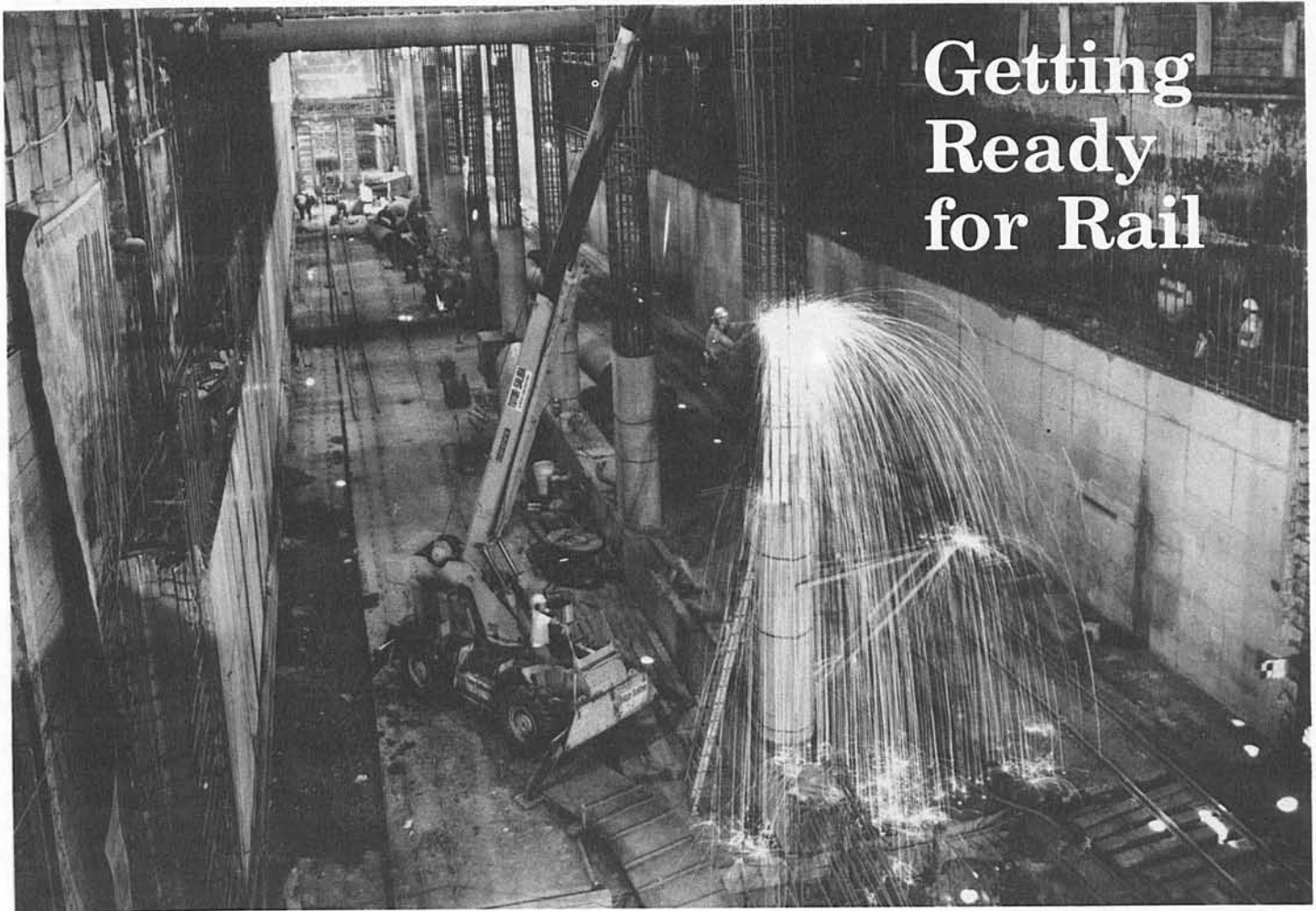




# Metro News **BULLETIN**



## Getting Ready for Rail

**GETTING READY FOR RAIL**—Top: Flying sparks and roaring heavy machinery continue as crews finish off the heavy construction phase of what will soon be the Metro Rail subway's Civic Center Station below First and Hill streets. Right: Testing continues on the light rail vehicles set to go into service this coming summer between Los Angeles and Long Beach.



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## TUNNEL EXCAVATION ON FIRST PHASE OF SUBWAY PROJECT MORE THAN TWO-THIRDS COMPLETE

The nearly nine miles of twin tunnels required for the first phase of the Metro Rail project was approximately 70 percent complete by the end of October.

On October 25, a tunneling machine approximately 85 feet below the surface poked through the last few feet of dirt separating the Seventh Street/Metro Center Station from the Pershing Square Station in downtown Los Angeles, creating the third of four tunnel subway openings that will serve the multi-leveled station.

