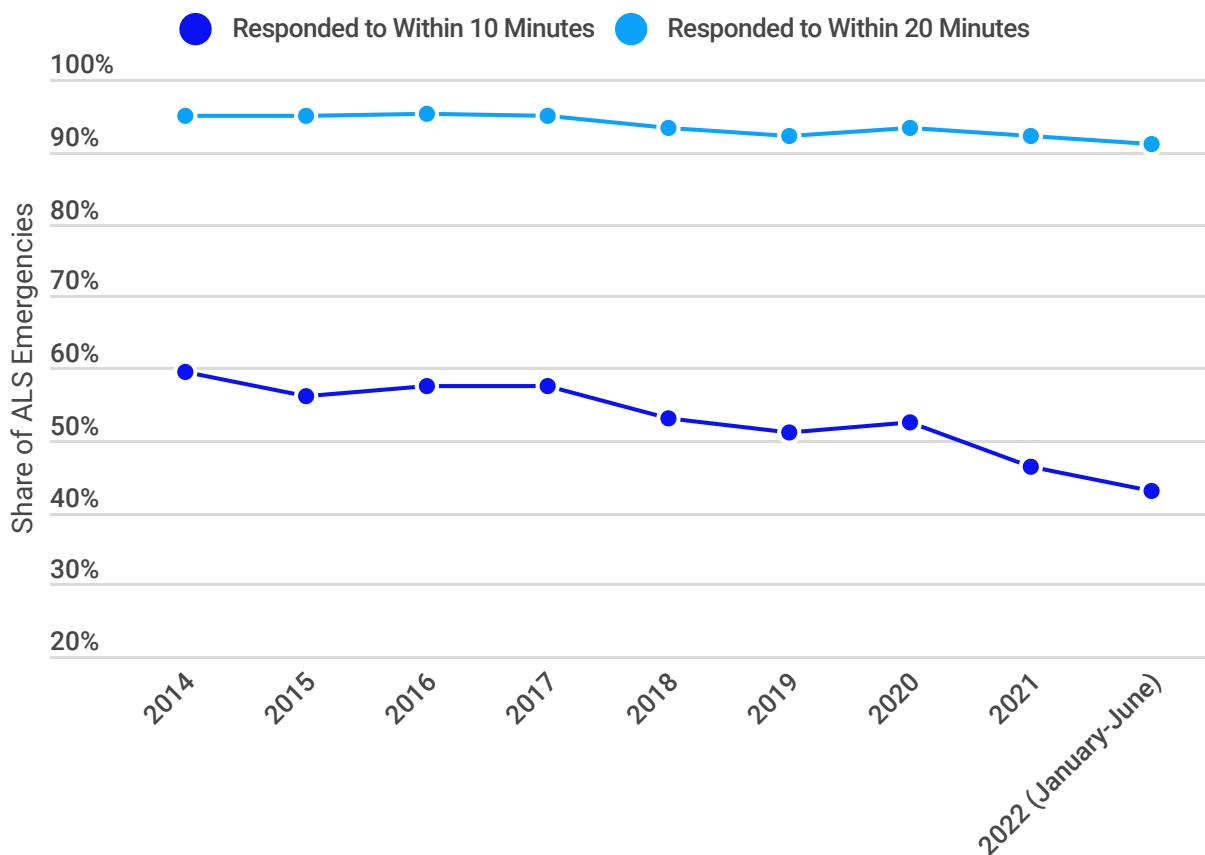


Has the City's Paramedic Response Time to the Most Serious Medical Emergencies Slowed In Recent Years? Is the Response Slowest Outside Manhattan?

Ambulances in the city respond annually to more than one million medical emergencies reported over the 911 system. About one-fourth, coded as Advanced Life Support (ALS) incidents, involve heart attacks and other very serious medical emergencies. These incidents call for a response by highly trained paramedics deployed in pairs in ALS ambulance units. Alternatively, two emergency medical technicians (not as highly trained as paramedics) staff Basic Life Support (BLS) ambulances. BLS ambulances generally respond to less serious medical emergencies.

