

American Society of Safety Professionals - SD Chapter Professional Development Conference March 10, 2020



David Bagley, System Safety Manager - Rail



MTS System Overview

- Over 37 million passenger trips in 2019
- 115,591 average weekday ridership
- 4 Rail Lines
- 53.5 Miles of Track
- Over 500 Weekday Trips
- 56 Train Stations
- 62 Substations
- 139 Grade Crossings
- 55 Bridges
- 128 Light Rail Vehicles



MTS Bus Network

- Approximately 160,000 Passenger Trips
- 11 Jurisdictions
- 10 Cities
- 1 County
- 90+ Bus Routes 50 million passenger annually
- Increasing network of high-frequency bus services
- *Rapid* Bus Routes:
 - ✓ Limited service: Times/week and/or trips/day
 - ✓ High-frequency, limited stop services
 - ✓ Utilize dedicated transit lanes or HOV lanes for service
- Rural Bus Routes:
 - ✓ Service to Campo, Jacumba, Julian, Ramona and Borrego Springs



Mid-Coast Trolley Project



- 11-mile extension of Blue Line
- Old Town Transit Center to University Town Center
- Nine new stations (five with parking)
- 36 new vehicles
- \$2.17 billion FTA funded including financing
- Revenue Service November 2021

Regulatory Oversight

- California Public Utilities Commission
- Federal Railroad Administration
- Federal Transportation Administration



MTS Emergency Management Program



Continuity of Operations Plan

- Ensures the continuity of core business processes
- Assesses, manages and mitigates Disaster Recovery risks.

National Response Framework (NRF)

Emergency Support Function (ESF)

- The primary operational-level mechanism to provide assistance
- Organized around functional capabilities (e.g., emergency management, transportation, search and rescue, etc.)

ESF General Duties

- Commit agency assets
- Maintain situational awareness and report on ESF operations
- Serve a technical experts

MTS has an existing MOU with the SD County OES



Independent Study Course



FEMA

MTS - Rail Supervisors, Controllers, Code Compliance and Transit Enforcement Officers have completed FEMA IS-100.b Introduction to Incident Command

EMERGENCY RESPONDER FAMILIARIZATION

SDTI performs safety training with personnel from emergency response agencies within jurisdictions through which the trolley operates. First responders are provided with basic information of the SDTI system, equipment, and operations during the training provided by the System Safety Manager and the Transportation Training Department. Function specific training and exercises are also provided, including:

- Active shooter/tubular assault/sniper (SWAT)
- Heavy lift/extraction (fire departments, urban search and rescue)
- San Diego State University familiarization (fire departments in proximity to the university)
- Field canine enforcement (US Customs and Border Patrol)

Regional Heavy Rescue Training



RAIL DIVISION
Emergency Responder Training



Metropolitan Transit System



Regional Heavy Rescue is conducted annually and include instructions on the following topics:

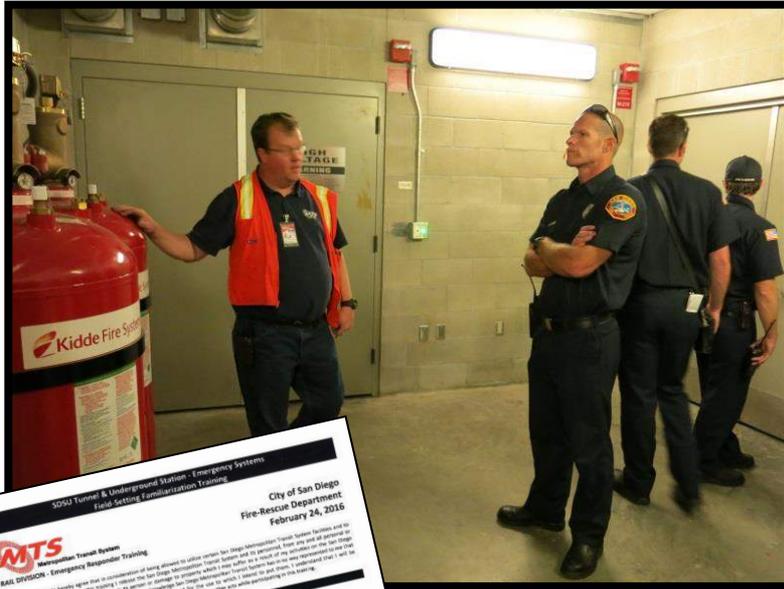
- Right of Way Safety
- Communicating with OCC
- Rail Road Response Protocol
- Vehicle & Equipment Familiarization
- LRV Lifting points



Heavy Rescue Training



Emergency Responder Training San Diego State University



4052 Tunnel & Underground Station - Emergency Systems
 Field Setting Familiarization Training

City of San Diego
 Fire-Rescue Department
 February 24, 2016

MTS
 Metropolitan Transit System
 RAIL DIVISION - Emergency Responder Training

I, the undersigned, do hereby agree that in consideration of being allowed to utilize certain San Diego Metropolitan Transit System facilities and all other facilities and participate in training to respond to a disaster or emergency, I agree to provide to MTS Security the following information as a condition of my participation in the training. I agree to provide the following information to MTS Security as a condition of my participation in the training. I agree to provide the following information to MTS Security as a condition of my participation in the training. I agree to provide the following information to MTS Security as a condition of my participation in the training.

