

Central Freeway

San Francisco, California

Overview

On October 17, 1989, the Loma Prieta earthquake shook San Francisco, California and the surrounding region. The earthquake damaged a portion of the Central Freeway, an elevated highway that bisected the Hayes Valley neighborhood of San Francisco. This particular section of highway was a 40-foot tall, double-deck freeway with on-ramps that connected the Hayes Valley neighborhood to U.S. Route 101, which runs south to Los Angeles and north to Olympia, Washington.



Current view of the intersection of Octavia and Hayes Streets. (Source: Hoodline)

The Central Freeway was a barrier that separated the more upscale west side of the neighborhood from the lower-income east side. In addition, areas of the neighborhood adjacent to the elevated freeway suffered from traffic noise, blocked views, shadows, and people loitering under the freeway. Removing the earthquake-damaged elevated facility alleviated these issues and resulted in 22 land parcels becoming available for redevelopment, creating an opportunity to bring the divided community together.

Caltrans removed the elevated freeway, which made developable land available where the freeway once stood. As the boulevard was constructed and parcels were developed, residents noted a significant change in the nature of the commercial establishments in the area. Where it had been previously populated by liquor stores and mechanic shops, soon the area was teeming with restaurants and boutiques. The replacement of the elevated freeway with a well-designed surface boulevard stimulated economic activity without necessarily causing the crippling levels of traffic congestion that opponents of the project feared would arise.

Making the Decision

Long after the response to the immediate aftermath of the earthquake, and after the community began to heal, the question naturally arose: what should be done with the severely damaged elevated Central Freeway on-ramp running through the neighborhood and connecting residents to the region? It wasn't immediately obvious from the beginning that the preferred alternative was to remove the facility. It took over a decade and three city referenda for a majority of the community to support demolishing the facility and replacing it with an at-grade boulevard.

Early in the process, engineers determined the portion of the elevated facility north of Fell Street to be dangerously unstable and removed it. This daylighted Hayes Street and almost immediately began attracting more investment to the neighborhood. The rest of the structure, however, was braced for any future seismic activity and remained in operation. By California State law, Caltrans was not able to rebuild the facility without authorization from the city. However, the removal of this section led to an increase of traffic on surface streets in the area, and further removal of the elevated facility was seen as politically unpopular. The do-nothing alternative became the status quo for years.



Demolition of the elevated portion of the Central Freeway. (Source: Madeline Behrens-Brigham)

The San Francisco Neighbors Association and the Sunset Merchants Group gathered over 28,000 signatures in support of rebuilding the freeway. In November 1997, the referendum Proposition H was put to a ballot. Due in part to low voter turnout, Proposition H passed with 53 percent in support, resolving to keep and rebuild portions of the Central Freeway.

Those opposing the resolution formed citizens' groups and spent the following year organizing. In November 1998, citizens were asked by Proposition E, "Shall the city repeal 1997's Proposition H and authorize Caltrans to replace the Central Freeway with an elevated structure to Market Street and a ground-level boulevard from Market along Octavia Street?" This time, voter turnout was much higher, and Proposition E passed with 54 percent of voters supporting it.

Over the following year, the planning process began for the removal of the facility as well as the ultimate construction of what would become Octavia Boulevard. First, Caltrans had to transfer ownership of the land to the city of San Francisco. FHWA provided assistance in this regard, coordinating with Caltrans and the city to support the asset transfer.

In reaction, community groups that feared traffic congestion on city streets due to the removal of the freeway gathered enough signatures to get yet another referendum on the ballot, Proposition J. This proposition was to reverse Proposition E from the previous year. This time, though, Proposition J would need to pass by a two-thirds majority. Proposition J ultimately failed with 47 percent of votes in favor, and the fate of the Octavia Boulevard project was sealed.

Design

The southern end of Octavia Boulevard begins at Market Street, where the off-ramp of Central Freeway establishes the northern terminus of U.S. Route 101. At Fell Street, the northern end of Octavia Boulevard sits Patricia's Green in Hayes Valley, a public park with benches, a playground, and public art which was also part of the redesign project. For the four city blocks of Octavia Boulevard, the design of the 133-foot-wide right-of-way includes four travel lanes for through-traffic (two travel lanes in each direction) with a tree-lined median. Separated from these travel lanes on either side by other tree-lined medians are two one-way frontage roads called Octavia Street. These frontage roads include one travel lane each and one on-street parking lane.