In calendar year 2021, there were roughly 290,000 ALS-level medical emergencies citywide. The Fire Department (FDNY) coordinates both FDNY and non-FDNY ambulance response to all medical emergencies reported over the 911 system. About two-thirds of ambulances deployed on city streets are operated directly by FDNY. Private hospitals deploy the remaining (non-FDNY) ambulances. FDNY and private hospitals both provide a mix of ALS and BLS ambulances. Using data data from 2014 through the first half of 2022, IBO analyzed how response times to ALS emergencies in the city (both FDNY and non-FDNY) have changed in recent years, and how one pilot program to improve service in the Bronx fared.

Share of Most Serious Medical Emergencies Responded to By Paramedics Within 10 or 20 Minutes Has Declined



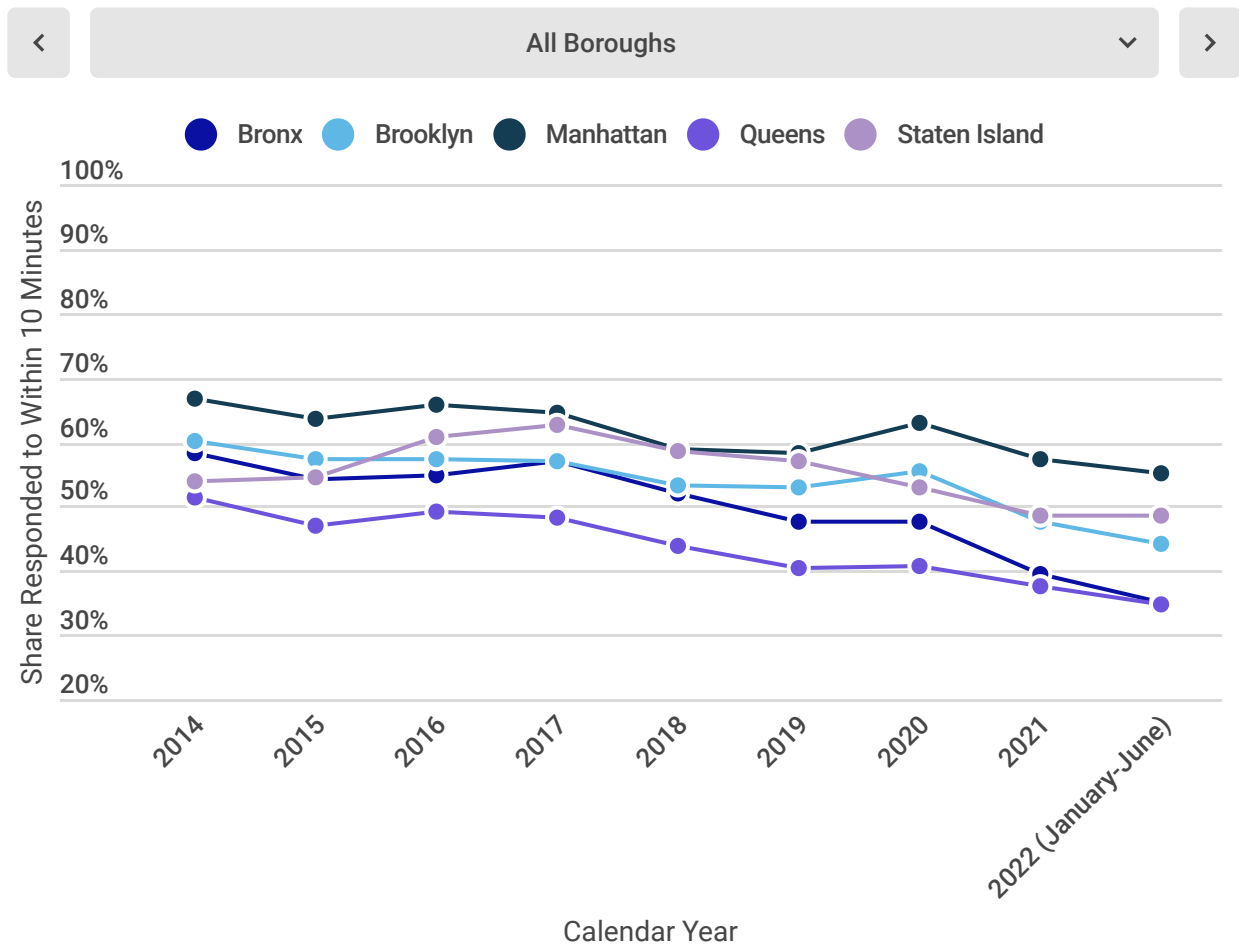
FDNY reports that paramedics responded to 46.2 percent of ALS medical emergencies within 10 minutes in 2021, with the figure dropping to 43.0 percent during the first six months of 2022. This continues a general decline since 2014 when nearly 60 percent of ALS medical emergencies were responded to by a paramedic within 10 minutes. For many years the city had a goal of paramedics arriving to 90 percent of ALS emergencies within 10 minutes, as reported in the annual Mayor's Management Reports (MMR), however, this target was dropped from the MMR in 2012.

