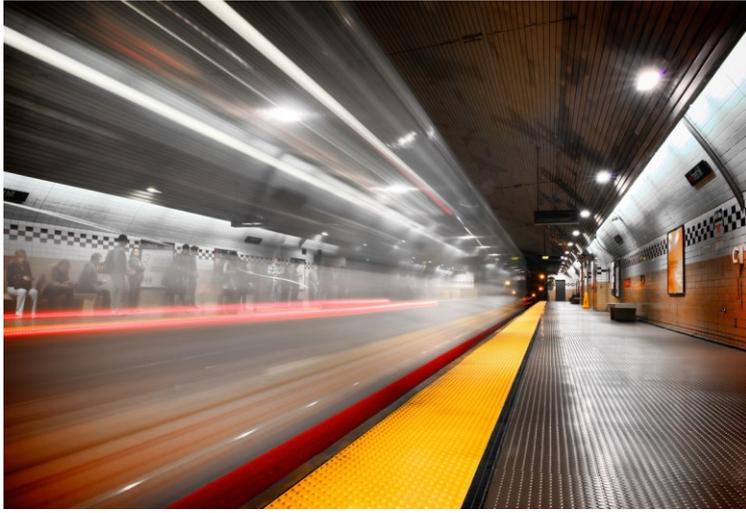


Twin Peaks Tunnel Trackway Improvements



What Are We Doing?

- Replacing all track and track holdings between West Portal and Castro stations
- Seismic improvements to abandoned station
- Repairs to tunnel walls and ceilings

Project Benefits

- New tracks will lift the speed restriction for trains moving through the tunnel
- Improves safety and reliability for Muni customers
- Seismic improvements and repairs improve safety of the tunnel and the neighborhoods around it



What We Heard



- *My customers and employees will have trouble getting to and from my business*
 - Bus shuttles will replace trains during shutdowns
 - Shuttles will run for each of the lines (K, L and M) from Castro outbound to the ends of the lines

- *This will disrupt my morning commute*
 - Construction for Twin Peaks Tunnel will be during the weekends. Tunnel will close late on Friday night and reopen before regular AM service begins



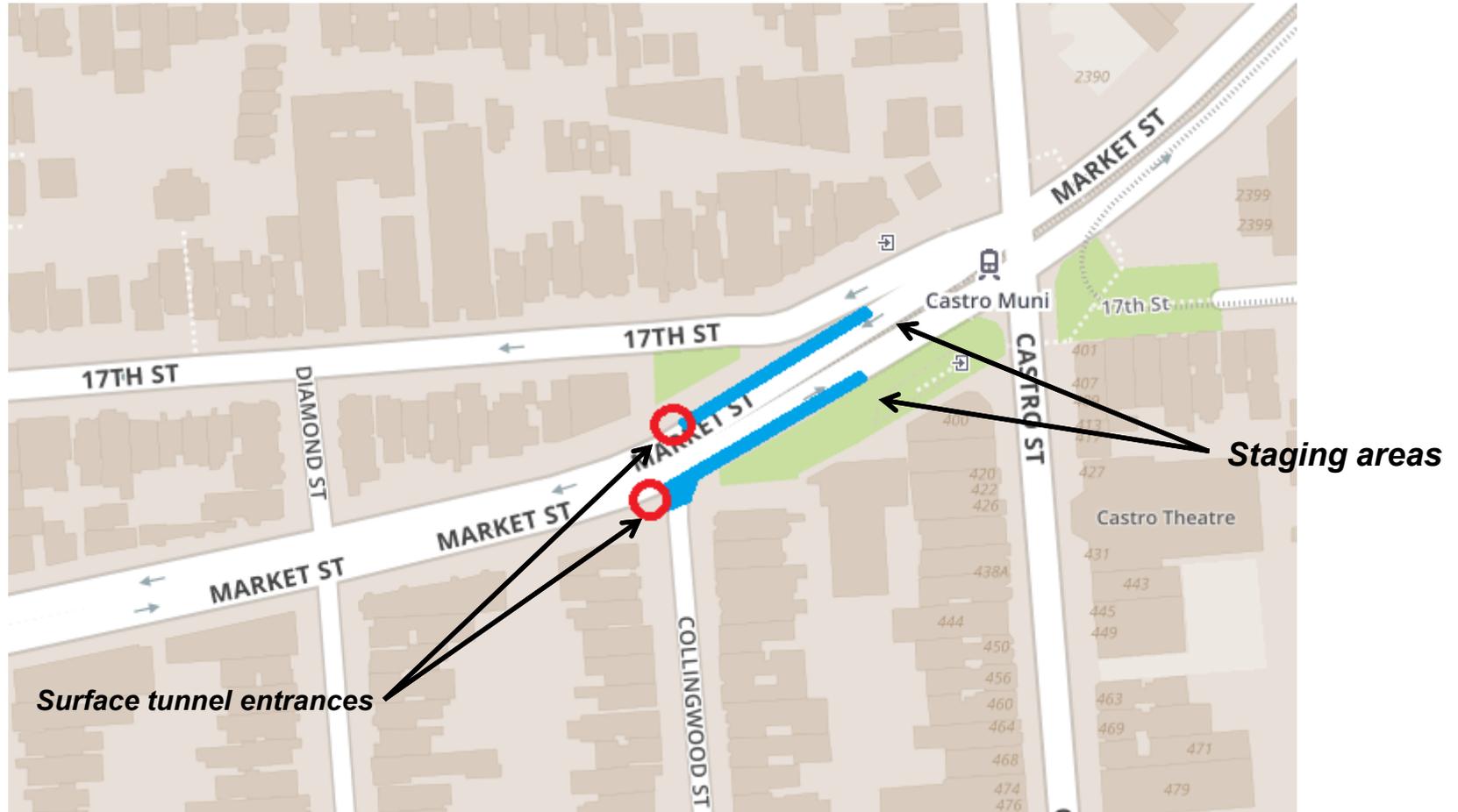
- *Construction noise will be bothersome*
 - Applying the same noise reducing measures as Sunset Tunnel

