

## Fire and Police Commission

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Memorandum
To: Honorable Members of the Milwaukee Common Council
From: Leon W. Todd, Executive Director
Barbara Cooley, Research and Policy Analyst
Date: May 3, 2024
RE: MPD/MFD Call Wait Times Report, Q4 2023
This memo is responsive to Common Council File 190001, Amendment 33, "Insert a footnote directing the Executive Director of the Fire \& Police Commission to provide quarterly reports to the Common Council on 9-1-1 call wait times, as well as activities, training, and initiatives to reduce 9-1-1 call wait times." Information in this memo has been provided by Tom Maureau of Winbourne Consulting, the City's contractor for developing a PSEP (Public Safety Enhancement Program), with analysis by the FPC Research and Policy Analyst.

## Call Answer Standard

In conjunction with the implementation of the Solacom 9-1-1 system, the PSEP Executive Steering Committee established two primary performance metrics that are National Emergency Number Association (NENA) standards:

1. $90 \%$ of all $9-1-1$ calls arriving at the PSAP SHALL be answered within (<=) 15 seconds
2. $95 \%$ of all $9-1-1$ calls arriving at the PSAP SHOULD be answered within (<=) 20 seconds

The Solacom 9-1-1 system monthly reports use the NENA standard as the foundation and then 15 second increments.

## Analysis by FPC Staff

During Q1 2024, both MPD and MFD continued to exceed the NENA 15-second standard. MPD exceeded the goal by $8 \%$ and MFD by $4 \%$. This continues to be a striking improvement for both departments since Q3 2022, when percentages for the NENA 15-second standard were $74 \%$ and $77 \%$, respectively.



Overall in Q1 2024, 99.8\% and 99.2\% of MPD and MFD 911 calls, respectively, were answered within 90 seconds.



Outlier calls are those answered in more than 180 seconds (3 minutes). In Q1 2024, .03\% of MPD 911 emergency calls (10/month) were outlier calls, and only $.06 \%$ of MFD 911 emergency calls ( $8 /$ month) were outlier calls. $2.11 \%$ of MPD non-emergency calls (338/month) were outlier calls, and $.33 \%$ of MFD non-emergency calls ( $6 /$ month) were outlier calls.

|  | MPD |  | MFD |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | Admin | 911 | Admin |
| Total calls | 37,325 | 16,052 | 14,071 | 1,706 |
| Outlier calls | 10.3 | 338.0 | 8.0 | 5.7 |
| Outliers as percentage | $0.03 \%$ | $2.11 \%$ | $0.06 \%$ | $0.33 \%$ |

## Effect of Staffing Level on Answer Time

The following graph shows the relationship between MPD total call volume (emergency and non-emergency) and 911 call pickup time from Q3 2021 through Q2 2022. As can been seen, there was a clear inverse relationship between call volume and call pickup time. The staffing level during this period was relatively flat at just over 100 call takers. This result indicated that call takers were working at capacity and there was a need to hire more call takers to reduce call answer time.


Note: "Total Call Volume" $=$ Emergency + Administrative

## Increasing Staffing Levels

The effort to increase the number of call takers for both MPD and MFD has resulted in much improved 911 call answer times, as can be seen in the chart below. That effort included an expedited hiring process as well as a pay increase for telecommunicators in early 2022. The first telecommunicator recruitment after that was more than twice the size of the last recruitment before the pay increase.

It takes 8 weeks from hire for telecommunicators to be fully trained: 5 weeks in classroom and 3 weeks on-the-job. Therefore, we saw the effects of the pay increase and expedited hiring process on call answer times during Q4 2022, and that level of performance increased through Q1 2024. The increase in the number of call takers has been dramatic, peaking at 164 in Q4 2023. In Q1 2024 there were 140 call takers.

| DEC Quarterly Staffing Levels v. 911 Performance |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $180-100 \%$ |  |  |  |  |  |  |  |  |  |  |
| $160 \sim$ - |  |  |  |  |  |  |  |  |  |  |
| 120 - |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 100 - |  |  |  |  |  |  |  |  |  |  |
|  |  |  | - 100 |  |  |  |  |  |  |  |
| $80-\square$ |  |  |  |  |  |  |  |  |  |  |
| $60-\square+\square$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |  |  |  |
| 0 | Q1 |  |  |  | Q1 | Q2 | Q3 | Q4 | Q1 | 0\% |
|  | $2022$ | $2022$ | $2022$ | $2022$ | $2023$ | $2023$ | $2023$ | 2023 | 2024 |  |
| - No. of Call Takers | 103 | 104 | 121 | 132 | 131 | 133 | 139 | 164 | 140 |  |
| -Percent Answered <= 15 seconds | 86\% | 73\% | 74\% | 94\% | 97\% | 93\% | 96\% | 98\% | 98\% |  |

