Division on use of the PCAD system and PDT hardware, and found that the importance of collecting response times was not strongly emphasized. The instructor briefly stated that CPD members should be marking themselves En-route and On-scene, per the policy.²¹

As a result of highly incomplete response time data, any analysis of trends and determining factors to fast or slow response times, process failures, or areas for improvement in the 911 emergency dispatch process is profoundly limited. To improve its data collection of 911 response times, CPD must engage in regular data monitoring and improve compliance with and enforcement of policies pertaining to response status data entry.

B | Considerations for public reporting of CPD response times

The gaps in the data completeness for critical timepoints in the response process present a significant challenge for those who wish to assess and evaluate CPD 911 response times. Before analyzing the speed, overall efficiency, and equity of CPD's 911 response, it is imperative to have substantially complete data for all timepoints in the dispatch and response process.

In a 2021 audit evaluating response times for the Chicago Fire Department (CFD), OIG consulted a statistics expert from the U.S. Government Accountability Office regarding a similar trend of missing response status timestamp data. The statistics expert advised OIG that before any analyses were done, an assessment should be done to determine if there is a trend to the missingness of the data (for example, if one or more geographic areas accounted for a greater-than-random proportion of calls with missing timestamps).²² While the incomplete nature of the data does not preclude statistical analyses of response times from being completed, it is imperative that anyone doing so must become an informed consumer of the quality of the data they are analyzing and the biases that may exist in the results of the analysis in case of systematic trends in which records have incomplete data. As with CFD's response time data, because CPD response time data is also substantially incomplete, or unrecorded, any analyses of CPD response times must first search for

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²¹ Chicago Police Department, "Uniform and Property U01-06: Portable Data Terminal," February 22, 2012, accessed September 8, 2022, http://directives.chicagopolice.org/#directive/public/6280.

²² OIG, "Second OIG Audit of the Chicago Fire Department's Fire and Emergency Medical Response Times," accessed September, 26, 2022, https://igchicago.org/2021/10/12/second-oig-audit-of-the-chicago-fire-departments-fire-and-emergency-medical-response-times/.

trends among calls where response timestamps are missing. An evaluation of timestamp missingness trends can help to inform whether the results of any analysis of the available data would be statistically biased. Statistical biases could appear if missing response timestamps are more prevalent among calls of a particular type. For example, if timestamp data is *more likely* to be incomplete for calls that occurred at a certain time of day, then any analysis of the data that *is* available would risk producing a biased estimate of the average and range of response times. If there are no such patterns in the 911 calls with incomplete timestamp data, then analyses of the available data would not be statistically biased.

OIG's exploratory data work has not identified any specific patterns among 911 calls for police service with unrecorded response times that suggest future analyses of response time data would be biased. However, because the timestamp data is needed to calculate the length of CPD's response, it is not possible to evaluate whether 911 calls with a particularly slow police response are more likely to have incomplete response time data. The absence of these timestamps could introduce a very important statistical bias into any analysis of response times within the available data; unfortunately, no analysis of the available data alone can eliminate that possibility. While it is not possible to eliminate the chance that *any* patterns exist in the missing data that could lead to biased estimates, a thorough examination for all possible biases must be completed before the calculation of response times can be done, given the incomplete nature of the data that *is* available. OIG has not undertaken that work in this inquiry, but may do so in future analyses.

Recently, OPSA published CPD response time data for 911 calls for the year 2022.²³ The data is displayed in an online dashboard. While the OPSA dashboard calculates average times from Dispatch of the CPD unit(s) to their arrival On-scene, it still relies on underlying data with a substantial amount of calls that are missing response status timestamps. Many of OIG's conversations with community-based organizations revealed frustrations with the time it takes for CPD members to arrive at the scene of the event and an interest in obtaining response time data for their communities. Providing the public with response time data from Dispatch to On-scene is a step towards transparency and holds the potential to reveal trends in response times across neighborhoods, Districts, types of calls, and more. Further, the City has procured a new vendor for the CAD system which promises to increase the On-scene time data completeness from 49.3% of dispatched calls, as identified in this analysis, to nearly all calls where a dispatched vehicle is equipped with GPS. Improving the completeness rates for On-scene times will strengthen the reliability of analyses that can be done on CPD's response time data. While these developments are promising, there remain important limitations in analyzing CPD response times based on the interval from Dispatch to On-scene alone.

