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****PRESS RELEASE****

**Tunnel Boring Machine “Big Alma” Launches,
Joining Her Twin “Mom Chung” to Construct Central Subway Tunnels**

Under 4th Street, the two machines tunnel north toward Union Square, Chinatown

San Francisco—The San Francisco Municipal Transportation Agency (SFMTA), which oversees transportation in the city, including the Municipal Railway (Muni), today announced that tunnel boring machine (TBM) Big Alma has launched, joining her twin Mom Chung to construct the two Central Subway tunnels. The tunnels will allow the T Third Line trains to travel quickly beneath SoMa, Union Square and Chinatown when the Central Subway opens, cutting travel times by more than half along this busy corridor.

Like Mom Chung, Big Alma is 350 feet long and weighs 750 tons. In the coming months, the two machines will travel north under 4th Street, Stockton Street and Columbus Avenue, excavating and constructing San Francisco’s first new subway line in decades.

The two machines will keep some distance between them as they move forward. Currently they are about 1,800 feet apart, with Big Alma under 4th and Harrison and Mom Chung near 4th and Mission.

The public may follow the TBMs on Twitter at [@BigAlmatheTBM](https://twitter.com/BigAlmatheTBM) and [@MomChungtheTBM](https://twitter.com/MomChungtheTBM). Their approximate locations will be updated on the Central Subway Google Map: <http://goo.gl/maps/U639m>.

“Today we are another big step closer to building the 21st century transportation system our world-class city needs and deserves,” said Mayor Edwin M. Lee. “The Central Subway and the tunnels we are excavating today are essential to our vision, and crucial to building and maintaining a reliable, modern public transportation system for San Francisco residents and visitors.”

“The Central Subway means more jobs, less congestion, and improved air quality for future generations,” said Board of Supervisors President David Chiu. “I am excited for Big Alma’s launch and this major transportation improvement for our city.”

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The TBMs will excavate and construct the 1.5-mile-long tunnels at an average pace of 40 feet per day, though their pace will vary based on ground conditions and other factors. Big Alma will move more slowly during the first 500 feet of tunneling, as Central Subway crews test the TBM and calibrate its many functions.

Currently Mom Chung is mining 20 hours a day, five days a week, with maintenance on Saturdays and between mining shifts. Most of the TBMs' journey will be through two major ground formations: the Franciscan complex, a bedrock formation that forms Nob Hill; and the Colma formation, a dense mixture of sand and clay. The TBMs travel so far beneath the surface – between 40 and 120 feet underground – that no vibration or noise will be felt above ground when they pass below.

“This is an exciting day for San Francisco – we are now building the city’s first new subway tunnels since the 1980s,” said Tom Nolan, chairman of the SFMTA Board of Directors. “With rapid transit on 4th Street and Stockton Street, through SoMa, Union Square and Chinatown, we’ll significantly speed up and improve transportation through some of our most congested areas.”

“By extending the T Third Line through SoMa, Union Square and Chinatown, we’re connecting major job and population centers to rapid transit and vastly improving transportation in areas that are expected to grow in coming years,” said SFMTA Director of Transportation Edward D. Reiskin. “The Central Subway and its tunnels are allowing us to realize the decades-long vision of bringing fast, efficient transit to the crowded 4th and Stockton corridors.”

Big Alma is named for “Big Alma” de Bretteville Spreckels, a wealthy 19th century socialite and philanthropist who, among her many accomplishments, persuaded her first husband, sugar magnate Adolph B. Spreckels, to fund the design and construction of the California Palace of the Legion of Honor, at Land’s End in San Francisco. A model in her youth, Spreckels was the inspiration for the “Victory” statue atop the Dewey Monument in the center of Union Square.

Each TBM consists of a rotating cutter wheel (the cutter head), a cylindrical steel shell (the shield) and a 300-foot train of tunnel-building mechanisms (the trailing gear). The cutter head, a spinning excavator at the front of the machine, pumps out an environmentally safe, soap-like foam to condition the ground as it cuts through the earth like a cheese grater. Once loosened, spoils pass through holes in the cutter head and onto a large screw. The screw carries the spoils onto a series of conveyors for transport out of the tunnel.

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To launch, Big Alma pushed off of a steel frame as her cutter head began to spin. As Big Alma tunnels, the machine will stop every five feet to install the concrete segments that make up the tunnel's lining. The concrete segments are installed within the back of the TBM's cylindrical shield. The machine lifts the segments into place, and then crews bolt them together. Hydraulic jacks within the shield then push off of the newly installed tunnel lining, propelling the massive machine forward. A crew of about 10 people operates each machine and bolts concrete tunnel segments together. The Central Subway is expected to open to the public in 2019. For more information, visit www.centralsubwaysf.com.

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Established by voter proposition in 1999, the SFMTA, a department of the City and County of San Francisco, oversees the Municipal Railway (Muni), parking and traffic, bicycling, walking and taxis. With five modes of transit, Muni has approximately 700,000 passenger boardings each day. Over 1 million people get around this city each day and rely on the SFMTA to ensure safe and reliable travel by transit, walking, bicycling, taxi and driving.

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