

Facts about the Central Subway Project

Project Overview

The Third Street Light Rail Transit Project is the most significant capital investment in generations for the seventh largest transit system in the nation. Phase 1 of the 6.8-mile two-phase project began revenue service as the T Third Line in April 2007, restoring light rail service to the heavily transit-dependent Third Street corridor of San Francisco after an absence of 50 years.

When the Central Subway is completed, the combined Third Street light rail line will provide a continuous light rail route connecting the heavily transit-dependent communities of Visitacion Valley and Bayview in the south through Dogpatch and Mission Bay with Chinatown and the central business district in the north. It will provide direct connections to major retail, sporting and cultural venues and carry more passengers upon opening than any other current Muni line. Most significantly, it will efficiently take people along this densely-populated corridor to jobs, educational opportunities and access to all of San Francisco. As such, it is critical to the future mobility and economic competitiveness of San Francisco as a regional, national and global destination.

Following are factual answers to issues and questions that have been raised regarding the project:

1) What are the costs and budget for the Central Subway Project and how have they changed?

- The Central Subway Project has an approved project cost of \$1.578 billion. The project budget includes approved and committed funds from local, state and federal sources that have been reviewed and approved by voters and elected officials.

History of Central Subway Project Cost:

- In 1998, the Federal Transit Administration (FTA) and the San Francisco Public Transportation Commission, predecessor of the San Francisco Municipal Transportation Agency (SFMTA), determined that a Supplemental Environmental Impact Report/Statement (SEIS/SEIR) was required to focus on Phase 2 of the T Third Line, known as the Central Subway Project. A cost estimate of \$647 million (in 2001 dollars, \$995 million in today's dollars) was taken from the Phase 1 Environmental Impact Statement / Environmental Impact Report (EIS /EIR) to serve as a placeholder, which was based on the cost of an early conceptual engineering estimate, before a revised cost estimate could be calculated.

- In 2001, the Central Subway Project was included in the Metropolitan Transportation Commission's Regional Transit Expansion Program (RTEP). A consensus was reached to support the Central Subway Project as a Bay Area priority for federal New Starts funding. The RTEP retained the estimated cost of \$647 million for Phase 2 of the T Third Line. The 2003 Proposition K Expenditure Plan used this same figure because preliminary engineering on the Central Subway had yet to begin.
- The FTA approved the project for preliminary engineering (PE) in 2002. During PE, the SFMTA modified the project alignment to help address mobility and transit deficiencies in the northeastern part of San Francisco by improving connections to communities in the southeastern part of the City and improving reliability of transit services and examined tunneling scenarios. The supplemental environmental review for the Central Subway resumed in 2005 and was completed when the FTA issued a record of decision for the project in November 2008.
- In late 2008 and early 2009, the SFMTA participated in the FTA's New Starts risk assessment as part of the New Starts process. The increase reflects cost escalation and the FTA's recommendation that additional cost (increased cost by \$200 million) and schedule reserve contingency (schedule was extended 21 months with a new completion date of December 2018) be added to the project. As a result of the overall budget increase, the FTA agreed to increase the federal contribution to the Central Subway Project by an additional \$180 million.
- The SFMTA's baseline budget for the Central Subway Project remains at \$1.578 billion; *there has been no increase or change in the local share since original voter approval in 2003 of \$126.0M in Proposition B/K sales tax funds.*

2) How does the Central Subway connect to the City's other modes of transportation and regional services?

- The Central Subway extension of the T Third line is part of and provides direct connectivity to the rest of the City's public transportation network. The T Third Line already provides a direct connection to regional commuter rail service (Caltrain) at 4th and King streets. Central Subway service also will provide direct *and improved* connections to BART and the other Muni Metro lines and the bus system for all customers coming from the south and from Caltrain as well as from Chinatown in the north.
- The Union Square/Market Street (UMS) Station will have a direct concourse-to-concourse connection with the Powell Street Muni/BART station. This design provides a relatively short concourse that will give customers direct and unimpeded underground access to Powell Street Station where transfers are available to Market Street Muni Metro lines and BART, as illustrated in Figure 1.

