

Tokyo Metro's Preparedness for Natural Disasters

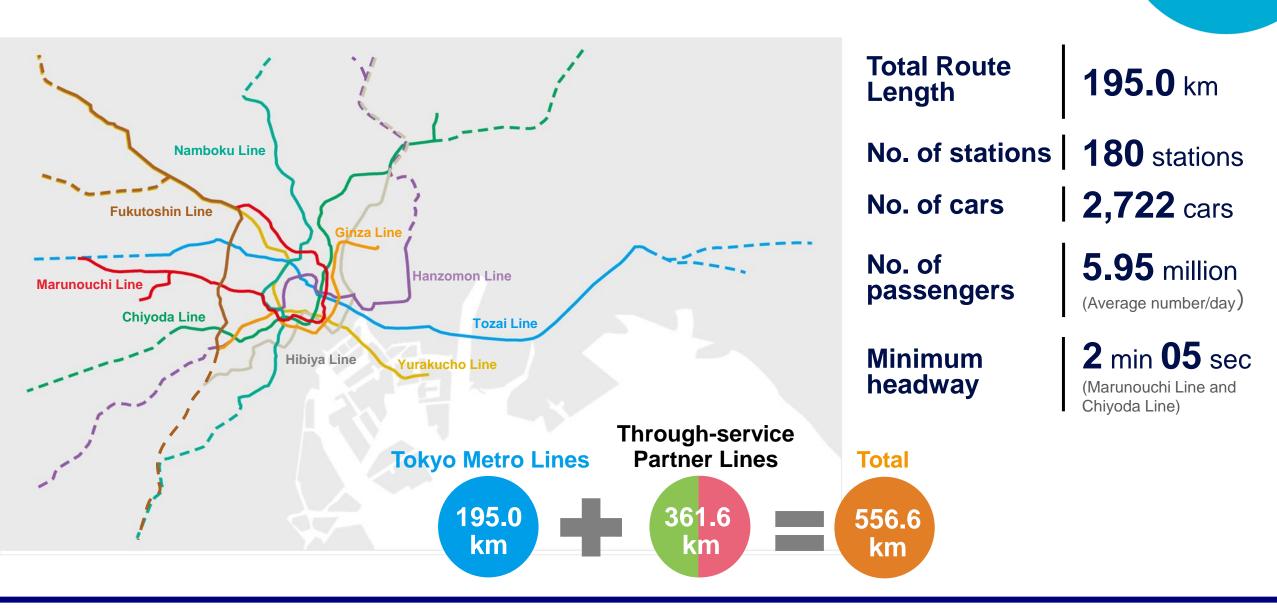
Future-Proofing Public Transportation:
Enhancing Resilience —

Noriyoshi YAMAGAMI Tokyo Metro Co., Ltd. 11 April 2024



Tokyo Metro Overview



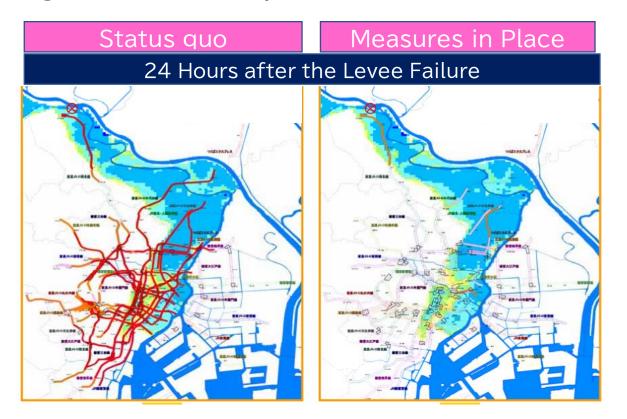


Flood Countermeasures (1)



Large-scale subway floods are predicted in the event of the Arakawa River's levee break.

 Report by Panel on Countermeasures against Large-scale Floods, National Disaster Management Council (April 2010)



- The red lines show flooded subway network
- Damage due to the levee's break is assumed to be the level of a flood that may occur once in 200 years.

