Economic Development and Highway Right-Sizing Elevated Freeway to Boulevard Right-Sizing

Community Motivations for Elevated Freeway to Boulevard Right-Sizing

Successful right-sizing projects will rebuild, rehabilitate, or remove travel facilities in a way that balances traffic flow with changing community attitudes toward urban land use and desires for social and economic connectivity. Motivations for elevated freeway to boulevard right-sizing include:

- Economic Development: Freeway to boulevard rightsizing creates better neighborhood connectivity and increases the amount of land available for development.
- More Public Amenities: Freeway to boulevard rightsizing can repurpose surrounding available land into public parks or other publicspaces.
- Improved Safety: Freeway to boulevard right-sizing usually slows traffic, which improves safety.
- **Traffic Management:** Freeway to boulevard right-sizing can reduce congestion and improve traffic flow through context-sensitive road redesign.
- **Transportation Access and Choice:** Freeway to boulevard right-sizing creates additional multimodal transportation options.

Improving Livability in San Francisco's Hayes Valley Neighborhood: The Central Freeway Project

The Central Freeway Project in San Francisco arose from public efforts to remove and rehabilitate a portion of the two-deck, 40foot-high freeway to improve connectivity and livability in the Hayes Valley neighborhood. The freeway was a barrier separating the more upscale west side of the neighborhood from the lowerincome east side. Furthermore, areas of the neighborhood adjacent to the freeway suffered from traffic noise, blocked views, shadows, and people loitering under the freeway.

After the freeway was damaged in the 1989 Loma Prieta Earthquake, stakeholders such as citizens' advisory groups and transportation decisionmakers clashed for years over whether to keep the freeway by repairing or rebuilding it, or to demolish it altogether. In 1997, a city referendum to rebuild, widen and retrofit the freeway passed by popular vote. In response, neighborhood activist coalitions with the support of the Mayor's Office brought another referendum to vote called Proposition E, which would repeal the previous referendum, and instead turn the debilitated freeway structure into a boulevard. Proposition E passed, and survived a third referendum, to spur over six years of planning through the Better Neighborhood Program, which focused on creating pedestrian-scaled, diverse neighborhoods located near transit, jobs, and amenities.



The above photos show the Central Freeway (left, Source: San Francisco Chronicle) and Octavia Boulevard (right, Source: re:Streets).

https://www.fhwa.dot.gov/planning/economic_development/right_sizing/

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The City of San Francisco led an extensive public process to create the Market and Octavia Area Plan, the efforts of which have contributed to a 30 percent appreciation in Hayes Valley home values and attracted higher-end businesses and restaurants to the area. To address concerns about rampant gentrification, planners stipulated that half of new residential units be affordable to low- and very low-income households.

Research conducted 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.

Bringing Tranquility and Public Space to Downtown Seoul: Cheonggyecheon's Elevated Expressway Project

The transformation of the Cheonggyecheon Elevated Expressway is one of the most drastic examples of right-sizing a highway into a boulevard. In 2001, armed with data and traffic models, Hongik University Professor Kee Yeon Hwang and his colleagues partnered with Mayor Lee Myung-bak to restore the Cheonggyecheon Stream, over which the Expressway was built, and revitalize the district. The team capitalized on strong political support and public will to improve quality of life through greener, more pedestrian-friendly plans.

The Expressway is now a 5.8-kilometer-long park that attracts over 64,000 people a day. In addition to benefitting the economy (the number of nearby businesses increased by 3.5 percent and the price of land within 50 meters of the project increased 30–50 percent), the project was a resounding environmental success: over 500 species of plants and animals returned to the area, particulate matter decreased by 35 percent, and temperatures along the stream cooled by up to 6°C compared to parallel roads 4-7 blocks away, reducing the urban heat island effect.

The photos at the right show a dual-level congested highway (top), the Cheonggyecheon Elevated Expressway before it was demolished, and the restored Cheonggyecheon Stream (middle). The bottom photo shows three pillars that once held up the Expressway, meant to serve as a reminder of Cheonggyecheon Stream's past. (Source: CNU.org)



The photo above (Source: re:Streets) shows Octavia Boulevard, which replaced the Central Freeway in 2005.

a white paper titled Economic Development and Highway Right-





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