Of even greater concern are ALS-level medical emergencies in which paramedics do not reach the scene within 20 minutes. Since 2017 there has been a drop in the share responded to within 20 minutes. In the first six months of this year, paramedics failed to respond within 20 minutes to 9.0 percent of ALS-level medical emergencies, a total of more than 11,600 or about 64 on average per day.

This decline in response times comes even as the total number of ALS emergencies has fallen somewhat in recent years. The number of ALS emergencies during our study period peaked in 2015 at 333,719, declining each year to 293,874 in 2019, and has continued to fall through the pandemic years to 290,763 ALS emergencies in 2021.

As IBO has previously [reported](#) New York City is the only jurisdiction in the state in which ALS ambulances are required by state-affiliated authorities to be staffed by two paramedics. Elsewhere, ALS ambulances can be (and typically are) staffed with one paramedic and one EMT. The latter staffing arrangement arguably has the advantage of facilitating more widespread deployment of paramedics, allowing at least one paramedic to arrive more rapidly at an ALS-level emergency. In 2005, FDNY [unsuccessfully sought permission to modify paramedic staffing](#) requirements in the city with the aim of improving the timeliness of paramedic response.

Paramedic Response is Slowing in All Boroughs, But Advanced Life Support Emergencies in Manhattan Remain Most Likely to Receive Response Within 10 Minutes



There is variation by borough in the swiftness with which paramedics respond to ALS-level medical emergencies. Manhattan has enjoyed the highest percentage of ALS-level emergencies responded to within 10 minutes in each year since 2014, although in 2018 the comparable figure on Staten Island was essentially equal to that of Manhattan.