Even if a new CAD system were to allow CPD to capture On-scene times for 100% of dispatched 911 calls, examining the interval from the Dispatch to the On-scene time alone excludes critical phases of the dispatch process that may also account for or contribute to inequity or inefficiency in the police 911 response process. Currently, the City's public dashboard of CPD response times does not examine the intermediary intervals in the dispatch process. The settlement agreement in Central Austin Neighborhood Association v. City of Chicago provides that the City shall "calculate, by district, the average on-scene response times (defined as from time of dispatch to time on-scene), and shall make those district-by-district averages public by posting them on the City's

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²³ CPD's response time data was made public in accordance with the settlement of *Central Austin Neighborhood Association v. City of Chicago*. Office of Public Safety Administration, "Central Austin Neighborhood Association Calls for Service Data Agreement," accessed November 8, 2022, https://cana-chicagopd.hub.arcgis.com.

website on a monthly basis" (emphasis added).²⁴ The settlement agreement also includes an appendix of data fields that the City is required to "collect and post online." The listed data fields in the appendix do not include Dispatch, Acknowledge, En-route, Closed, or Clear timestamps.

However, to identify which specific factors of the dispatch and response process account for delays and inefficiencies, CPD and any other stakeholders undertaking an analysis of response times would need to examine the dispatch and response process in its entirety. Studying time intervals outside of the time from Dispatch to On-scene can reveal contributing factors to a delayed dispatch process. For example, an analysis of the duration from Dispatch time to the Acknowledge or Enroute time in a District could identify whether insufficient CPD staffing levels in relation to the volume of calls for that area may be driving slow response. Examining *only* the Dispatch to On-scene time would not help CPD to identify how much of delayed responses may be attributed to the call intake and dispatch processes within the OEMC call center including the points in time when the call is received, an event is created in the PCAD system, and ultimately dispatched to a CPD unit. In Figure 11, OIG outlines several important time intervals using the response statuses CPD currently records and a brief explanation of what each time interval can reveal about the dispatch process.

Figure 11: Response Time Intervals and Their Significance to Understanding CPD 911 Response CALL RECEIVED EVENT CREATED IN EVENT DISPATCHED EVENT CLOSED IN PCAD BY OEMC PCAD BY OEMC BY OEMC 8 CPD EN-ROUTE CPD ON-SCENE **CPD CLEAR** DISPATCH FROM SCENE **ACKNOWLEDGED** BY CPD UNIT(S) CALL RECEIVED **EVENT CREATED IN** BY OEMC PCAD BY OEMC Long intervals between Call Received and Event Created could implicate high call volumes or low call taker staffing levels as delaying factors in police response times. CALL RECEIVED EVENT DISPATCHED BY OEMC BY OEMC 3 Call Received to Dispatched intervals cover the entire period of OEMC's call processing and could help to identify whether delays are originating within OEMC, CPD, or both agencies.



The interval from Call Received to On-scene incorporates both OEMC and CPD processes. It is the time interval most relevant to a member of the public's experience calling for police service and therefore critical for building public confidence in the 911 system.

EVENT CREATED IN PCAD BY 0EMC BY 0EMC BY 0EMC

Long intervals from when a call taker sends an event to a dispatcher until it is dispatched could implicate the 911 call priority system, low CPD staffing levels leading to Radio Assignments Pending (RAPs), or low dispatcher staffing levels.

²⁴ Office of Public Safety Administration, "Central Austin Neighborhood Association Calls for Service Data Agreement," accessed November 8, 2022, https://cana-chicagopd.hub.arcgis.com.



Long intervals from Dispatch to Acknowledge may indicate pending calls due to insufficient CPD staffing levels. Missing Acknowledge times may indicate a lack of PDTs in CPD vehicles.



