DATE: November 19, 2020

TO: Honorable Members of the Board of Supervisors
    Jeffrey V. Smith, M.D., J.D., County Executive

FROM: René G. Santiago, Deputy County Executive & Director, County of Santa Clara Health System
       Jackie Lowther, Director Emergency Medical Service

SUBJECT: San Jose Fire Department Response Time Improvement Strategies

During the November 4, 2020 Health and Hospital Committee meeting discussion on agenda Item 9.f. “Receive verbal report from Emergency Medical Services Agency,” Supervisor Simitian requested the EMS Agency report back on how the City of San Jose has improved their timely performance for response time compliance over the last two years. This report provides the requested information.

Background

The 9-1-1 Emergency Medical Services Provider Agreement between the City of San Jose and the County of Santa Clara establishes response time requirements for two emergency vehicle response modes: with red lights and sirens or without red lights and sirens. 9-1-1 calls are triaged by public safety radio dispatchers utilizing the Medical Priority Dispatch System (MPDS). Resulting determinates (Omega, Alpha, Bravo, Charlie, Delta, Echo) inform field resources of the appropriate response mode. Lights and sirens responses require arrival on scene within eight minutes, 90 percent of the time, in all EMS calls in urban areas (commonly referred to as the County EMS Code 3 Standard). Lower level EMS incidents require arrival on scene within 13 minutes, 90 percent of the time, in urban areas. Under the County EMS response time standard, the time clock begins upon dispatch of response resources and stops upon arrival at the incident address.

The agreement with the County includes response time performance "exemptions" for responses outside of the County's defined Exclusive Operating Area (EOA) and designated "hard to serve areas." The County may also waive response time performance requirements when the response network is under unusual pressure, such as during periods of time when greater alarms are occurring or when the Department is providing mutual aid to other jurisdictions. During such exemption periods, Department response times not meeting the County EMS Code 3 Standard are excluded from the County EMS Code 3 response time calculations.
The chart below depicts San Jose Fire Department’s compliance trend from 2015 through 2019.

The SJFD has utilized the following strategies to improve their response time performance over the last three years:

- **Data Collection** - This effort will increase the storage and scope of electronic data collection to enhance analytical capabilities to improve response times.

- **Business Intelligence Tools** - These tools will provide reports and user interfaces (“dashboards”) that direct organizational focus on performance driven by actionable data.

- **Response Area Mapping/Emergency Service Zone Refinement** - Ongoing refinement of Emergency Service Zone (ESZ) assignments to ensure appropriate resources (station/apparatus) are dispatched.

- **Traffic Signal Preemption** – This effort was deployed to decrease travel time at 948 intersections.

- **Implemented Early Dispatch** – Adopted “early dispatch” procedures for EMS responses to improve dispatch time. As a result, all EMS dispatches became Code-3 until completion of Emergency Medical Dispatch (EMD) triage. This procedure results in simultaneous dispatch of Squads, with the appropriate resource continued upon
completion of triage.

- CAD (Computer Aided Dispatch) to CAD Dispatch Link(s) - Connect SJFD CAD system with other County agencies (including County Communications) to share unit and event information. This project will be reinitiated once Santa Clara County Communications completes its transition to the Hexagon CAD system.

- FirstWatch - Through its analytics software, determines if the first responder response was “on time” or “late.” The EMS Agency has access to FirstWatch and can review all unadjusted and adjusted/reconciled first responder and ambulance response time data (by day, week, month, quarter, or annually). As a matter of historical practice, the EMS Agency/County has required first responders to submit a monthly “finalized” report detailing their compliance with the contractual standards.

There have been a couple of noticeable factors that have helped the City of San Jose’s response time compliance improve from the EMS Agency’s perspective. It appears that by using the FirstWatch Online Compliance Utility software, the City is reviewing all the late response data and exercising use of all the reconciliation mechanisms allowed in their first response agreement. Those reconciliation mechanisms include the use of exemptions, use of verifiable time corrections and use of the ambulance’s arrival time (as allowed by the Seventh Amendment of the Rural/Metro agreement) to stop the clock. The City’s use of these allowable practices as well as strategies from their work plan has facilitated the reduction of late responses, increasing the City’s response time compliance.