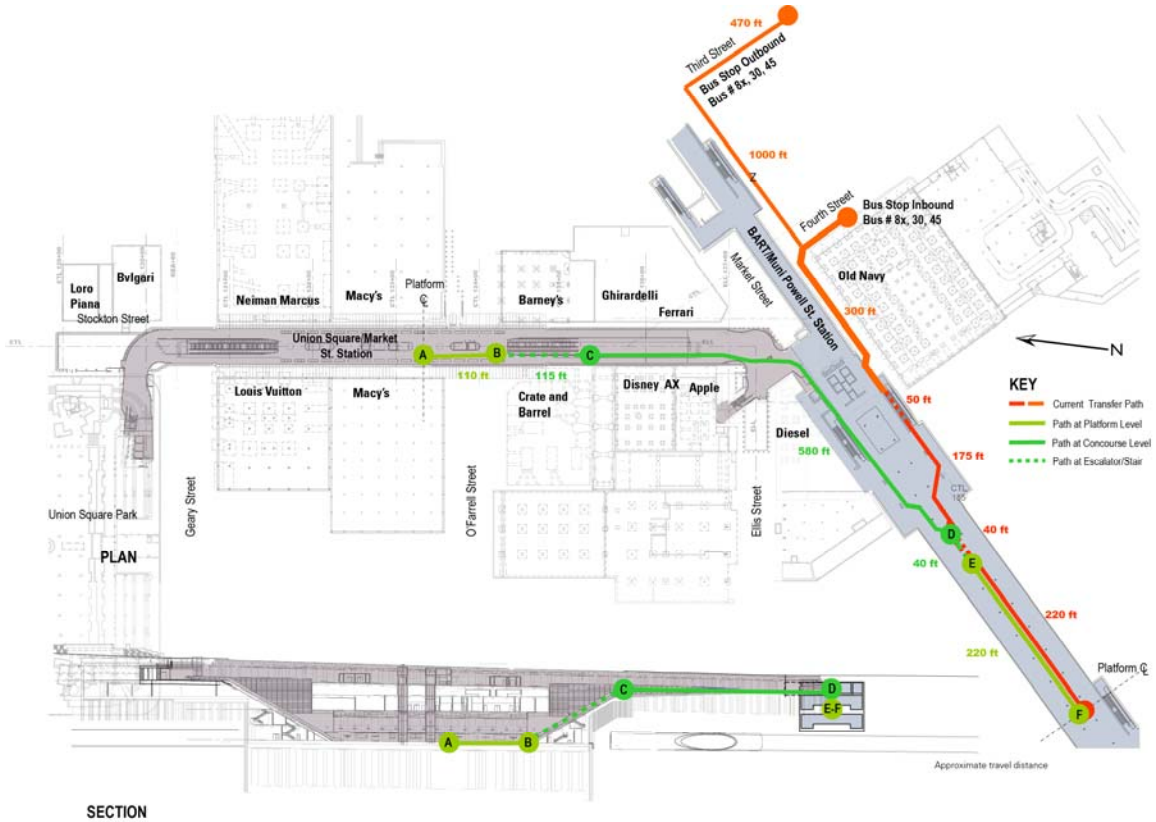


Figure 1: Central Subway Union Square/Market Street Station Connection to Powell Street Station

- The UMS Station provides escalators on each end of the station that will facilitate movement through the station, and a short walk on the underground concourse will lead customers directly to the entrance of Powell Street Station next to the Ellis Street station exit. Elevators will meet the needs of persons with disabilities and will provide alternative access to the Station.
- The comparable current connection is from the Muni 30 Stockton and 45 Union bus routes to the Powell Muni Metro Station. The Central Subway transfer will be shorter and more seamless, as it will be contained within a controlled environment with vertical circulation aided by escalators and elevators in both directions.