Flood Countermeasures (2) - Flood Prevention



Flood prevention stop boards



Flood prevention door



Flood prevention gate at tunnel outlet



Flood prevention machine





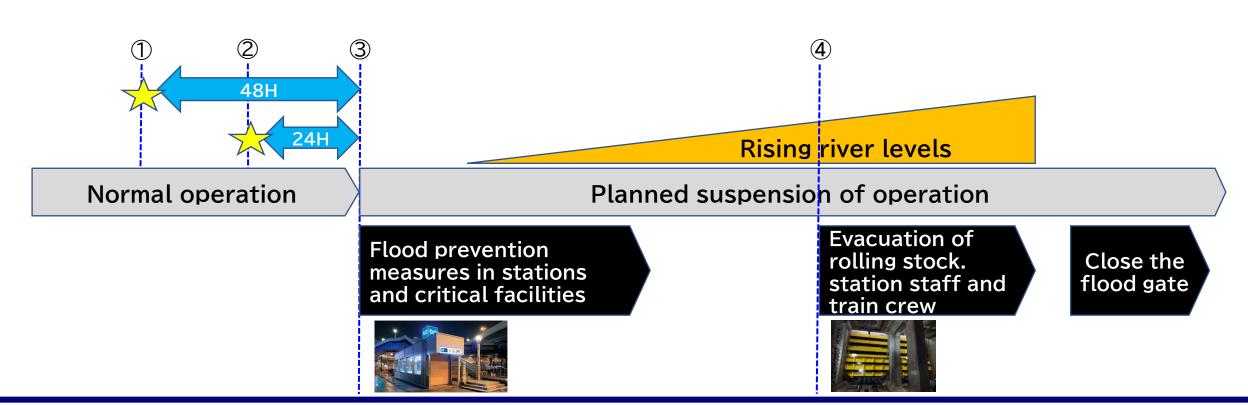


Closed

Flood Countermeasures (3) - Planned Suspension



- ① Possibility of planned suspension is announced 48 hours in advance.
- ② Details of planned suspension is announced 24 hours in advance.
- 3 Immediately after implementing planned suspension, we take measures to prevent flooding of stations and critical facilities.
- Start evacuation of train cars and station staff/crew, based on river level information, and close watertight gates thereafter.

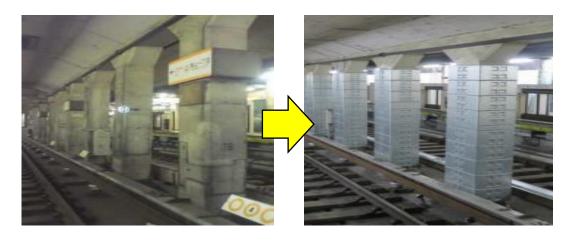


Earthquake Countermeasures (1)

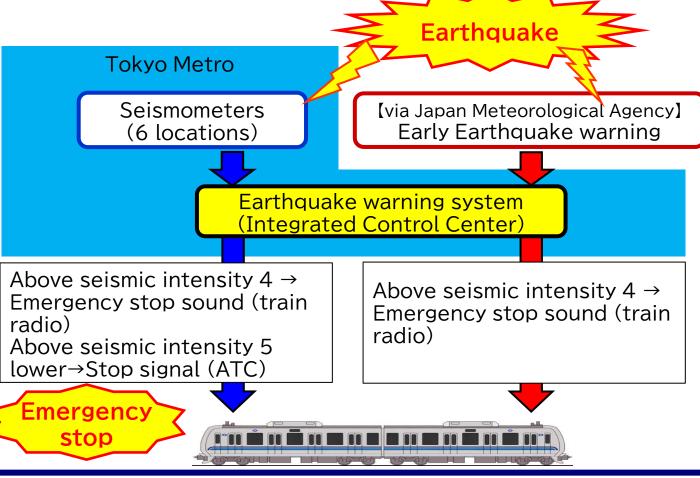
Reinforcement & Emergency Stop



Reinforcement against Earthquakes



Earthquake Warning System



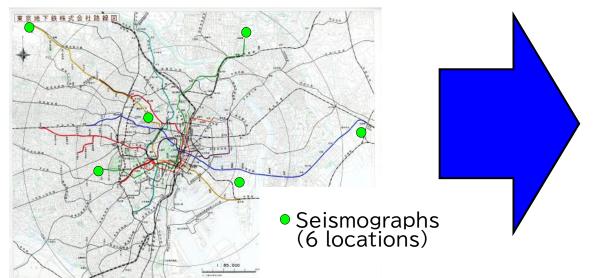
Earthquake Countermeasures (2)

Tokyo Metro

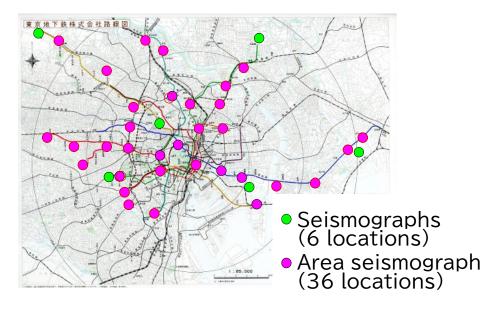
Prompt Resumption of Operations

36 "area seismographs" were additionally installed in 2007 to enable earlier resumption of operations. We conduct inspections as necessary depending on the measurement of each area and resume operations area by area wherever safety is confirmed.

Before October 2007



Today



"Keeping Tokyo on the Move"



In preparation for natural disasters, we have been conducting various countermeasures, to protect the lives of our customers, to prevent or mitigate damage to facilities and rolling stock for prompt resumption. By so doing, we manage to support Tokyo's urban functions.

