

TECHNOLOGY

SFMTA's train system running on floppy disks; city fears 'catastrophic failure' before upgrade



By [Luz Peña](#)

Sunday, April 7, 2024 1:28AM



SFMTA's train system is not only relying on humans to run it, but turns out that a floppy disk has been playing a key role for decades.

SAN FRANCISCO (KGO) -- San Francisco Municipal Transportation Agency's train system is not only relying on humans to run it, but turns out that a floppy disk plays a key role.

ABC7 news reporter Luz Peña spoke to SFMTA's director on their plan to upgrade the system that is decades old.

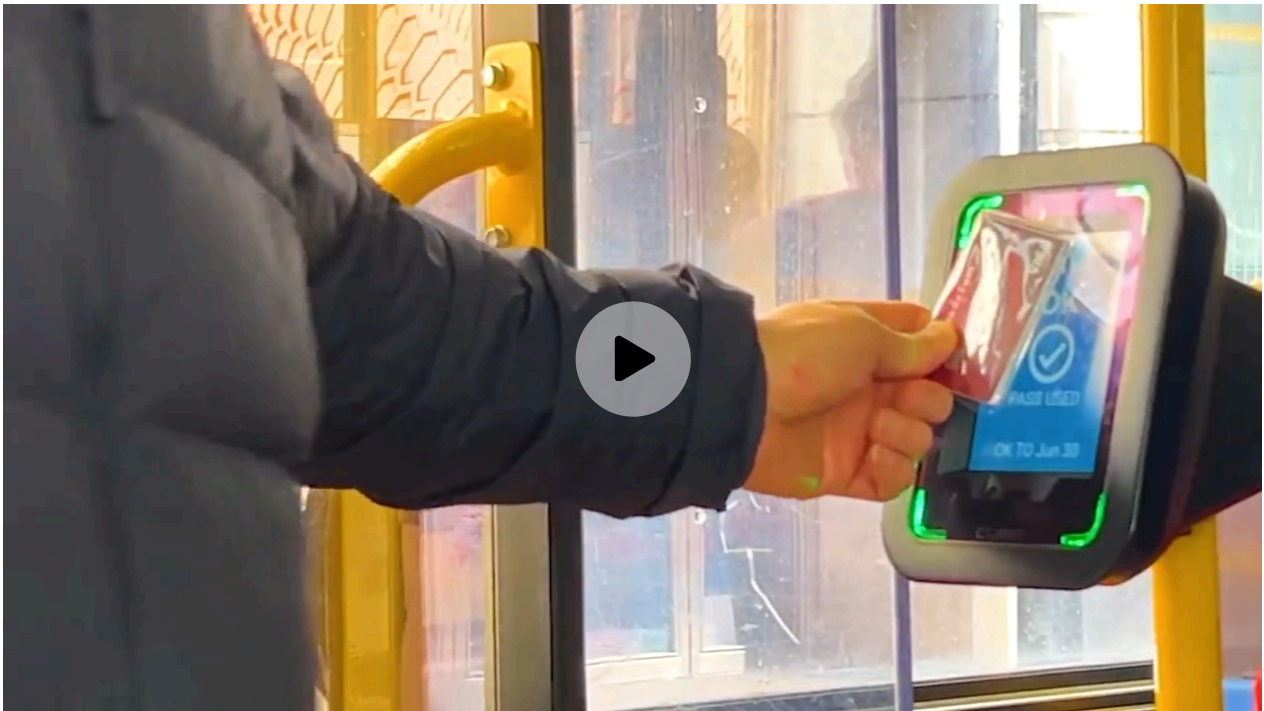
We may be in Silicon Valley, but what if I told you that San Francisco's train control system is running off a floppy disk.

"Wow. I mean I thought we were moving on to AI. So why are we doing floppy disk," said Katie Guillen, SFMTA passenger.

Turns out that in 1998, [SFMTA](#) had the latest cutting edge technology when they installed their automatic train control system.

"We were the first agency in the U.S. to adopt this particular technology but it was from an era that computers didn't have a hard drive so you have to load the software from floppy disks on to the computer," said Mariana Maguire, SFMTA Train Control Project.

MORE: [SFMTA to add 35 more transit fare inspectors amid financial crisis](#)



SFMTA says 35 more transit fare inspectors will be added to improve ticket enforcement amid its ongoing financial crisis.

It's been 26 years and every morning SFMTA staff still relies on floppy disks to tell the trains how to operate.