3) What is the estimated project ridership?

- Ridership along the T Third Line is projected at 65,000 riders per day in 2030 for the two-phase line. Ridership projections are 43,700 for opening year (2019). These figures were developed by the SFCTA and included in the annual New Starts submittal required by FTA. Recent figures that have been reported reflect ridership for the Central Subway alone and not for the two-phase alignment.

- When considering phase II ridership alone as reported by the FTA, the project stills enjoys one of the highest levels of any existing or proposed New Starts light rail line in the U.S. The updated T Third figure remains approximately 20 percent higher than comparable 2030 projections of Muni’s N Judah Line ridership, Muni’s most active line, which operates over a similar route length. Compared to light rail projects around the country, *Central Subway is forecast to attract extremely high usage with daily boardings per mile higher than ridership forecasts for almost all other light rail projects in the country as seen in Figure 2.*

U.S. Light Rail Projects	State	2030 Avg. Daily Boardings*	Route Miles	Daily Boardings per Mile
Los Angeles, Regional Connector, Downtown Subway	CA	88,200	1.9	46,421
SFMTA, T Third Phase 2 (Central Subway)	CA	35,100	1.7	20,647
Seattle, University Link	WA	40,200	3.1	12,968
Vancouver, Columbia River Crossing	WA	21,400	2.9	7,379
Houston, North Corridor	TX	29,000	5.2	5,577
Houston, Southeast Corridor	TX	28,700	6.5	4,415
Mesa, Central Mesa Extension	AZ	11,900	3.1	3,839
St. Paul - Minneapolis, Central Corridor	MN	40,900	11	3,718
Portland, Milwaukie Project	OR	22,800	7.3	3,123
Sacramento, South Sacramento Corridor Phase 2	CA	10,000	4.3	2,326
Charlotte, Northeast Corridor	NC	23,800	10.6	2,245
Dallas, Northwest / Southeast	TX	45,900	21	2,186
Salt Lake City, Draper	UT	6,800	3.8	1,789
Salt Lake City, Mid Jordan	UT	9,500	10.6	896

*http://www.fta.dot.gov/publications/reports/reports_to_congress/planning_environment_12279.html

Figure 2: FY 2030 Daily Boardings per Mile for Light Rail Projects around the Country

- The T Third Line will offer vital future capacity to accommodate new ridership without overcrowding, as the Visitacion Valley, Bayview/Hunters Point, and Mission Bay areas continue to develop. With the influx of 10,000 new housing units planned for the old Naval Shipyard at Hunters Point and the Schlage Lock redevelopment site, and the dramatic growth in businesses and residential units in Mission Bay, an estimated 24,000 additional people will depend on the T Third Line to connect to Caltrain, AT&T Park, Moscone Convention Center, Market Street, Union Square, Chinatown and after a future phase into North Beach and Fisherman’s Wharf. Currently 68 percent of residents along the Central Subway alignment do not own vehicles and rely heavily on public transportation.
- Ridership comparisons with other projects that attract new riders are not relevant. In fact, the FTA stopped using the new rider calculation after determining that it favored suburban rail investments where ridership calculations started from zero rather than the benefits of improved service for high, existing ridership in metro areas such as San Francisco, New York City and Los Angeles. The more relevant measure is the “user

benefit” of the investment which the FTA defines as the equivalent hours of travel time savings associated with improvements in transit service levels for all customers of the transportation system. These time savings are a major factor that the FTA uses in ensuring that the greatest number of people benefit in an investment, not simply a few new riders.

4) What will the operating costs be for the Central Subway and how will it impact Muni’s overall transit service?

