Metro's venerable Arthur Winston – 100 years old on March 22 – ends 72 years of service as one of the hardest-working members of the Transit Operations team. He received a Congressional Citation in 1997 as “Employee of the Century.” In retirement, Winston vows to keep active, saying, “I don’t want to go home and sit down.”
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The colors represent Metro Rail, a network that has become the backbone of our transit system. It’s now possible, for example, to travel by Metro Rail between Pasadena in the San Gabriel Valley and downtown Los Angeles – or between North Hollywood and the heart of Long Beach. And those are just some of the scores of destinations accessible by rail.

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You’ll also read about a project that will push tracks westward from downtown LA to Culver City – the Exposition Light Rail Transit Project. One day soon, we hope this new rail line will reach all the way to Santa Monica. There’s also news about advances in Metro Bus service, with the opening of the Metro Orange Line in the Valley and new express lines and articulated buses going into service.

Finally, don’t miss the captivating photo on the back cover of this issue. It features our senior employee, the 100-year-old Arthur Winston, a man who has inspired us all with his 72 years of faithful service and his dedication to excellence.

Enjoy Metro Quarterly and thank you for your continuing interest in Metro.

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The face of Los Angeles transportation is constantly changing to meet an ever-growing need. This county of 10 million people sprawls across 4,000 square miles of desert basin, mountain canyons and coastal beaches. By the year 2030, an estimated 2.5 million more people are expected to traverse our county’s already bursting streets and freeways.

To face such a challenge, innovative transportation ideas are needed. Metro is answering that challenge by pioneering such services as the new Metro Orange Line in the San Fernando Valley, by expanding the network of Metro Rapid lines in heavily traveled transit corridors, and by opening Metro Express lines between major transit hubs.

Rail also plays a vital role in keeping Los Angeles County moving. Every day, Metro’s Red, Gold, Blue and Green Lines transport thousands of local rail commuters to their destinations, while Metrolink serves riders in outlying areas of Los Angeles County and in surrounding counties. The Metro Bus System and Metro’s municipal transit partners provide vital interurban links, as well as feeder service to the rail lines.

Metro’s Two New Rail Projects
The 5.9-mile Metro Gold Line Eastside Extension is currently under construction and is slated to open in 2009. The Exposition Metro Line Construction Authority will start work shortly on the final design and construction of the 8.5-mile Exposition Light Rail Project, which is expected to begin service in 2010.

In addition to those two projects, Metro’s Long Range Transportation Plan (LRTP) calls for an extension of the Exposition Line from Culver City to Santa Monica, a bus rapid transit or light rail project along the Crenshaw Boulevard corridor, and a San Fernando Valley north/south transitway project.

If additional new funds are found, the LRTP indicates the possibility of other rail and/or busway corridors, such as a possible extension of the Metro Red Line beyond Wilshire/Western and extensions of the Metro Gold Line beyond Pasadena and beyond East Los Angeles. Also envisioned are extensions of the 22-mile Metro Green Line that now links Norwalk and El Segundo and other corridors.

Moving people, of course, is Metro’s main concern, but the agency also is involved in helping ease traffic congestion caused by LA’s rail freight lines. By increasing safety at 42 rail crossings, for example, the Alameda Corridor East (ACE) Project will improve the flow of traffic at intersections traversed by rail traffic from the ports of Los Angeles and Long Beach.

‘Right Tool for the Right Problem’
Metro CEO Roger Snoble often uses the term, “the right tool for the right problem,” to describe the agency’s focused mobility approach. This issue of Metro Quarterly focuses on rail transportation, especially on Metro’s two newest rail construction projects and the people and machines that are planning and building them.

The Metro Gold Line Eastside Extension will give residents direct service to downtown LA, while the Exposition Line will connect downtown Los Angeles with Culver City. Each of these new lines will be the “right tool for the right problem.”

“Metro’s focused mobility approach is the right tool for the right problem.”

Metro CEO Roger Snoble

MEETING THE NEED FOR REGIONAL MOBILITY

The face of Los Angeles transportation is constantly changing to meet an ever-growing need. This county of 10 million people sprawls across 4,000 square miles of desert basin, mountain canyons and coastal beaches. By the year 2030, an estimated 2.5 million more people are expected to traverse our county’s already bursting streets and freeways.
Just 19 months after construction began on the Metro Gold Line Eastside Extension, “Lola” and “Vikki,” the $10 million German-built tunnel boring machines, began the labor-intensive job of boring twin 1.7-mile tunnels at an average depth of 50 to 60 feet beneath the narrow streets of Boyle Heights.

“We started at First Street and Boyle Avenue in February, and expect the tunneling operation to last until October 2006,” says Eli Choueiry, deputy executive officer and project manager. “The machines will carve out 21-foot diameter tunnels—moving on average 40 feet of dirt per day.”