The station's tunnels include two for the Metro Rail subway, opening for service in late 1993, and two for the Long Beach/Los Angeles Light Rail project, which RTD is scheduled to start partial operation of in the summer of 1990.

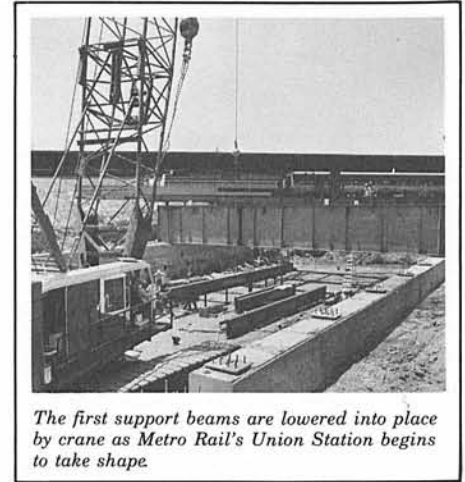
The breakthrough culminated five months of excavation through 4,300 feet of earth by contractor Shank-Ohbayashi. Sophisticated tunneling machines, working night and day, scoop out the raw earth making a bore somewhat higher and wider than

a two-car garage. Behind the machinery, the freshly mined dirt is dumped onto a conveyor belt, then transported to small rail cars to be hauled away. On some days, as much as 30 truckloads of dirt are removed.

"One of the best parts about the whole process is that we are keeping surface disruption to a minimum," said Alan F. Pegg, RTD general manager. "Most of the activity is underneath the surface and out of sight."

With 70 percent of the excavation completed on the 4.4 miles of the first portion of the project, which will connect Union Station on the north part of downtown with Wilshire Boulevard and Alvarado Street to the west, District officials are already well into the next phases.

"With most of the digging done, we have started pouring the concrete walls and station platforms," said William J. Rhine, RTD assistant general manager — transit systems development. "And following that will come the finishing touches such as elevators, artwork and landscaping."



The first support beams are lowered into place by crane as Metro Rail's Union Station begins to take shape.

## METRO RAIL SUBWAY TUNNELS: ONE OF THE SAFEST PLACES TO BE IN A QUAKE

As was the case in recent severe earthquakes in Tokyo and Mexico City, the October event in the San Francisco Bay Area again demonstrated the safety of modern subway systems.

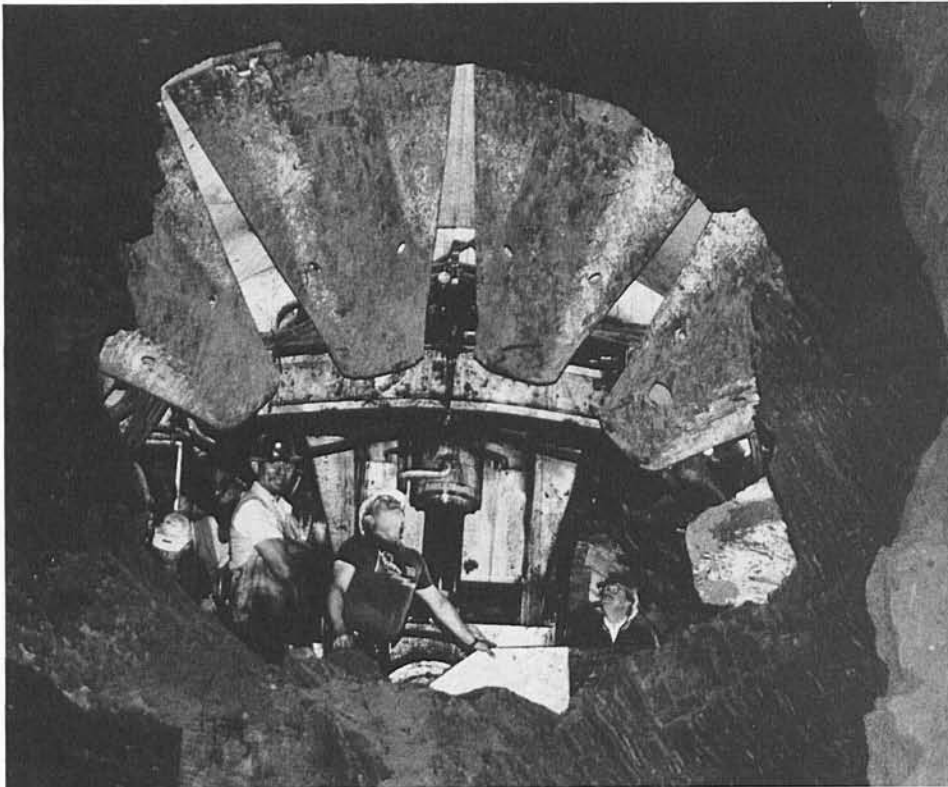
The area's BART system, following brief shutdowns for safety inspections, handled crush loads of commuters heading from the East Bay into San Francisco whose normal routes, including the destroyed Nimitz (880) Freeway and the badly damaged San Francisco-Oakland Bay Bridge, were out of service.