- The total increase to the SFMTA overall operating budget with the Central Subway in 2019 is estimated to be \$1.76 million. The cost to operate the Subway in 2030 is \$6.89 million. These numbers are in the FY2012 New Starts submission. When the 2030 \$6.89 million operating cost figure is escalated to Year of Expenditure (YOE) 2030 dollars, the figure as reported by the FTA is \$15.21 million. *The Central Subway, with its 35,000 daily boardings, will increase the Agency’s overall \$760 million annual operating budget by less than 0.25 percent.*
- The new operating cost estimates reflect a better understanding of the future travel plans of customers along the alignment and come from a close collaboration with the SF Planning Department and the SFCTA to understand and prepare for growth associated with development projects in Mission Bay and the southeast quadrant of the City.
- The challenges that the SFMTA faces with regard to its \$760 million operating budget are driven by current budgetary challenges and not by the addition of efficient incremental rail service, and don’t obviate the need for expansion to accommodate expected growth in demand.

5) What are the benefits of the Central Subway Project?

- The Central Subway, Phase 2 of the T Third Line, will provide a continuous, critical north-south rail connection from Visitacion Valley through the Bayview/Hunters Point, Dogpatch, Mission Bay, and South of Market neighborhoods into the heart of downtown and Chinatown. It will extend reliable, faster rail service into one of the densest, most congested corridors in the West.
- Once complete in 2019, the overall T Third Line will accommodate the current and projected high ridership in the corridor, reducing trips times and providing direct connections to regional transit systems including Caltrain, BART and future high speed rail. Job and housing growth are projected to increase significantly in the next two decades and the T Third Central Subway Line will be essential to ensuring mobility to meet this dramatically growing market. *Addressing these fundamental mobility needs is why the project continues to receive the highest federal ratings among peer projects for both Land Use and Economic Development benefits as compared to similar projects around the nation.*

- As a significant infrastructure construction project, the Central Subway is providing immediate job opportunities for local workers and firms as well as small and medium sized businesses. It will significantly enhance access to jobs and employment along this burgeoning corridor as well as in the downtown core and San Francisco's financial center.

6) What happens to the federal funding if it doesn't go to San Francisco's Central Subway Project?

- The federal funds allocated for the Central Subway Project cannot be redirected to offset any other San Francisco projects.
- If the Central Subway Project were to be stopped, the entire \$942 million dollar contribution from the federal government would be redistributed to other New Starts projects throughout the nation under the New Starts program and the City would not receive any of this funding. New Starts is a highly competitive program; recent experience in other programs suggests that any hesitation from San Francisco will result in immediate redirection of funds to other cities.
- This loss of nearly a billion dollars of federal transportation funds would cost thousands of employment and local contracting opportunities at a time when they are desperately needed and would derail the improvement of our public transit system at a time when ridership demand is trending upward given the development in the T Third Line corridor.
- To date the local, state and federal governments have allocated \$248 million in funding and spent nearly \$200 million on the Central Subway Project. Abandoning the project now would ignore transportation needs in this growing corridor and would waste the \$200 million spent to date.

7) How will the project accommodate projected future growth in San Francisco?

- The current population density within a half-mile of the station areas is 53,700 people per square mile in the corridor and total employment in project station areas is 217,600 jobs.
- The San Francisco central business district is the densest and most transit accessible downtown on the west coast. Union Square is the primary retail district in the city with dense pedestrian and transit-oriented development. Chinatown has extremely dense concentrations of residential units, retail and some office and small-scale industrial uses.
- Available parking in the corridor is generally on-street, with some off-street parking for commuters and shoppers at city-owned parking garages. The daily cost to park in city-owned lots in the corridor is high, ranging from \$20 to \$30 or more per day.
- By 2030, the San Francisco Planning Department projects a 26 percent increase in overall corridor population and a 61 percent increase in corridor employment.

- *Without the Central Subway, there will be much greater congestion and significantly increased delays along this corridor, along with associated increases in pollution and other greenhouse emissions.*

8) How many jobs will be created by the Central Subway Project?

