

Project Proposal

Problem Statement:

On September 1, 2021. MTA Subways were affected by “Ida” flooding as an analog for sea-level rise caused by climate change. MTA subways were submerged in water with the immense impact causing widespread devastation on MTA turnstiles. So, MTA suspended all services due to the damages that happened to the turnstiles. Thus, it is causing many risks among MTA revenue during these days. First, they should repair the subway station's infrastructure. Also, they should come up with new equipment and tools to save the stations during the floods. Regardless, the suspended turnstiles systems services created significant money losses which affect the MTA income budget.

Questions:

what are the most 3 stations get affected?
how much money losses comparing with regular days?

Data Description:

Name	Description
C/A	Control Area (A002)
UNIT	Remote Unit for a station (R051)
SCP	Subunit Channel Position represents an specific address for a device (02-00-00)
STATION	Represents the station name where the device is located
LINENAME	Represents all train lines that can be boarded at this station
DIVISION	Represents the line originally the station belonged to BMT, IRT, or IND
DATE	Represents the date (MM-DD-YY)
TIME	Represents the time (hh:mm:ss)
DESC	Represents the “REGULAR” scheduled audit event (Normally occurs every 4 hours). Audits may occur more than 4 hours due to planning. or troubleshooting activities. Additionally, there may be a “RECOVER AUD” entry: This refers to a missed audit that was recovered.
ENTRIES	The cumulative entry value for a device
EXIST	The cumulative exit register value for a device

Tool:

Pandas
SQLite
SQL ALCHEMY
Seaborn