Long intervals from Dispatch to En-route could indicate multiple dispatched calls to a single unit due to insufficient CPD staffing levels or high call volume in certain areas. Units must respond to these "stacked events" in order of priority.



The Dispatch time to On-scene interval captures the period from when CPD units are first alerted to the incident and when they arrive on-scene and could help identify whether delays are originating within OEMC or CPD.



Long intervals from arrival On-scene to when responding CPD members are Cleared from the scene are not necessarily problematic or inefficient. For example, more serious or complex events might reasonably require responding members to spend more time on scene. Data on this time interval could help to identify trends or disparities in the time CPD units dedicate to resolving events, based on call type or geographic area.

Source: OIG analysis.

Although a new CAD system may provide partial solutions to response time data collection, the new CAD system will not address certain timepoints and consequently will not support the full range of analysis necessary to provide a complete picture of CPD emergency response times.

Recommendations

- 1. CPD should review the contents of its policy "U01-06: Portable Data Terminal" and provide guidance to members that reinforces their responsibility for the timely entry of PCAD statuses and timestamps throughout the event dispatch process, such as through Academy and field training, job supervision, and clear written guidance.
- 2. CPD should coordinate with OEMC to audit PMIS data for data completeness to ensure compliance with the response time data entry requirements of CPD policy.
- 3. CPD should collaborate with OPSA in the development and implementation of any new CAD system to optimize the user interface to reduce barriers to CPD members' consistent entry of status updates in real time.
- 4. CPD should ensure that all vehicles that respond to 911 calls are equipped with a PDT device, or equivalent equipment to enable use of the new CAD system.
- 5. To comprehensively evaluate response time data for operational improvements, CPD should:
 - a. analyze data for each time interval in the dispatch process, not only time from Dispatch to On-scene, and
 - b. evaluate methodological best practices in calculating police response times and consider how methodological decisions will impact the reported results of its analyses, such as:

- i. how missing data impacts response times analyses,
- ii. how response times are calculated for a single emergency event that is called into 911 multiple times, and
- iii. how response times are calculated for jobs where multiple CPD units are dispatched to a single event.

Management Response

- 1. The Department agrees with this recommendation and will review the "U01-06: Portable Data Terminal" order to determine what, if any, edits should be made. Additionally, the Department intends to review additional orders to determine whether changes need to be made to orders surrounding communications to highlight the importance of the timely entry of PCAD statuses. Subsequent to policy revisions the Department will work with the Training and Support Group to determine what, if any, changes should be made to training to ensure officers are aware of changes to orders and the importance of communication.
- 2. The Department had the opportunity to discuss this recommendation with the OIG during the exit conference and understand that this recommendation is more than simply a data quality audit rather a way to determine if CPD has decreased compliance in certain districts. CPD is currently reviewing to what extent it can do an audit as recommended by OIG. CPD has limitations in manpower and band-with that limits its ability to fully adopt this recommendation, but understands the importance of completing periodic audits to determine where changes need to be made. CPD will continue to work with OIG on this recommendation and possible responses it can do to meet this recommendation.
- 3. There is currently a working group on this issue comprised of members from OPSA, OEMC and CPD. This group focuses on the development and implementation of the new CAD system and how it works within and across these departments.
- 4. CPD is moving towards equipping all CPD members with telephones that contain CAD and GPS enabled equipment. As the Department rolls out this new equipment it will continue to discuss the order in which members outside of patrol will receive this equipment.
- 5. The Department agrees that evaluation of response time data is an important step to take and will consider this recommendation by the OIG as the Department develops its evaluation criteria and goals it seeks to accomplish through this evaluation. While the Department understands the importance of evaluating response time data, there are limitations in both technology and band-with to truly evaluate this data in the manner recommended by the OIG. The Department will continue to be cognizant of how additional data can impact analysis on response times and will work to audit and analyze the available data, but cannot fully adopt this recommendation at this time.