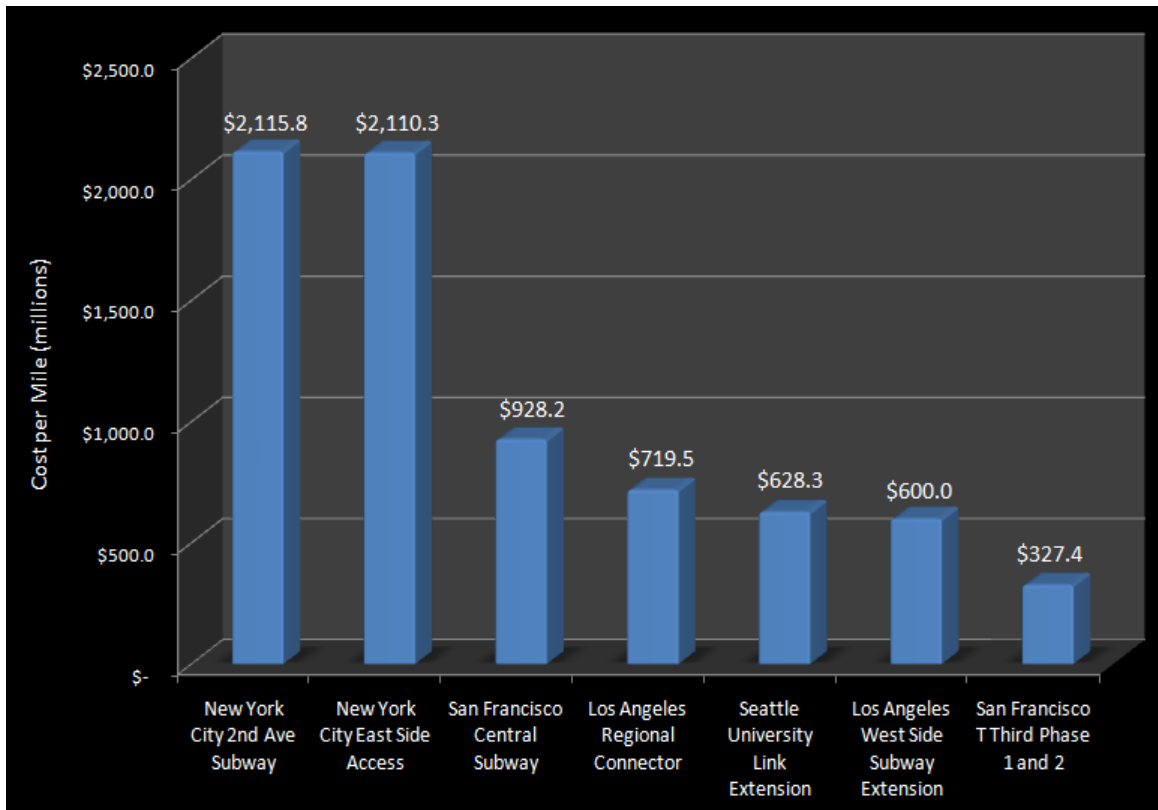
- The Central Subway Project will create thousands of employment and job training opportunities in professional services and construction-related jobs. A study through the American Public Transportation Association in conjunction with the FTA showed that for every billion dollars of federal funding, a project can generate 30,000 jobs.
- The Central Subway Project has developed a robust trucking program aimed at ensuring 50 percent of all material hauling on the project goes to local truckers.
- Entry level trainee positions and hands-on job training are being created through the City's First Source hiring and City Build programs and will continue through the duration of the project through 2019.

9) What are the SBE/DBE programs associated with the project?

