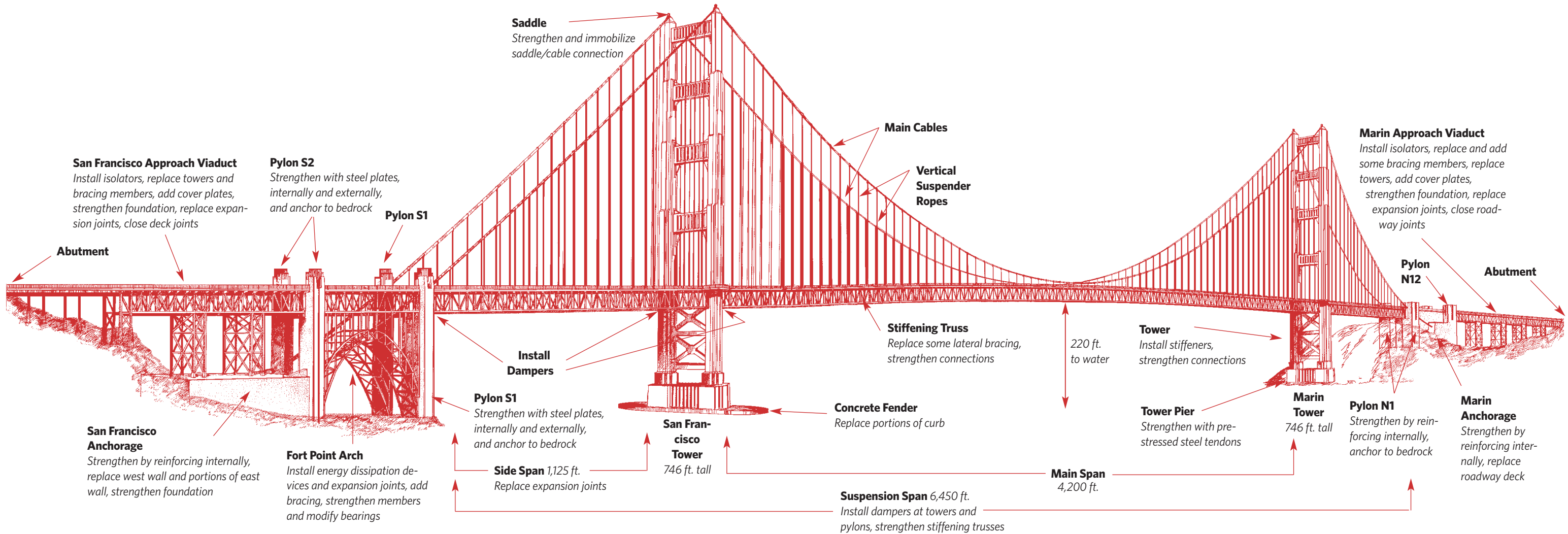


Golden Gate Bridge Structures
Shown with the Seismic Retrofit Design Measures



Saddle
 Strengthen and immobilize saddle/cable connection

Main Cables

Vertical Suspender Ropes

Stiffening Truss
 Replace some lateral bracing, strengthen connections

Tower
 Install stiffeners, strengthen connections

Tower Pier
 Strengthen with pre-stressed steel tendons

Marin Tower
 746 ft. tall

Pylon N1
 Strengthen by reinforcing internally, anchor to bedrock

Marin Anchorage
 Strengthen by reinforcing internally, replace roadway deck

Marin Approach Viaduct
 Install isolators, replace and add some bracing members, replace towers, add cover plates, strengthen foundation, replace expansion joints, close roadway joints

Abutment

Pylon N12

San Francisco Approach Viaduct
 Install isolators, replace towers and bracing members, add cover plates, strengthen foundation, replace expansion joints, close deck joints

Pylon S2
 Strengthen with steel plates, internally and externally, and anchor to bedrock

Pylon S1

Abutment

Install Dampers

Pylon S1
 Strengthen with steel plates, internally and externally, and anchor to bedrock

San Francisco Tower
 746 ft. tall

Concrete Fender
 Replace portions of curb

220 ft. to water

Main Span
 4,200 ft.

Suspension Span 6,450 ft.
 Install dampers at towers and pylons, strengthen stiffening trusses

Side Span 1,125 ft.
 Replace expansion joints

Fort Point Arch
 Install energy dissipation devices and expansion joints, add bracing, strengthen members and modify bearings

San Francisco Anchorage
 Strengthen by reinforcing internally, replace west wall and portions of east wall, strengthen foundation