V | Conclusion

Chicagoans have long had concerns regarding equitable police emergency response times, and public access to reliable data has been limited. In both policy and practice, CPD members are responsible for updating their status for each point in the emergency response process on their PDTs, thereby generating a corresponding timestamp for the status. Through this inquiry, OIG found that CPD's response time data is substantially missing and CPD lacks monitoring systems that could enforce data entry responsibilities. CPD must bolster its data collection of all response status timestamps to enable more accurate and thorough analysis of the efficiency and equity of 911 response times across the City. Although CPD's procurement of a new CAD system will help to increase the data collection of On-scene times, limiting response time analyses to only the interval from Dispatch time to On-scene time will not allow CPD to examine the full range of factors that may lead to a delayed response for service.

This report is intended to provide transparency around the steps in CPD's 911 emergency response process and serve as a foundation to highlight the data quality necessary to conduct reliable analyses of CPD's 911 response times. OIG did not undertake response time calculation work in this inquiry; any future effort to do so must first undertake to thoroughly examine the data for trends in missing response status timestamps to identify possible statistical biases. Further, analyses of 911 response times must determine how to calculate response times for 911 calls with multiple dispatched CPD units or for emergencies with numerous associated 911 calls, and consider the accuracy of the data based on the user that entered the status. A comprehensive analysis must also evaluate each interval in the 911 dispatch and response process to pinpoint drivers of slow response times and in turn to identify areas to target for operational improvement.

Appendix A | Dispatch Process and Roles for 911 Calls to CPD

Within the OEMC 911 call center, there are two intermediary roles between a 911 caller and the CPD officer who will respond to their emergency: a call taker and a dispatcher. Both call takers and dispatchers are OEMC employees. Communication between call takers and dispatchers occurs via the electronic PCAD system, and communication between dispatchers and responding CPD members occurs both electronically through the PCAD and verbally over the radio.

OEMC Call Takers (Police Communications Operator I/PCO Is)

Determining Fire/EMS Response

Within OEMC, all 911 calls first come to the Police Communications Operator (PCO I), or "Police call taker." It is the Police call taker's job to determine if the event should be "routed to fire," i.e. sent to a Fire Communications Operator I (FCO I) or not. Should a 911 call require a Fire or EMS response, the Police call taker will route the call to the Fire call takers, and when that intake is complete, the call will return to the original Police call taker to determine if further police dispatch is needed. OEMC staff reported to OIG that there are many fewer Fire call takers and dispatchers than there are for police.

Gathering Information

The call taker talks to the 911 caller on the phone and is tasked with gathering relevant information about the event, including information about the event such as the presence of weapons, the service address or location, and the caller's personal information. In observations of OEMC call taker training, OIG found that OEMC stressed the importance of call takers gathering as much information about the call as possible in the interest of ensuring the safety of responding CPD members. While gathering information from the caller, the call taker also determines whether there is a mental health component for the call and if so, checks a box in the PCAD system indicating the event is mental health-related. This is done to allow the OEMC dispatcher to dispatch units with a CPD member who has been trained in crisis intervention, if available (see Dispatching Events section below).

Creating the event in PCAD

The call taker creates the event in the PCAD system and selects the most appropriate event type based on information provided by the caller. The selected event type will automatically populate a priority ranking for the event. Via the PCAD, the call taker sends the event to the appropriate dispatcher for the geographic Zone for the event location. The event appears in the dispatcher's pending events list. The call taker is still able to update information about the event and remain on the line with the caller even after sending the event to a dispatcher in the PCAD system. Because of the size of the 911 call center, workstations for OEMC call takers and dispatchers are spread out. Due to this spacing and the fact that call takers and dispatchers are in near constant verbal communication with callers and CPD units respectively, the call takers and dispatchers do not communicate verbally with each other. They communicate exclusively through the PCAD system.

