

# Memorandum



CITY OF DALLAS

DATE April 21, 2023

TO Honorable Mayor and Members of the City Council

SUBJECT **Network Outage of Wednesday, April 19, 2023**

On the morning of Wednesday, April 19, beginning around 2:00 a.m. CST, the City experienced a major network outage that impacted all inbound and outbound internet access. This affected all City departments, including 311 and Dallas Water Utilities' ability to process requests. However, due to network redundancy, 911 and Public Safety dispatch were not affected.

Information & Technology Services (ITS) began receiving reports of service unavailability from multiple City locations and began gathering the necessary internal team members to manage and identify the issue. At approximately 3:00 a.m., the City's ITS team placed a series of calls to the City's internet and managed network provider, AT&T, who created a system trouble ticket to assign resources to track and resolve the issue. ITS identified that both internal internet network and public-facing sites were unreachable.

Working with the City's managed network services provider, AT&T, ITS began troubleshooting the City's network access, completing a series of steps to restore service and identify the root cause. Between 7:00 and 11:00 a.m., working with ITS staff, AT&T performed a series of remediation steps to bring the network back online. At 11:00 a.m., the City's home page and other internet services began to come back online. Again, at around 1:00 p.m., a partial loss of the internal internet network connectivity occurred; further troubleshooting was performed to address the issue. All services were fully restored by 3:00 p.m.

The outage necessitated the cancellation of the Council Briefing meeting scheduled for the day. Due to the dependency of internet availability to broadcast the meeting, and compliance with opening meeting provisions for residents' access requirements, we were unable to proceed with the meeting.

At this time, it is believed the root cause of the sustained outage was a failure of an AT&T managed network switch within the City's network which primarily functions to forward all internet traffic. As a result, the devices connected to the switch became unreachable, and communication between different parts of the network disrupted. Moreover, these switches are a crucial component of the City's core network infrastructure, thereby having a cascading effect, causing multiple devices to fail, and eventually resulting in Wednesday's network outage.

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A full technical review of the outage is scheduled with AT&T and ITS during the week of April 24 to examine the root cause(s), document lessons learned, and develop a plan of action to prevent future recurrences of such an incident. Additionally, ITS has taken multiple actions to address the resiliency in the City's overall network. Along with upgrading and improving the infrastructure, the City has also effectuated a long-term redundancy plan which implements a failover mechanism that automatically switches to the secondary circuit in case of a failure in the primary circuit. During the April 12 City Council meeting, the Council approved the first of several agenda items to address these issues with secondary redundant circuits. Future agenda items will be presented to City Council for approval, as a series of steps to build out and eliminate the risks of these types of resiliency concerns.

If you have any questions, please contact me or William (Bill) Zielinski, Chief Information Officer and Director of Information & Technology Services.



Jack Ireland  
Chief Financial Officer

c: T.C. Broadnax, City Manager  
Tammy Palomino, Interim City Attorney  
Mark Swann, City Auditor  
Biliera Johnson, City Secretary  
Preston Robinson, Administrative Judge  
Kimberly Bizer Tolbert, Deputy City Manager  
Jon Fortune, Deputy City Manager

Majed A. Al-Ghafry, Assistant City Manager  
M. Elizabeth (Liz) Cedillo-Pereira, Assistant City Manager  
Dr. Robert Perez, Assistant City Manager  
Carl Simpson, Assistant City Manager  
Genesis D. Gavino, Chief of Staff to the City Manager  
Directors and Assistant Directors