Before the project was complete, many predicted overwhelming congestion on the remaining freeway facility and gridlock on the new boulevard. However, research conducted through surveys after the boulevard was completed showed that drivers changed their behavior by taking a different freeway, transitioning to using city streets for the entirety of similar trips, switching to public transportation, or no longer taking the trip that they would have on the previous freeway. The traffic volume on the remaining portion of the Central Freeway declined by 52 percent after the construction of the boulevard.



Map of Octavia Boulevard and surrounding area. (Source: Open Street Map)

Development and Construction

The removal of the elevated structure and the replacement of it with an at-grade, right-sized boulevard created 22 parcels of developable land adjacent to the new boulevard. The State of California sold five of these parcels to private developers and seven to the San Francisco Redevelopment Agency. The sale of those parcels generated \$25.5 million in revenue which was used to finance the construction of Octavia Boulevard. Those parcels were developed into high-density, residential and mixed-use buildings. To address concerns about rampant gentrification, planners stipulated that half of the newly developed residential units must be affordable to low- and very low-income households. Construction of the boulevard from Market Street to Fell Street began in 2002 and the boulevard opened in 2005. Developers constructed the mixed-use buildings concurrently with the construction of the boulevard.

Development of the remaining parcels of land is a years-long process that is ongoing. One of the interesting things that planners did in this regard is think through how they could help revitalize the community in interesting ways during the construction process. The result of this exercise was unique

attractions such as temporary, pop-up retail locations housed in shipping containers, repurposed open space for outdoor public movie nights, and community garden space.

Neighborhood Character and Community Impacts

Before the Loma Prieta earthquake occurred, the Central Freeway provided access to a mixed-use corridor in the Hayes Valley neighborhood, but it also bisected it, cutting off the east side from the west. The elevated structure loomed over the neighborhood and obstructed views. The demographics that comprised the neighborhood were characterized largely by racial minorities and lower-income households, including a public housing development in the northern part of the neighborhood.



A view of Patricia's Green at the northern end of Octavia Boulevard. (Source: foundsf.org)

Due to the replacement of the elevated freeway with an at-grade boulevard, and the construction of commercial and residential space where the freeway once was, the character of the neighborhood changed and local economic activity was stimulated. The businesses that moved into the new commercial space were restaurants, boutiques, and other small businesses, a notable difference from the types of businesses that populated the rest of the neighborhood. Between 1990 and 2000, after the Central Freeway was partially demolished, but before Octavia Boulevard was constructed, the average per capita income of the neighborhood more than doubled. While city officials tried to minimize the effects of gentrification to the greatest extent possible, a study conducted by Cervero in 2006 found that, while the Central Freeway was in operation, real estate prices decreased the closer a parcel was to the freeway. The same study found that real estate prices increased by an average of \$116,000 in 2005, the year Octavia Boulevard opened. A study conducted by the Congress for the New Urbanism found that prior to the project, prices for condominiums in the neighborhood were 66 percent of the average price for San Francisco, whereas after the opening of Octavia Boulevard in 2005, prices increased to 91 percent of the city average. This study noted that condominiums closer to the boulevard saw the largest price increases.

Traffic Concerns

One of the primary concerns among detractors of the demolition of the elevated facility was that the resulting traffic would cripple the neighborhood. The damaged portion of the Central Freeway was demolished and traffic shut down in phases. The city planned detours with each phase of demolition

and especially during the construction of Octavia Boulevard. Over the years-long construction process, traffic patterns changed. When Octavia Boulevard opened, it created capacity where there previously (but temporarily) had been none. Residents, employees, and patrons needed to access U.S. Route 101, and Octavia Boulevard was the way to do so. Much of the traffic in the neighborhood can be explained by San Franciscans from other neighborhoods either arriving to Hayes Valley as a destination, or passing through to access U.S. Route 101.

Looking Forward

As the development of the remaining parcels continues, the city of San Francisco is focusing on making small changes to the design to accommodate new realities such as alleviating car traffic with public transit investments and bicycle infrastructure improvements. While planners tried to minimize gentrification in the neighborhood to the greatest extent possible by ensuring the development of affordable housing, San Francisco has become one of the most expensive places in the country to live. The demolition of the Central Freeway and the resulting development has caused the Hayes Valley neighborhood to become very popular. Despite the disagreements in making the decision to right-size the facility, the neighborhood has become more connected and vibrant because of the Central Freeway/Octavia Boulevard project.