"It's like if you lose your memory overnight, and every morning, somebody has to tell you hey 'this is who you are and what your purpose is what you have to do today,'" said Maguire.

We went underground where SFMTA Train Control Project public information officer gave us a tour of their system.

Luz Pena: "What is the role the floppy disk is playing right now?"

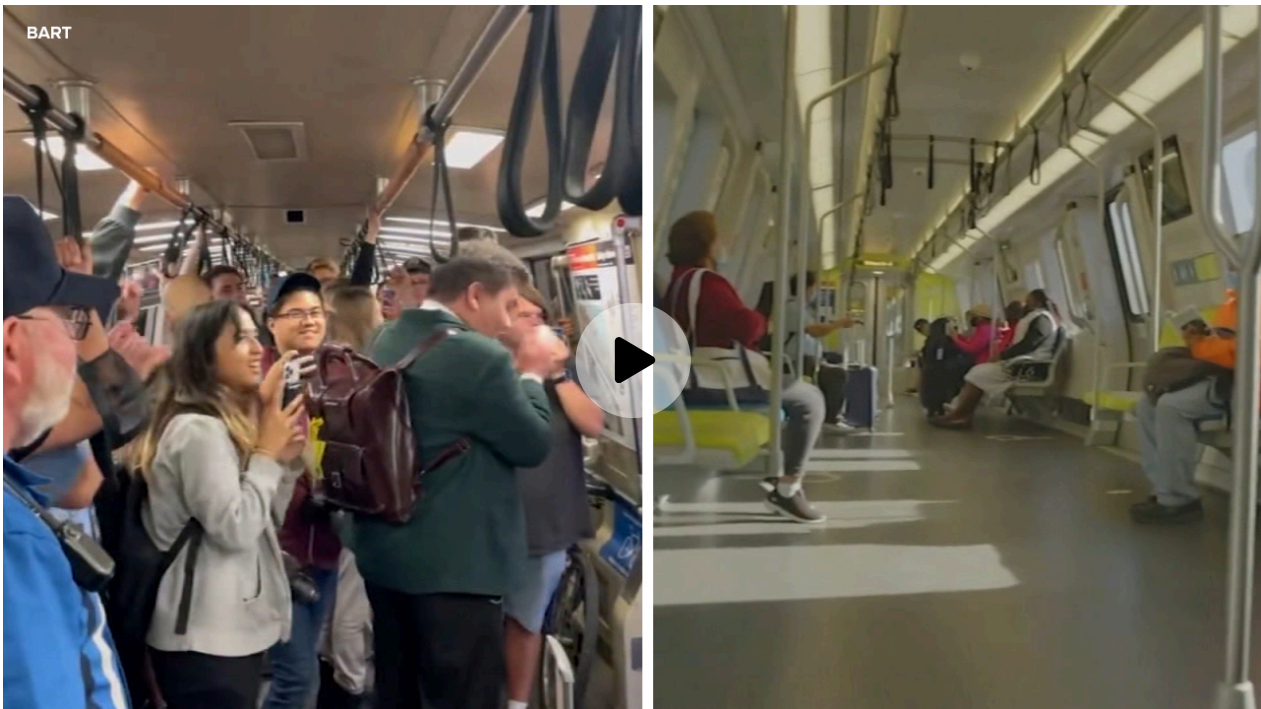
Mariana Maguire: "The floppy disk is one component of one system. The system that automatically controls our trains inside the subway. But our metro system that operates citywide has many components to it."

SFMTA's train control system relies every morning on 5 inch floppy disks.

Luz Pena: "How dire is it to change the system to upgrade it from a floppy disk to a wireless system?"

Jeffrey Tumlin: "It's a question of risk. The system is currently working just fine but we know that with each increasing year risk of data degradation on the floppy disks increases and that at some point there will be a catastrophic failure."

MORE: [BART riders prepare for new system changes, say goodbye to legacy trains](#)



BART riders can expect to see only the new trains and a new schedule starting Monday.

This system was designed to last 20 to 25 years. SFMTA's director Jeffrey Tumlin said upgrading the system will take another decade and cost hundreds of millions of dollars.