NAME (Last, First, Middle Initial)

1. Nadia Louwage
 2. Maria Saele
 3. Rodrigo Alvarez
 4. Jackson Bennett
 5. Gabriel Gomez
 6. Alex Oros
 7. Mike Pearson
 8. Ryan Oshel
 9. Brandon Truwer
 10. Jesse Lopez
 11. Christa Martin
 12. Brandon Castro
 13. Rishi Gargueta
 14. Brandon Martin
 15. Eric Danovich
 16. Phil Mangery

DATE: 2/24/16

SIGNATURE: [Handwritten signatures]

Site familiarization with San Diego Fire Department

SWAT Training



Participating Agencies

SWAT Tubular Assault/ Sniper Exercises:

- San Diego Police SWAT
- San Diego Sheriff SWAT
- National City SWAT
- El Cajon Police SWAT
- La Mesa SWAT
- National City SWAT
- FBI/Navy EOD



Equipment Familiarization



Equipment Familiarization



MTS-Rail Earthquake Procedures

SOP 106.04

- When an earthquake is felt the controller must be notified immediately
- The Controller will contact and record the location of each train
- The controller shall instruct each train to proceed at restricted speed until reaching the location of the preceding train
- Trains shall report damages to the controller



Special Instructions

49 CFR 237.105 – Outlines

Inspection requirements and special instructions for Bridge Inspections

- Scheduling of inspections
- Conducting actual inspections
- Review of inspection records and inspection reports.

Earthquake Procedures



- MOW and Track personnel are dispatched to inspect bridges and overpasses, structures, tunnels, and any damage that is reported
- The Superintendent of Transportation is notified of any action taken
- In the event that communications or electrical power is lost for an extended period, employees will reassure and keep patrons safe, secure and protect the line and property, and use alternate means of communication to report to the controller

Earthquake Response Instructions

The U.S.G.S. website (<http://earthquake.usgs.gov>) is used to obtain current earthquake information.

- Subscription service with automatic notifications
- notify subscribers by email and cell phone
- Provides information based on user defined area and established magnitude thresholds

After the magnitude and epicenter have been determined, the following Train Operation and Inspection Response criteria will apply:

Earthquake Response Instructions

Magnitude	Train Restriction	Signal	Track	Bridge	Radius from epicenter
0.0 to 4.9	No train operation restrictions or inspections	-	-	-	-
5.0 to 5.49	Proceed at restricted speed	Yes	No	No	30 miles
5.5 to 5.99	Proceed at restricted speed	Yes	Yes	Yes	30 miles
6.0 to 6.49	Trains stop for inspections	Yes	Yes	Yes	50 miles
6.5 to 6.99	Trains stop for inspections	Yes	Yes	Yes	70 miles
7.0 to 7.49	Trains stop for inspections	Yes	Yes	Yes	100 miles
7.5 & above	Trains stop for inspections	Yes	Yes	Yes	Varies*

Earthquake Response Instructions

- Damage will likely be at the bridge bearings which will exhibit lateral shift and/or abutment tilt. Track surface will exhibit settlements at the approaches to the bridge.
- Due to access limitations, it may be advantageous to use a high-rail vehicle to perform post-earthquake bridge inspections.
- In addition to railroad bridges and railroad infrastructure, piers supporting highway bridges over the track and older buildings adjacent to the track should also be inspected.

Earthquake Response Instructions

- Train operations must not resume over any structure that has earthquake related damages until a qualified Railroad Bridge Engineer has been consulted.
- Further procedures have been developed and include:
 - Instructions for Underwater Inspections
 - Instructions for High Water, Flood, Streambed Erosion and Drift accumulation
 - Vehicle & Vessel Impacts Response Instructions and Special Inspection Procedures
 - Fire Damage Response and Special Inspection Procedures

County OES Partnership

COASTAL WARRIOR TABLETOP EXERCISE SITUATION MANUAL



The purpose of these exercises is evaluate San Diego County's response to a complex emergencies that could occur within our region.



San Diego Regional Participants

Public / Government Agencies	Emergency Responders	Hospitals / Schools
San Diego MTS	San Diego Police/Fire	VA Healthcare
FBI	San Diego Sheriff Office	UCSD Medical Center
US Coast Guard	National City Police/Fire	Kaiser Permanente
MCRD San Diego	El Cajon Police/Fire	Sharp Healthcare
Naval Base Coronado	Oceanside Police/Fire	Scripps Healthcare
SD County Medical Examiner	Cal Fire	California State University
Airport Authority	Carlsbad Police/Fire	Cal State San Marcos
San Diego Medical Services	Escondido Police/Fire	National University
Emergency Medical Services	Heartland Fire Rescue	South Western College
Dept. of Homeland Security	SDSU Police	SDSU