- Central Subway business outreach conducted at more than 60 events and in collaboration with nearly 50 partners, has achieved more than \$115 million in contract awards combined for local (LBE), disadvantaged (DBE) or small business enterprises (SBE) to date.
- Six of the 11 prime contractors working on the Central Subway Project are certified as SBEs, DBEs or LBEs.
- The SFMTA is committed to encouraging the economic growth of small and local businesses through this project by providing contractor assistance in the form of outreach and bid preparation training. The SFMTA provides opportunities to small businesses by unbundling contracts, providing a bonding and financing assistance program, encouraging small business set-aside programs and actively monitoring prompt payments.
- On the Guideway Tunnel contract, 12 to 18 percent of the total contract is anticipated to be performed by small business enterprises, more than double the six percent goal.
- For employment training and job placement for non-construction jobs on the Central Subway Project, the SFMTA works with the First Source Hiring program and places disadvantaged trainees with the prime and subcontractors. On construction contracts, the SFMTA implements the federal goals for women and minorities for each trade as well as state apprenticeship requirements, working with First Source and CityBuild to provide referrals to contractors.

10) How does the Central Subway compare to other projects?

- While comparisons have been made regarding the cost of the project with transit projects underway in other cities, it is important to distinguish the types of comparisons being made. For example, investing in a subway light rail system in the urban core is very different than running a surface rail line into low-density suburban communities; these projects will have inherently lower costs per mile.
- In the case of the Central Subway, the more accurate peer comparison is with other urban subway projects such as those now underway in New York City and Los Angeles. Actual data from the FTA reveals that when comparing subways, San Francisco’s Central Subway project costs are in the middle. While the New York City projects are so-called “heavy rail,” the costs of tunneling make the comparison more valid than any comparison with surface light rail.
- The FY2012 New Starts Annual Report on Funding Recommendations lists six projects that are primarily subway construction (three are light rail: Central Subway, Los Angeles’ Regional Connector and Seattle’s University Link). A summary of cost per mile for these peer projects is included in Figure 3, revealing the true cost of the combined two-phase T Third Light Rail project compared to other similar projects:



*http://www.fta.dot.gov/publications/reports/reports_to_congress/planning_environment_12279.html

Figure 3: Cost per Mile of New Starts Projects with Subway Segments

11) What are travel time benefits of the project?

- The Central Subway will reduce travel time from Chinatown to Caltrain at 4th and King streets from 20 minutes along the congested 4th Street/Stockton corridor to an estimated eight minutes. Muni bus routes serving this corridor are already well over capacity.
- Travel time-savings resulting from the Central Subway Project have improved by 13 percent compared to the 2008 forecast. Planned TEP improvements will create faster connections from other Muni bus routes and rail lines for overall swifter trips. Improvement of this overall travel time metric, which is aimed at capturing the project's travel benefits, confirms that the T Third Central Subway Project, Transit Effectiveness Project, and other Muni system advancements work together to provide a more robust overall transit service to current and future customers in this *Transit First City*.

12) How will the project meet citywide transportation needs?

- The City's long term transportation needs are regularly evaluated in order to identify new and emerging markets. More than 20 years ago. Significant studies identified key needs for San Francisco's transit system. The Financial District, Union Square and Chinatown have a high level of existing transit service that serves the project corridor. These trolley bus routes operate on two-minute headways during peak hours and typically carry customer loads that are at or well above capacity. Currently, T Third customers from the south must board these crowded buses operating on congested roadways or walk over a mile from the Caltrain Station to reach the central business district. These customers may currently choose to continue on light rail to access downtown, but the alignment along the Embarcadero is circuitous. The Central Subway Project is intended to provide a direct, rapid transit link between these areas. Implementation of the Central Subway Project is further expected to help carry large crowds attending events at convention and professional sports venues in the South of Market area (SOMA).
- The Central Subway will provide rapid north-south service in contrast to the principally east-west rapid transit service on Market Street and will facilitate direct transfer opportunities to Caltrain service (and ultimately high speed rail service) at 4th and King streets and to BART and other Muni Metro lines at Powell Street Station.
- Muni customers will have the option to take surface buses or subway to their desired destinations. This is similar to what our customers currently experience on Market Street with coordinated bus and light rail service.