Connecting the Eastside to Los Angeles
When it opens in late 2009, the six-mile Eastside Extension of the Metro Gold Line will link Union Station in downtown Los Angeles with Little Tokyo and the Arts District, Boyle Heights and East Los Angeles.

Construction of the Metro Gold Line Eastside Extension is being done by Eastside LRT Constructors, a joint venture of Washington Group International, Obayashi Corporation and Shimmick Construction Corporation. The tunneling sub-contractor is Traylor/Frontier Kemper.

Building Public Support
Just as important as the physical planning and construction of the Eastside Extension project is gaining the community’s support. This is where the talents of Metro’s Community Relations team really shine.

“The residents and businesses of Boyle Heights have been extremely supportive of the Eastside extension project,” says Yvette Robles, community relations manager for Metro’s capital projects. “They’re looking forward to the line becoming operational. A large part of this success comes from the high regard the contractor and Metro project team have for the community, as well as the hard work they do to impact the community as minimally as possible.”

Small projects, such as keeping the ground wet to combat dust, ensuring trucks leave as little debris as possible as they travel, signs that say businesses are still open during construction and continually cleaning the streets around sites, have helped get the project off to a good start.

Additionally, huge sound walls enclosing construction sites to block the view and reduce the noise help keep the construction from intruding into residents’ lives.

Design Work Continues
At the same time the community outreach and tunneling is being done, the design/build contractor will continue to wrap up the project’s final design. “This includes the stations at grade and underground, as well as the track work and the systems,” notes Choueiry. “All the design should be ready and complete by mid-2006 when the contractor will proceed with the at-grade segment of the project.”

Team members shown below are: Jon Akiba, Mike Altheis, Lloyd Boucher, Lee Berrie, Dave Daulton, Amanda Eguiluz, Dan Estrada, Frank Fortunato, Matt Goldring, Fred Garcia, Muhammad Ghauri, Rick Gohl, Robert Grinley, Judy Half, David Howland, Robert Hoppe, Bob Jenkins, Jason Johnson, Sunderland Karaman, Ben Langner, Julie Lampert, Ted Loper, Ojyio Lopez, Jim Martin, Nicole Mchale, Cynthia Mendes, Zafar Modan, Gerald Munson, Vali Nitu, Jose O’Donnell, Eric Olson, Nayan Panahy, Mike Peacock, Chris Przybylo, Ed Richardson, Carl Rynkiewich, Yvette Robles, Kristin Rynkowa, Tom Sarkisyan, Julie Seifert, Fred Smith, Susan Smith, Jim Thomas, William Valdulna, Francesco Villanueva, Donna Lee Wilson, Rick Wilson and Mary Woznir.

Construction Safety a Number One Priority
Eastside LRT Constructors reached a major milestone at the end of the project’s first full year of construction. Thanks to the contractor’s dedication to safety, absolutely no lost-time accidents were recorded during that period! An impressive record to be sure. But even more commendable is the fact that by the end of January 2006, construction team members had logged 700,233 hours on the job site. According to James Brown, Metro construction safety manager, the project’s recordable incidents rates were 3.1 – well below the national average of 5.6.

Eastside Teamwork
Metro Construction’s Eastside Extension team includes professionals in many fields of civil engineering. Working under Construction Chief Rick Thorpe, the team is led by Executive Officer Dennis Mor, center with tie, and Project Manager Eli Choueiry, center.
The two giant machines—nicknamed “Lola” and “Vikki”—now tunneling beneath the streets of East Los Angeles are marvels of the construction industry. Built in Germany, these “earth pressure balance” tunnel boring machines are 344 feet long and weigh more than 2 million pounds each. A crew of about six miners operates each machine.

Powered by eight hydraulic motors, the machines advance by means of 32 push cylinders exerting 5,000 pounds per square inch of pressure around the tunnel circumference. The 144,000-pound cutting head excavates a tunnel 21 feet, 4 inches in diameter. A 193-foot screw conveyor—the longest in the world—moves the excavated soil away from the tunnel face and into waiting “muck cars” for disposal.

The giant machines also can lift 8,000-pound pre-cast concrete tunnel liner segments—six to complete the circumference of the tunnel—into place as the tunneling machine inches forward. The result: a concrete-lined tunnel 18 feet, 10 inches in circumference that’s ready for installation of tracks and other rail equipment.
Exposition Line Off and Running

After an active six months spent establishing the independent Exposition Metro Line Construction Authority and completing the final environmental process certification, the Exposition Light Rail Transit (LRT) Project is now running right on track.

The project, which will be built with local funding, will be the newest extension of the 62-station Metro Rail system.

The 8.5-mile Exposition LRT, projected to open in 2010, will share a common track and two stations (7th St/Metro Center and Pico/Chick Hearn) with the Metro Blue Line as it leaves downtown Los Angeles. Just south of downtown, the line will proceed west on the Metro-owned rail right-of-way on Exposition Boulevard, paralleling the heavily congested I-10 Freeway.