## Conclusion

Until Q3 2022, though the staff of call takers was working at capacity, NENA standards were not being met and there was a need to increase staffing. Measures put in place to do so included raising telecommunicator pay as well as improving processes, including an expedited hiring process. These were followed by an approximately doubled size of new telecommunicator applicants, a greatly increased number of hires and a much lower quit rate.

Since the end of Q4 2022, the percentage of 911 calls answered in 15 seconds or less has continued to meet or exceed the $90 \%$ NENA standard for both MPD and MFD.

## Q1 2024 DATA

9-1-1/10-Digit Emergency Calls
MPD Q1 2024

| Incoming MPD 9-1-1 Calls | January | February | March |
| :---: | :---: | :---: | :---: |
| All Received | 39,254 | 35,653 | 38,622 |
| Answered | 38,654 | 35,244 | 38,077 |
| Abandoned | 600 | 409 | 545 |
| Call Backs | 528 | 358 | 477 |
|  |  |  |  |
| MPD Answered 9-1-1 Calls | January | February | March |
| Average 9-1-1 Call Wait Time | $0: 00: 01$ | $0: 00: 01$ | $0: 00: 01$ |
| Percent Answered Within 15 sec | $97.9 \%$ | $98.6 \%$ | $97.9 \%$ |

## MFD Q1 2024

| Incoming MFD 9-1-1 Calls | January | February | March |
| :---: | :---: | :---: | :---: |
| All Received | 16,022 | 13,463 | 12,911 |
| Answered | 15,948 | 13,398 | 12,868 |
| Abandoned | 74 | 65 | 43 |
| Call Backs | 2 | 0 | 3 |
|  |  |  |  |
| MFD Answered 9-1-1 Calls | January | February | March |
| Average 9-1-1 Call Wait Time | $0: 00: 03$ | $0: 00: 03$ | $0: 00: 03$ |
| Percent Answered Within 15 sec | $93.9 \%$ | $94.0 \%$ | $94.8 \%$ |

## 9-1-1/10 Digit Call Answer Time

## MPD Q1 2024

| MPD Emergency |  | January |  |  | February |  |  | March |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME INCREMENT | MPD CALLS ANSWERED | Individual \% of Calls | Cumulative \% of Calls | MPD CALLS ANSWERED | Individual \% of Calls | Cumulative \% of Calls | MPD CALLS ANSWERED | Individual \% of Calls | Cumulative \% of Calls |
| 0-15 Seconds | 37,847 | 97.9\% | 97.9\% | 34,750 | 98.6\% | 98.6\% | 37,269 | 97.9\% | 97.9\% |
| 16-30 Seconds | 278 | 0.7\% | 98.6\% | 198 | 0.6\% | 99.2\% | 315 | 0.8\% | 98.7\% |
| 31-45 Seconds | 185 | 0.5\% | 99.1\% | 104 | 0.3\% | 99.5\% | 192 | 0.5\% | 99.2\% |
| 46-60 Seconds | 85 | 0.2\% | 99.3\% | 65 | 0.2\% | 99.6\% | 127 | 0.3\% | 99.5\% |
| 61-75 Seconds | 74 | 0.2\% | 99.5\% | 48 | 0.1\% | 99.8\% | 76 | 0.2\% | 99.7\% |
| 76-90 Seconds | 49 | 0.1\% | 99.6\% | 25 | 0.1\% | 99.8\% | 47 | 0.1\% | 99.9\% |
| 91-105 Seconds | 42 | 0.1\% | 99.8\% | 13 | 0.0\% | 99.9\% | 19 | 0.0\% | 99.9\% |
| 106-120 Seconds | 29 | 0.1\% | 99.8\% | 8 | 0.0\% | 99.9\% | 10 | 0.0\% | 99.9\% |
| 121-150 Seconds | 31 | 0.1\% | 99.9\% | 14 | 0.0\% | 99.9\% | 16 | 0.0\% | 100.0\% |
| 151-180 Seconds | 12 | 0.0\% | 99.9\% | 10 | 0.0\% | 100.0\% | 6 | 0.0\% | 100.0\% |
| 181-210 Seconds | 8 | 0.0\% | 100.0\% | 8 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 211-240 Seconds | 7 | 0.0\% | 100.0\% | 1 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 241-270 Seconds | 6 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 271-300 Seconds | 1 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 301-330 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 331-360 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 361-390 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 391-420 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 421-450 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 451-480 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 481-510 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 511-540 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 541-570 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 571-600 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 601-1200 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 1201-1800 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| > 1800 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| Total Answered Calls | 38,654 | 100.0\% |  | 35,244 | 100.0\% |  | 38,077 | 100.0\% |  |