13) How are the housing needs of the relocated residents and businesses being addressed by the project?

- The station locations of the Central Subway have required the relocation of 56 residents in 19 households. Eight businesses will be relocated as a result of property acquisitions for the project. These relocation efforts are all being carried out consistent with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
- As part of the project budget, the SFMTA has budgeted \$6 million for relocation and associated costs for moving affected residences and businesses.
- As part of the overall residential relocation effort, the SFMTA entered into an agreement with the Mayor's Office of Housing (MOH) to replace the dwelling units that 19 households currently occupy (which are to be demolished) in the Broadway/Sansome Project, which is being developed by MOH. The proposal for the SFMTA to contribute \$8 million to MOH was approved in the Central Subway Relocation Impact Study and Last Resort Housing Plan, by the FTA, the SFMTA Board of Directors and the San Francisco Board of Supervisors.

14) How will the Central Subway enhance one of San Francisco's top industries: tourism?

- In 2010, San Francisco welcomed nearly 16 million visitors with an average of more than 125,000 visitors in San Francisco each day. These visitors spent \$8.34 billion. The tourism industry generated \$485 million in taxes for the City of San Francisco, up four percent from the previous year. In addition, tourism supported 67,122 jobs in 2010 with an annual payroll of \$1.88 billion.
- San Francisco is consistently a top international convention and visitors' destination. The Central Subway will improve travel time for many visitors moving from the center of the downtown to Chinatown, Moscone Convention Center and Mission Bay.
- In addition, as the City continues to redevelop the southeastern quadrant, the Central Subway will provide modern, customer-friendly underground and above ground service. As Mission Bay moves toward completion and Pier 70, the Naval Shipyard at Hunters Point, and the Schlage Lock redevelopment site move forward with development, we can anticipate greater tourism related needs.

15) What are the environmental benefits of the Central Subway Project?

- The Central Subway Project will reduce air and noise pollution and use environmentally clean light rail vehicles. The project will also enhance and preserve the environment by reducing traffic congestion on the street.
- By making the City's transit system more accessible and useful, the

Central Subway as the completion of the second phase of the T Third Light Rail Project, will help reduce the use of single occupancy vehicles.

16) What other alternatives were considered?

- The SFMTA considered and reviewed a range of transportation alternatives to provide public transit service that enhances and preserves the social, physical and environment aspects of the communities to be served while minimizing potential negative impacts during construction and operation of the line. Working closely with stakeholders and the FTA, the alternatives evaluated resulted in the development of 10 alternatives that were reduced by the 1998 EIS/EIR to No Project; No Build/Transportation System Management (TSM) with enhanced bus service to meet demand; and a two-phased Light Rail Build Alternative that included a 5.1-mile initial operating segment (IOS) that became Phase 1.
- Progressively more detailed analyses were conducted, based on an extensive set of criteria and measures of effectiveness. The Supplemental EIR/EIS and Final Supplemental EIR/EIS reflected approval of the IOS for rail service, with eventual completion of the two-phased Light Rail Build Alternative. *The surface alternatives along 3rd, 4th and Stockton Streets were evaluated but rejected from further evaluation in the Draft SEIS/SEIR because they had fewer benefits in terms of service reliability and greater impacts on parking and traffic.* Though the capital costs were less for a surface alternative than for a subway alternative, the surface alternatives only minimally met the project purpose and need and resulted in higher operation, maintenance costs and environmental impacts.
- On March 12, 2007, the FTA approved a 1.7-mile, four-station project for entry into preliminary engineering. After completion of a Draft SEIR on the corridor, a Final Supplemental Environmental Assessment was completed on July 22, 2008. The FTA issued a Record of Decision in November 2008 for the current project alignment.
- It is important to note that the current alignment and construction plans have been designed to accommodate a future Geary subway connection, if plans for such a project are further developed.

17) What has been the public review and approval process?