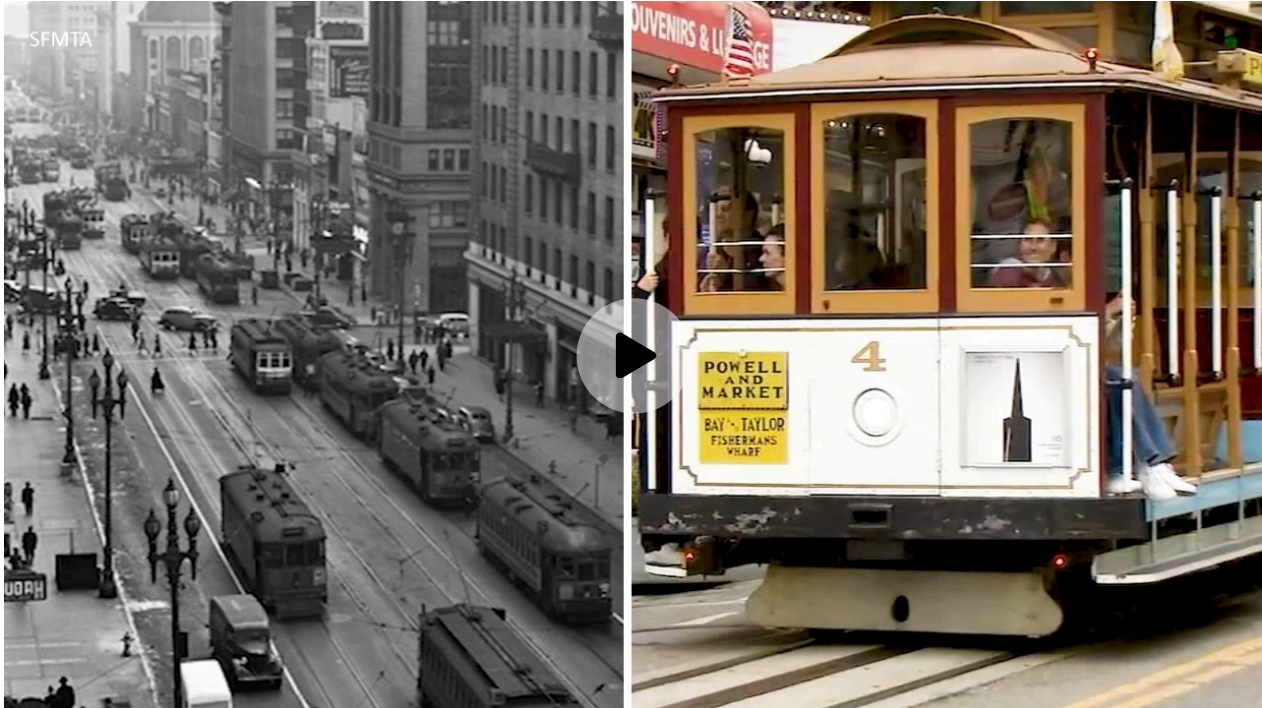
"The detail project schedule will be finalized once we have a contractor onboard. This is effectively a multi-phase decade long project that starts with pieces of market street subway and pieces in the surface. Ultimately our goal is to have a single train control system for the entire rail system," said Tumlin.

SFMTA said upgrading the system will improve reliability something the team in the control room is tracking every day.

Luz Pena: "Once the upgrade happens, what will change here?"

Mariana Maguire: "They will be able to track the movements of trains and the operations of trains throughout the city much more easily with the assistance of autopilot, which will be able to boost the human element as well."

MORE: [Iconic San Francisco Cable Car turns 150 years old. Here's a look at the celebration](#)



Cable Cars are synonymous with San Francisco and recognized around the world. It all started in 1873 with an idea to navigate the city's hills.

Who will pay for the system upgrade?

"We are hoping that a large component of this will come from state and federal grants. The rest of it will come from Muni's rapidly declining internal capital resources," said Tumlin.



If you're on the ABC7 News app, [click here to watch live](#)

[Report A Correction Or Typo](#)

Copyright © 2024 KGO-TV. All Rights Reserved.

Related Topics

TECHNOLOGY

SAN FRANCISCO

PUBLIC TRANSPORTATION

MONEY

TRAINS

SFMTA

[Home](#)

[AccuWeather](#)

[Traffic](#)

[Local News](#)

[Categories](#)

[Station Info](#)

[Shows](#)

[Apps](#)



Follow Us:    

[Privacy Policy](#) [Do Not Sell My Personal Information](#) [Children's Privacy Policy](#)

[Your US State Privacy Rights](#) [Terms of Use](#) [Interest-Based Ads](#)

[Public Inspection File](#) [FCC Applications](#)

Copyright © 2024 ABC, Inc., KGO-TV San Francisco. All Rights Reserved.