William J. Rhine, RTD's assistant general manager — transit systems development, who is in charge of the Metro Rail subway project, earlier in his career worked in the Bay Area and helped design BART.

"Unlike above-ground structures, RTD Metro Rail tunnels and stations would move along with the ground during a quake," Rhine said. "Damage to structures on the surface occurs mostly because of a 'whiplash' effect, which cannot happen underground."

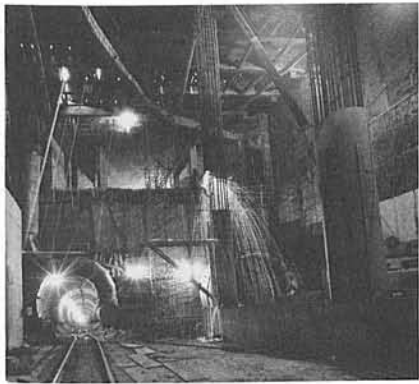
Rhine explained further that the sectional construction of tunnels allows for a shear movement to occur with little or no damage. He also pointed out that Metro Rail tracks will be equipped with sensors to automatically shut the system down if a magnitude 5 or larger quake occurs.

"The chances of being injured while



A MAJOR BREAKTHROUGH IN RTD METRO RAIL SUBWAY PROJECT—Workers who had spent the last six months tunneling through about 3,400 feet of earth inspect the first jagged opening they created recently by breaking through the wall of the future Metro Rail subway Civic Center Station. The breakthrough marked the first connection between two future stations in the first phase of the 4.4-mile project.

underground on the Metro Rail are much smaller than if you are above in a building or walking on the street," Rhine said. "The 8-point earthquakes in Mexico City in 1985 caused massive damage to buildings, but the subway system there suffered almost no damage."



A tunnel leading to Union Station opens into Civic Center Station as a worker welds support into a column down the center of the station structure.

## RTD BOARD CALLS FOR ALL-SUBWAY RAIL ROUTE IN SAN FERNANDO VALLEY

Joining a broad coalition of residents, homeowner associations, and other members of the community, the RTD Board of Directors on October 12 adopted a resolution calling for any rail projects in the San Fernando Valley to be subway.

"We want to go on record supporting subway construction in this area because it is obviously what the community wants," said Nick Patsouras, RTD board member and resident of the Valley.

State Senator Alan Robbins had authored legislation to require subway construction which was passed by the legislature but subsequently vetoed by the governor.

The area covered by the RTD resolution is described as the western curb of Hazeltine Avenue, the northern curb of Sherman Way, and a line parallel to and 50 feet west of the western edge of the Hollywood Freeway, the eastern curb of Tujunga Avenue between the Hollywood Freeway and Ventura Boulevard, and the southern curb of Ventura Boulevard.



CONCRETE SENTRIES STAND GUARD NEAR MacARTHUR PARK—75-foot tall concrete supports keep a stark vigil over the Westlake-MacArthur Park Station site at Wilshire and Alvarado, the western terminus of the first 4.4-mile segment of RTD's Metro Rail subway project. Excavation of the station is nearly complete, and will be followed by "Stage II" work which includes installation of elevators and escalators, tile work and other esthetic touches. The \$1.25 billion project has been under construction for almost three years and is expected to open for service in September, 1993.

## RTD BOARD NAMES METRO RAIL STATIONS

Since construction started on the Metro Rail subway in 1986, the five stations along the line have been referred to primarily by the names of the closest intersecting streets.

The RTD Board recently unanimously decided to give three of the five stations more descriptive names (two of the stations already had appropriate names: Union Station and Civic Center Station at First and Hill streets).

The station at Fifth and Hill will be called the "Pershing Square Station." At Seventh and Flower streets, where the subway will interface with the Long Beach/Los Angeles light rail project, the designation is "Seventh Street/Metro Center Station."

The Phase 1 terminus of the first 4.4 miles of the line at Wilshire Boulevard and Alvarado Street will be the "Westlake-MacArthur Park Station."

"We feel these more descriptive names will be easily remembered by regular users and visitors alike since they more accurately describe the neighborhoods where they are located," said Gordana Swanson, RTD board president.

## TWO METRO RAIL FIELD OFFICES OPEN IN DOWNTOWN LOS ANGELES

Curious about rail construction in downtown Los Angeles? Want to know where future extensions of the subway are planned? Need a speaker on rail transit for a meeting?