It is important to understand the long history of public review and input associated with this project:

- The Southeastern area of the City has long been recognized as being underserved by high capacity transit. In the late 1980s an extensive planning process was undertaken by the San Francisco County Transportation Authority (SFCTA) to prioritize transit corridors in the City.

Four corridors that needed enhanced transit service were identified, studied and prioritized as follows: 3rd Street, Chinatown as an extension of the 3rd Street Corridor (now referred to as the Central Subway), Geary and Van Ness. The prioritization was also influenced heavily by environmental justice considerations as a result of the low income and transit dependent nature of the communities served along the corridors. The disruption of access to Chinatown resulting from the 1989 Loma Prieta earthquake was also a factor in the prioritization.

- A number of specific alignment options were considered for the Central Subway Project during the original environmental study including using 3rd Street, 4th Street, Kearny Street and Stockton Street. *Extensive public outreach, planning and decision making resulted in the current alignment extending from 4th and King streets along 4th and Stockton streets to Chinatown.* The project will serve extremely dense communities for which current transit options have exceeded capacity.
- The project has maintained public involvement during preliminary engineering, final design and construction through an extensive community outreach program. The project team has conducted more than 300 public presentations for agencies, organizations, and community groups throughout the City. A Community Advisory Group of neighborhood representatives meets quarterly to learn about latest project developments and to provide input as representatives of stakeholders and groups based along the corridor. In addition, the project has a website, www.centralsubwaysf.com, and an active social media program to connect with the community and to provide real-time updates and in-depth project information.

18) Will the Central Subway ever go to Fisherman's Wharf or North Beach?

- Discussions have begun regarding the possible extension of the T Third Line to North Beach and beyond. Currently, plans for a North Beach extension, or Phase 3 of the T Third Line, are preliminary and would require a formal public approval process. In 1998, Jackson Street was the environmental limit line, where the Central Subway terminus station is located. The project does include a provision to extend the tunnels (for construction purposes only) from Chinatown to North Beach, where the tunnels will daylight and the tunnel boring machines can be extracted. This tunneling, as part of Phase 2, will lay the groundwork for Phase 3.
- An extension of the current Central Subway, or a Phase 3 project, will require a separate planning study and a separate funding allocation process.

19) What is the FTA New Starts program?

- The FTA's discretionary New Starts program is the federal government's primary financial resource for supporting locally-planned, implemented,

and operated transit guideway capital investments. The New Starts program has helped to make possible hundreds of new or extended transit fixed guideway systems across the country over the past 35 years. Federal investment in rail and bus transit has improved the mobility of millions of Americans helping to reduce congestion, improve air quality and the overall quality of life. *The FTA’s New Starts program is subject to the toughest review of any federal funding program, far greater scrutiny than any highway investment, and the Central Subway is one of the nation’s highest rated projects in this program.* These investments are creating jobs now and access to jobs and opportunity in the future.

- Eligible for funding under this program are new projects or extensions of light rail, heavy rail, commuter rail, monorail, automated fixed guideway systems (such as a “people mover”) or a busway/high occupancy vehicle (HOV) facility. Projects become candidates for funding under this program by successfully completing the appropriate steps in the major capital investment planning and project development process.
- Funds are distributed following a Full Funding Grant Agreement (FFGA) that defines the scope of the project and specifies the total multi-year federal funding commitment to the project. Funding allocation recommendations, including new FFGA decisions, are made in the “Annual Report on New Starts” sent to Congress as part of the President’s annual budget.

20) What are the next steps for the project?

- The Central Subway Project FFGA application was submitted to the FTA on September 19, 2011. The Executive Branch review time will be up to 60 days after which Congress will have up to 60 days to finalize any questions and comments. This process is summarized in Figure 4.



Figure 4: Full Funding Grant Agreement Submission and Review Process

- Tunnel work will begin in 2012, and station construction in 2013.
- Construction will be complete in 2018, with revenue service beginning in early 2019.