Non-Emergency/Administrative Calls

MPD Q1 2024

| Incoming MPD Non-Emergency Calls | January | February | March |
| :---: | :---: | :---: | :---: |
| Answered | 16,353 | 15,471 | 16,331 |
|  |  |  |  |
| MPD Answered Non-Emergency Calls | January | February | March |
| Average Non-Emergency Call Wait Time | $0: 00: 13$ | $0: 00: 12$ | $0: 00: 15$ |

MFD Q1 2024

| Incoming MFD Non-Emergency Calls | January | February | March |
| :---: | :---: | :---: | :---: |
| Answered | 1,914 | 1,650 | 1,555 |
|  |  |  |  |
| MFD Answered Non-Emergency Calls | January | February | March |
| Average Non-Emergency Call Wait Time | $0: 00: 06$ | $0: 00: 04$ | $0: 00: 04$ |

## MPD Q1 2024

| MPD Admin |  | January |  |  | February |  |  | March |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MPD CALLS | Individual \% of | Cumulative \% of | MPD CALLS | Individual \% of | Cumulative \% of | MPD CALLS | Individual \% of | Cumulative \% of |
| TIME INCREMENT | ANSWERED | Calls | Calls | ANSWERED | Calls | Calls | ANSWERED | Calls | Calls |
| 0-15 Seconds | 14,433 | 88.3\% | 88.3\% | 13,945 | 90.1\% | 90.1\% | 14,217 | 87.1\% | 87.1\% |
| 16-30 Seconds | 303 | 1.9\% | 90.1\% | 234 | 1.5\% | 91.6\% | 313 | 1.9\% | 89.0\% |
| 31-45 Seconds | 261 | 1.6\% | 91.7\% | 197 | 1.3\% | 92.9\% | 222 | 1.4\% | 90.3\% |
| 46-60 Seconds | 219 | 1.3\% | 93.0\% | 172 | 1.1\% | 94.0\% | 223 | 1.4\% | 91.7\% |
| 61-75 Seconds | 181 | 1.1\% | 94.2\% | 135 | 0.9\% | 94.9\% | 210 | 1.3\% | 93.0\% |
| 76-90 Seconds | 161 | 1.0\% | 95.1\% | 112 | 0.7\% | 95.6\% | 170 | 1.0\% | 94.0\% |
| 91-105 Seconds | 120 | 0.7\% | 95.9\% | 92 | 0.6\% | 96.2\% | 146 | 0.9\% | 94.9\% |
| 106-120 Seconds | 95 | 0.6\% | 96.5\% | 76 | 0.5\% | 96.7\% | 114 | 0.7\% | 95.6\% |
| 121-150 Seconds | 152 | 0.9\% | 97.4\% | 122 | 0.8\% | 97.5\% | 195 | 1.2\% | 96.8\% |
| 151-180 Seconds | 92 | 0.6\% | 97.9\% | 105 | 0.7\% | 98.2\% | 124 | 0.8\% | 97.6\% |
| 181-210 Seconds | 89 | 0.5\% | 98.5\% | 65 | 0.4\% | 98.6\% | 86 | 0.5\% | 98.1\% |
| 211-240 Seconds | 65 | 0.4\% | 98.9\% | 45 | 0.3\% | 98.9\% | 63 | 0.4\% | 98.5\% |
| 241-270 Seconds | 46 | 0.3\% | 99.2\% | 41 | 0.3\% | 99.2\% | 60 | 0.4\% | 98.8\% |
| 271-300 Seconds | 25 | 0.2\% | 99.3\% | 19 | 0.1\% | 99.3\% | 40 | 0.2\% | 99.1\% |
| 301-330 Seconds | 24 | 0.1\% | 99.5\% | 14 | 0.1\% | 99.4\% | 33 | 0.2\% | 99.3\% |
| 331-360 Seconds | 20 | 0.1\% | 99.6\% | 20 | 0.1\% | 99.5\% | 25 | 0.2\% | 99.4\% |
| 361-390 Seconds | 15 | 0.1\% | 99.7\% | 17 | 0.1\% | 99.6\% | 20 | 0.1\% | 99.6\% |
| 391-420 Seconds | 14 | 0.1\% | 99.8\% | 9 | 0.1\% | 99.7\% | 15 | 0.1\% | 99.7\% |
| 421-450 Seconds | 5 | 0.0\% | 99.8\% | 8 | 0.1\% | 99.7\% | 8 | 0.0\% | 99.7\% |
| 451-480 Seconds | 6 | 0.0\% | 99.8\% | 6 | 0.0\% | 99.8\% | 15 | 0.1\% | 99.8\% |
| 481-510 Seconds | 8 | 0.0\% | 99.9\% | 6 | 0.0\% | 99.8\% | 7 | 0.0\% | 99.8\% |
| $511-540$ Seconds | 6 | 0.0\% | 99.9\% | 5 | 0.0\% | 99.8\% | 9 | 0.1\% | 99.9\% |
| 541-570 Seconds | 4 | 0.0\% | 99.9\% | 5 | 0.0\% | 99.9\% | 5 | 0.0\% | 99.9\% |
| 571-600 Seconds | 4 | 0.0\% | 100.0\% | 6 | 0.0\% | 99.9\% | 2 | 0.0\% | 99.9\% |
| 601-1200 Seconds | 5 | 0.0\% | 100.0\% | 15 | 0.1\% | 100.0\% | 9 | 0.1\% | 100.0\% |
| 1201-1800 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| > 1800 Seconds | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
|  |  |  |  |  |  |  |  |  |  |
| Total Answered Calls | 16,353 | 100.0\% |  | 15,471 | 100.0\% |  | 16,331 | 100.0\% |  |