OEMC Dispatchers (Police Communications Operator II/PCO IIs)

Dispatcher Zones & Roles

Within OEMC, there are 13 Dispatch Zones or radio zones. Most Zones cover two CPD Districts, with some covering only one CPD District. All CPD units in a Zone are tuned into the same radio frequency; however, dispatchers can also communicate over all radio frequencies when needed. For each Zone, there are two dispatchers (Police Communications Operator II/PCO IIs) that work the Zone simultaneously per shift. The two dispatchers have identical positions and job responsibilities, but alternate in their daily roles. Daily, the two dispatchers will alternate working as the "primary dispatcher" or the "secondary dispatcher." The primary dispatcher is the person who talks over the radio to the responding units. Their primary responsibilities are to monitor the airwaves for their Zone, verbally dispatch units over the radio, respond to and acknowledge all requests from field units, and ensure officer safety. The secondary dispatcher is mainly responsible for data entry, processing officer requests such as name or license plate checks, responding to PCAD messages, making appropriate notifications, and doing "callbacks." For example, if more information is needed from a caller, or CPD units arrive on the scene and cannot find the caller, the secondary dispatcher is the one who will dial the number recorded in the event by the call taker. Both dispatchers have identical workstations and can view and enter all the same information and commands. OEMC reported to OIG that the alternation of the daily dispatcher roles is to avoid fatigue.

Dispatching Events

When an event is sent by the call taker, it will display in the dispatcher's pending events list, or "the queue" on their monitors. The pending events screen shows a countdown clock for each event based on the priority of the event. Dispatchers have 10 minutes to dispatch Priority 1 and Priority 2 events. Dispatchers have 60 minutes to dispatch all other events. Events involving officer emergencies, or Priority 0, have a countdown clock of 0:00 and must be dispatched immediately. By looking at the "lineup," a roster of all the units/vehicles in the Zone and their availability status, the dispatcher will then dispatch the pending events to available police units. This is done both verbally over the radio and in the PCAD system by dispatching a unit to the event which changes the unit's status in PCAD to "Dispatched" for that event. This will trigger the event to show up on the PDT in the assigned police vehicle.

Figure A1: Example Police Dispatcher Workstation



Source: OIG analysis.

The dispatcher will know if a unit contains an officer who is trained in crisis intervention by checking the unit attributes next to the unit number in the lineup. The unit will contain a code (a "z") next to its unit number indicating the unit has a crisis intervention-trained CPD member. However, the process of updating unit attributes is manual, as the members in each unit change from watch to watch. Other unit attributes that can be listed on the OEMC dispatcher's

interface are the gender and language abilities of members (specifically, there are codes for Spanish- and Polish-speaking members).

Radio Assignments Pending (RAPs)

If no vehicles in a District are available, but the dispatcher has events that have passed the allotted time to be dispatched, this is called a RAP—or Radio Assignments Pending. When this circumstance arises, the OEMC dispatcher must alert their floor supervisor and the CPD field supervisor and read out the events over all radio frequencies every 15 minutes. An OEMC dispatcher reported to OIG that this is done in case nearby listening units are able to respond.

Maintaining field unit status and location

In addition to dispatching events, dispatchers check on units and maintain their status and location in the PCAD system. Dispatchers must check in when a unit's lunch or break has elapsed, and they must check on dispatch assignments when the unit has not given an update. When a dispatcher assigns a unit to a job, their status becomes "Dispatched." The CPD unit then can mark themselves as Acknowledged, En-route, and On-scene on the in-vehicle PDT; dispatchers are also able to update units' statuses.

Responding CPD Units

Receiving a job

When a CPD unit is dispatched to event, it will appear on the in-vehicle PDT, covering the computer's entire screen. There is a large button that appears on the touchscreen that says, "Acknowledge Dispatch." When pressed, this changes the unit's status from "Dispatched" to "Acknowledged." CPD members are instructed to mark themselves as En-route immediately after Acknowledgment unless something prohibits them from embarking en-route to the scene. CPD members are also instructed to hit the On-scene button immediately before stepping out of the car after arrival at the scene of the event.

Communication to Dispatch

A CPD unit's PDT is able to send messages to the Zone dispatchers and other units in their District. Units may also communicate to dispatch over the radio. For certain communications, such as acknowledgement of dispatch assignments, units are required to update their status both verbally and on the PDT, if there is one present in the vehicle. For other communication with the dispatcher, such as requesting a name or license plate check, the officer can exercise discretion in using the radio or the PDT. In certain emergency situations, dispatchers may ask all units for radio silence until the emergency is concluded.