If you work in downtown Los Angeles or your work takes you there frequently, the above concerns and much more can be handled at either of two Metro Rail field offices. Both offices, open from 8 a.m. to 4:30 p.m. Monday through Friday, are staffed by knowledgeable RTD representatives ready to answer your questions and supply you with current publications.

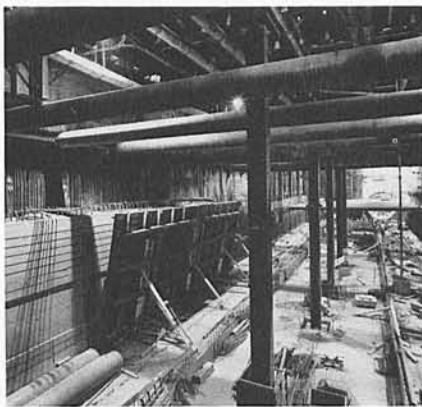
One of the offices is at 649 S. Olive, the other at 415 S. Hill. The offices can also be contacted by phone at (213) 972-7957 for the Olive facility; while Hill is (213) 972-7966. In addition, information on construction activities is available on a toll-free hotline number, 1-800-852-9994.

**WOMEN, ETHNIC MINORITY FIRMS' PARTICIPATION IN METRO RAIL CONTRACTS EXCEEDS GOAL**

The participation by firms controlled by women and ethnic minorities, or Disadvantaged Business Enterprise (DBE), has exceeded RTD's goals for the first phase of the Metro Rail project.

As of this past summer, \$18 million worth of contracts, or 21.7 percent of all subcontracts awarded by prime contractors went to DBEs, exceeding the goal of 20 percent.

So far 45 certified DBE subcontractors have been awarded 60 contracts.



*RTD SHAPES THE FUTURE BENEATH SEVENTH AND FLOWER—This view of the subway level of the Seventh Street/Metro Center Station at Seventh and Flower streets in downtown Los Angeles is from the light rail level, where passengers will be able to transfer from the light rail system to the RTD Metro Rail subway when both systems are open in September, 1993. Phase 1 of Metro Rail consists of 4.4 miles and five stations. The Seventh Street/Metro Center Station will be the sole interface point for the light rail and subway lines.*

The breakdown by categories includes:

Hispanics	\$5.5 million
Blacks	\$5.9 million
Women	\$1.4 million
Minority Women	\$2.8 million

Asians, Asian Pacific Islanders and Native Americans were awarded smaller amounts.

The RTD's attempts to involve as many minority vendors as possible are ongoing. The most recent example was a DBE workshop held in November featuring a panel of speakers who outlined how those interested can do business with the District.

**RTD PREPARES TO OPERATE LONG BEACH/LOS ANGELES LIGHT RAIL LINE**

With the return of rail transit to Los Angeles just a few months away, RTD is well on the way to being ready for operations.

This was the conclusion of a report presented the RTD Board of Directors recently by General Manager Alan F. Pegg. RTD will begin operating the initial segment of the 22-mile Long Beach/Los Angeles light rail line next July. The line is being built by the Los Angeles County Transportation Commission (LACTC).

While LACTC is supervising construction of the line, RTD has:

- Trained the first rail operators.
- Begun initial test operation of the first two rail cars.
- Worked with the commission to determine a yearly operating budget for the line.
- Held a series of public meetings in late summer to develop an efficient bus/rail interface plan for the rail corridor. A formal hearing on the final proposals was held in December.
- Hired more than 100 staff members — to insure highly qualified staff, RTD has recruited personnel from commuter rail operations in Chicago, Baltimore, San Jose, Buffalo and Calgary.

The first trains will operate between Pico Boulevard in downtown Los Angeles and Anaheim Street in Long Beach. At the end of 1990, service will be extended south to downtown Long Beach. In 1991 the final segment connecting Pico with the Seventh Street/Metro Center Station will open. Two years later, this location will offer the chance for Long Beach passengers to transfer to the Metro Rail subway line.

**RTD BOARD ESTABLISHES FARE FOR LIGHT RAIL**

While the exact amount has yet to be set, the RTD Board decided in October that riders will pay a single fare regardless of distance traveled on the Long Beach/Los Angeles light rail line.



*Tracks for the Long Beach-Los Angeles Light Rail Line have been laid along the median of Long Beach Boulevard in the City of Long Beach, as well as throughout most of the mid-corridor section of the route. From Long Beach Boulevard, the route loops around the city's civic center.*

The Board also decided that transfers purchased on RTD buses and other carriers will be honored on the system. The honoring of monthly passes by other operators is presently being negotiated.

The light rail system will be what is called a "barrier free" operation, which means patrons will be required to purchase a ticket from a vending machine before boarding. Roving fare inspectors will then check to insure all patrons have a valid ticket or transit pass. This system is similar to the one in operation on the San Diego trolley service.



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