## MFD Q1 2024

| MFD CALLS ANSWERED | January Individual \% of Calls | Cumulative \% of Calls | MFD CALLS ANSWERED | February Individual \% of Calls | Cumulative \% of Calls | MFD CALLS ANSWERED | March Individual \% of Calls | Cumulative \% of Calls |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 1,790 | 93.5\% | 93.5\% | 1,559 | 94.5\% | 94.5\% | 1,472 | 94.7\% | 94.7\% |
| 32 | 1.7\% | 95.2\% | 24 | 1.5\% | 95.9\% | 16 | 1.0\% | 95.7\% |
| 18 | 0.9\% | 96.1\% | 16 | 1.0\% | 96.9\% | 20 | 1.3\% | 97.0\% |
| 14 | 0.7\% | 96.9\% | 12 | 0.7\% | 97.6\% | 14 | 0.9\% | 97.9\% |
| 11 | 0.6\% | 97.4\% | 10 | 0.6\% | 98.2\% | 6 | 0.4\% | 98.3\% |
| 7 | 0.4\% | 97.8\% | 9 | 0.5\% | 98.8\% | 10 | 0.6\% | 98.9\% |
| 5 | 0.3\% | 98.1\% | 5 | 0.3\% | 99.1\% | 5 | 0.3\% | 99.2\% |
| 7 | 0.4\% | 98.4\% | 3 | 0.2\% | 99.3\% | 1 | 0.1\% | 99.3\% |
| 8 | 0.4\% | 98.9\% | 6 | 0.4\% | 99.6\% | 4 | 0.3\% | 99.5\% |
| 8 | 0.4\% | 99.3\% | 1 | 0.1\% | 99.7\% | 4 | 0.3\% | 99.8\% |
| 4 | 0.2\% | 99.5\% | 1 | 0.1\% | 99.8\% | 0 | 0.0\% | 99.8\% |
| 3 | 0.2\% | 99.6\% | 2 | 0.1\% | 99.9\% | 2 | 0.1\% | 99.9\% |
| 1 | 0.1\% | 99.7\% | 1 | 0.1\% | 99.9\% | 0 | 0.0\% | 99.9\% |
| 4 | 0.2\% | 99.9\% | 0 | 0.0\% | 99.9\% | 1 | 0.1\% | 100.0\% |
| 1 | 0.1\% | 99.9\% | 0 | 0.0\% | 99.9\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 99.9\% | 1 | 0.1\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 1 | 0.1\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |
| 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% | 0 | 0.0\% | 100.0\% |