Minimizing the Impacts

- Construction measures being taken:
 - Lower frequency back-up beepers will be used on construction vehicles and flaggers will be on site
 - Liners will be put in trucks for quieter loading of materials
 - Mufflers will be installed on loud machinery
 - No loud construction/demo 10:00PM-6:00AM

Castro Staging Area

There will be two staging areas to hold the rail and gravel that will go into the Twin Peaks Tunnel, one in West Portal and one in Castro. Below shows the Castro staging area.



Muni Subway Systems Improvements

In an effort to minimize impacts to the neighborhood and avoid future tunnel shutdowns, we've combined three service improvements into one construction project. By incorporating these projects, we can better minimize impacts to Muni customers and the neighborhoods.

Muni Subway System Improvements

Blue Light Emergency Telephone Replacement



Twin Peaks Tunnel Trackway Improvements



Radio Replacement



Radio Replacement

What Are We Doing?

- Upgrading the radio communication system in the Muni subway between West Portal and Embarcadero stations
- Installing Computer Aided Dispatch/Automatic Vehicle Location (CAD/AVL) and integrated incident management/reporting
- Installing American Disabilities Act (ADA) compliant traveler information— onboard digital “next stop” announcements that provide visual and audio announcements on light-rail vehicles
- Installing Data and Reporting to assist with delivery performance analysis and vehicle incident management

Project Benefits

- Modernized radio system will improve fleet dispatch and management
- New technology will improve communications system-wide
- Provide ADA-compliant traveler information on light rail vehicles
- Expands the number of available channels for use between Muni Operations Center, Muni drivers, maintenance workers and stations



New Vehicle Data Terminal



New Radio Units

Blue Light Emergency Telephone Replacement

What Are We Doing?

- Replacing 90 existing Blue Light Emergency Telephones with 181 new ones:
 - Inside the Muni subway and on station platforms
- Adding phones per code and San Francisco Fire Department requirements:
- Constructing answering stations connecting with:
 - Central Control Center
 - The new Transportation Management Center

Existing ET Phone Cabinet



Project Benefits

- Replace blue light emergency phones in the subway that were initially installed in the 1970s.
- SFMTA can better serve Muni customers in emergency situations, such as during a natural disaster.

New Blue Light ET Phone



Project Schedule

Summer 2015	Fall	Winter	Spring 2016	Summer
Blue Light Emergency Telephones				
Radio Replacement Project				
			Twin Peaks Tunnel Track Replacement	

Blue Light Emergency Telephones and Radio System Replacement:

- *From West Portal Station to Embarcadero Station*
- Nighttime shutdowns (from late PM to start of regular train service), Monday through Sunday (7 days/week)
- Start July 2015; complete in winter 15/16

Twin Peaks Tunnel Track Replacement

- *From West Portal Station to Castro Station*
- *Tentative schedule:* weekend shutdowns (from late PM Friday night to start of regular train service Monday morning)
- Start January 2016; complete in late spring or summer

Project Areas