Appendix B | CPD Response

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OFFICE OF INSPECTOR GENERAL City of Chicago

740 N. Sedgwick Street, Suite 200 Chicago, Illinois 60654 Telephone: (773) 478-7799 Fax: (773) 478-3949

Management Response Form

 $Inquiry\ Title\ and\ Number: \underline{Chicago\ Police\ Department\ 911\ Response\ Time\ Data\ Collection\ and\ Reporting,\ \#20-1327}$

Department Name: Chicago Police Department (CPD)

Commissioner/Department Head: Interim Superintendent Fred Waller, CPD

Date: July 10, 2023

OIG Recommendation	Department's Response and Proposed Corrective Action	Implementation Timeframe	Party Responsible
 CPD should review the contents of its policy "U01-06: Portable Data Terminal" and provide guidance to members that reinforces their responsibility for the timely entry of PCAD statuses and timestamps throughout the event dispatch process, such as through Academy and field training, job supervision, and clear written guidance. 	The Department agrees with this recommendation and will review the "U01-06: Portable Data Terminal" order to determine what, if any, edits should be made. Additionally, the Department intends to review additional orders to determine whether changes need to be made to orders surrounding communications to highlight the importance of the timely entry of PCAD statuses. Subsequent to policy revisions the Department will work with the Training and Support Group to determine what, if any, changes should be made to training to ensure officers are aware of		

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OIG Recommendation	Department's Response and Proposed Corrective Action	Implementation Timeframe	Party Responsible
	changes to orders and the importance of communication.		
CPD should coordinate with OEMC to audit PMIS data for data completeness to ensure compliance with the response time data entry requirements of CPD policy.	The Department had the opportunity to discuss this recommendation with the OIG during the exit conference and understand that this recommendation is more than simply a data quality audit rather a way to determine if CPD has decreased compliance in certain districts. CPD is currently reviewing to what extent it can do an audit as recommended by OIG. CPD has limitations in manpower and band-with that limits its ability to fully adopt this recommendation, but understands the importance of completing periodic audits to determine where changes need to be made. CPD will continue to work with OIG on this recommendation and possible responses it can do to meet this recommendation.		

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3. CPD should collaborate with OPSA in the development and implementation of any new CAD system to optimize the user interface to reduce barriers to CPD members' consistent entry of status updates in real time.	There is currently a working group on this issue comprised of members from OPSA, OEMC and CPD. This group focuses on the development and implementation of the new CAD system and how it works within and across these departments.		

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 CPD should ensure that all vehicles that respond to 911 calls are equipped with a PDT device, or equivalent equipment to enable use of the new CAD system. 	CPD is moving towards equipping all CPD members with telephones that contain CAD and GPS enabled equipment. As the Department rolls out this new equipment it will continue to discuss the order in which members outside of patrol will receive this equipment.		

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OIG Recommendation	Department's Response and Proposed Corrective Action	Implementation Timeframe	Party Responsible
5. To comprehensively evaluate response time data for operational improvements, CPD should: a. analyze data for each time interval in the dispatch process, not only time from Dispatch to On-scene	The Department agrees that evaluation of response time data is an important step to take and will consider this recommendation by the OIG as the Department develops its evaluation criteria and goals it seeks to accomplish through this evaluation. While the Department understands the importance of evaluating response time data, there are limitations in both technology and band-with to truly evaluate this data in the manner recommended by the OIG. The Department will continue to be cognizant of how additional data can impact analysis on response times and will work to audit and analyze the available data, but cannot fully adopt this recommendation at this time.		

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OIG Recommendation	Department's Response and Proposed Corrective Action	Implementation Timeframe	Party Responsible
5. To comprehensively evaluate response time data for operational improvements, CPD should: b. evaluate methodological best practices in calculating police response times and consider how methodological decisions will impact the reported results of its analyses, such as:		imerane	
i. how missing data impacts response times analyses, ii. how response times are calculated for a single emergency event that is called into 911 multiple times, and iii. how response times are calculated for jobs where multiple CPD units are dispatched to a single event.			

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