Market Street is San Francisco’s most important transit corridor, with 22 bus routes and one streetcar line operating on the surface of the street (in addition to underground Muni Metro and BART service). With more than 200 transit vehicles/hour during peak hours — that’s a bus every 20 seconds! — the sheer scale of surface transit traffic presents an operational challenge. Transit speeds average below 8 miles per hour, and riders often express desires for a faster and more reliable journey.

Much of the existing transit infrastructure is in need of replacement, including the streetcar tracks, traffic signals, transit boarding islands and electrical systems, including traction power. The traction power system distributes electricity to Muni’s trolley coaches, the F Market streetcar and Muni light rail vehicles in the subway and originates from two different substations (one on Stevenson Street and one under UN Plaza). Duct banks — groups of conduits protected by concrete — run underground from the substations to an Overhead Contact System (OCS) from which Muni trolley coaches and the F line streetcar draw power.