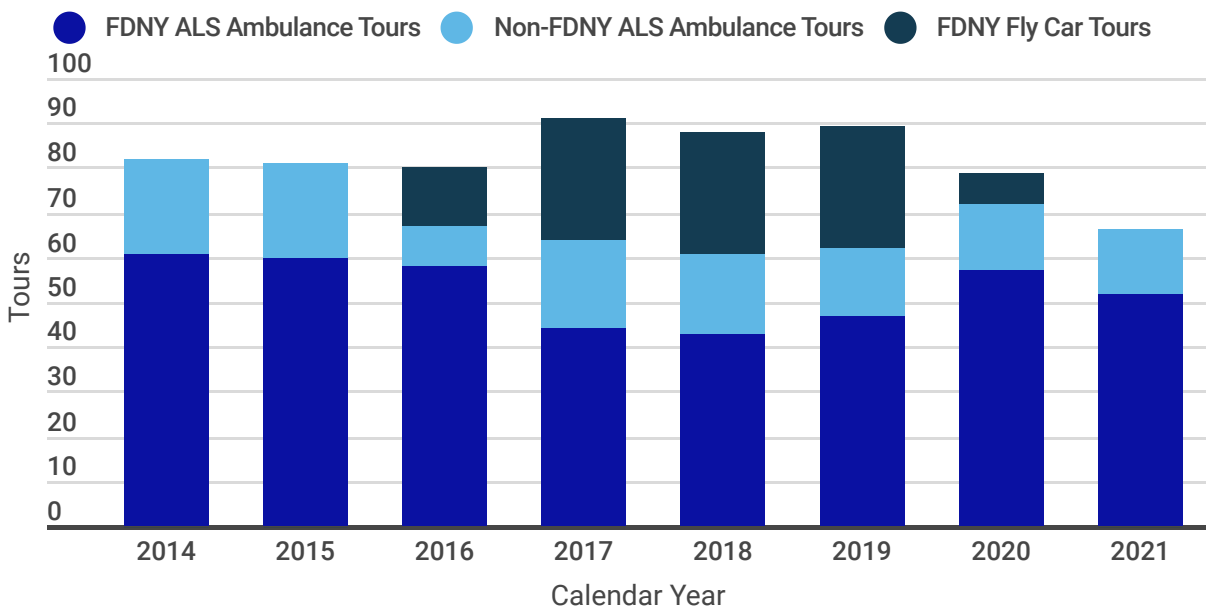
In 2021, the percentage of ALS-level medical emergencies responded to within 10 minutes ranged from 57.2 percent in Manhattan to 37.5 percent in Queens.

In 2017 the City Council enacted legislation requiring that the FDNY also provide response time data within each of the city's 59 community districts rather than only at the borough and citywide levels. The department has not yet done so. According to the Mayor's Office of Operations, they are still in the process of establishing a mechanism for incorporating community district level data into their regular monthly reporting.

Brief Life of FDNY's Fly Car Initiative: An Attempt to Speed Service in the Bronx

From 2016 through early 2020, the FDNY piloted an initiative intended to speed paramedics to the scene of ALS emergencies in the Bronx.¹ The initiative used fly cars—SUVs staffed with one paramedic and one supervisory paramedic. If the paramedics onboard the fly car were able to stabilize the patient a separate BLS ambulance could, if necessary, transport the patient to the hospital. The fly car with paramedics onboard could then be available for the next ALS-level emergency. The fly car initiative was first suspended in early 2020 due to Covid-related budget cuts and then eliminated completely in 2021.

Average Daily Number of Advanced Life Support Ambulance and Fly Car Tours in The Bronx



The swiftness of paramedic response in the Bronx improved modestly from 2016 to 2017, with the percentage of ALS-level medical emergencies receiving a paramedic within 10 minutes growing from 54.8 percent to 56.9 percent. However, the share then decreased to 47.5 percent in 2019 just prior to the suspension of the fly car initiative in 2020.

One possible reason the fly car pilot did not have more of an impact on response times was that the deployment of fly cars coincided with a drop in ALS ambulance tours. The latter resulted from two factors. First, the TransCare ambulance company went bankrupt in 2016 leading to a temporary drop in the average daily number of non-FDNY ALS tours in the Bronx. The FDNY also confirmed that several of the FDNY paramedics assigned to fly cars had previously been assigned to FDNY ALS ambulances, so that the operation of FDNY fly car tours in the Bronx was, to an extent, accompanied by a decline in traditional FDNY ALS tours.

SOURCES: New York City Fire Department; Mayor's Office of Data Analytics; Mayor's Office of Operations

Endnotes

¹The Bronx was the borough chosen for the fly car pilot program presumably because the borough, along with Queens, has consistently had (and still has) among the lowest percentage of ALS-level medical emergencies responded to by a paramedic within 10 minutes.



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