“Keeping the project on an accelerated schedule, Metro Gold Line Construction Authority and the use of a design/build strategy served as a model for the new $640 million Exposition project.”

“The benefit to establishing a Construction Authority is that it can do design/build on a best-value basis – selecting a contractor on technical criteria, in addition to price,” says Sandberg. “As a single-purpose entity, the Exposition Construction Authority can be more efficient than a large multi-purpose authority; it can focus directly on light rail and the needs of the project.”

Exposition Metro Line Construction Authority

The Exposition Metro Line Construction Authority Board consists of seven voting members: two appointed by the Los Angeles County Board of Supervisors; two by the Los Angeles City Council; one each by the city councils of Culver City and Santa Monica; and a seventh member appointed by Metro. Additionally, Metro CEO Roger Snoble sits on the Board as an ex-officio non-voting member.

Next Steps

The Federal Transit Administration issued a Record of Decision, Feb. 27. A major milestone, the ROD indicates that the project has satisfied all requirements of the National Environmental Policy Act and now has environmental clearance. The Exposition Construction Authority also has awarded a contract for design and construction to a joint venture of FCI/Fluor/Parsons.

Construction of the Exposition Line is expected to begin in July with utility relocation and clearing of right-of-way. June 2009 is the projected completion date to Venice/Washington in Culver City.

Rick Thorpe: Taking on LA’s Transportation Challenges

Driving LA’s challenging rail projects excites Rick Thorpe. As Chief Capital Management Officer, he oversees Metro’s bus and rail construction programs. With more than 30 years of design and construction experience, Thorpe is known in the transit industry not only for his work in Los Angeles, but also for the San Diego and Salt Lake City transit systems.

A Hand in Many Projects

“What I enjoy most is the problem solving – with any project, there are always things that come up and need resolution,” he says. “I like being able to come up with a win-win scenario.” Since coming to the agency, Thorpe has been involved with the Pasadena Gold Line; the Orange Line and the Eastside Extension project.

Thorpe also serves as Chief Executive Officer for the Exposition Metro Line Construction Authority. He previously was CEO of the Pasadena Gold Line Construction Authority.

Applying “Lessons Learned”

“There are a number of positive ‘lessons learned’ from the Gold Line that we want to duplicate on the Exposition Line,” notes Thorpe. “One is involving the community throughout the project. Our Board’s constituents are the Gold Line, the Orange Line and the Eastside Extension project. So, we’re working to make sure the project fits into the fabric of their communities. We can do that with a staff and Board that are solely focused on the Expo project.”

Thorpe was recognized as 2004 Person of the Year by the Construction Management Association of America and by Engineering News Record as one of the industry’s “Top 25” for 2005.
Environmental Impact Report: A Vital Part of Construction

Long before design-build contracts are awarded, Metro's planning team, with help from other Metro departments, must shepherd LA's transportation projects through the Environmental Impact Statement/Report (EIS/EIR) process. Whether it's a busway, light rail or heavy rail construction, each project must go through three phases: alternatives analysis or scoping, draft environmental impact report, and final report. Projects built with federal funds must comply with federal environmental requirements; while those built with state and local funds must meet California rules.

Scoping Transportation Alternatives

"Generally it's a three-year process," explains David Mieger, Metro's Director of Westside Planning. "In the first scoping phase, we perform alternatives analysis. We solicit input about what types of transportation solutions should be used. Should it be light rail? Bus rapid transit? Building a double-deck on the freeway, or another solution?"

In the case of the Exposition Light Rail Transit (LRT) Project, a Metro-owned right-of-way runs parallel to the I-10 Freeway – one of the nation's most congested freeways. "The question was how best to use this unused right-of-way to move people in such a heavily trafficked corridor," says Mieger.

An alternatives analysis, completed in 1999-2000, evaluated which transportation options had the highest ridership, what the costs were, which ones had community support, and which ones posed potential environmental impacts. These options were presented to the Metro Board of Directors for approval.

Evaluating Impacts

From there, the Westside planning team got to work on the Draft EIR. "It was as thick as a phone book," Mieger recalls. They assessed the various environmental impacts, the line's potential ridership, and studied which types of technology performed the best. In addition to Metro Board review, close to 300 people attended a series of public meetings to air their opinions on the project.

"At this middle stage of the EIR process, the Board selected the locally preferred alternative, the technology, route and alignment that would work the best," says Mieger.

Giving the Project the Green Light

During the last phase, the Final EIR, Metro's engineering team prepared drawings that showed what stations will look like, where the crossings are and the grade separations. These were shared with area homeowners, businesses, schools and religious institutions, as well as Caltrans, the affected cities and their transportation departments. Plans were then modified to meet certain needs.

"We pin down exactly where we'll build the project and what specific mitigation measures we'll commit to. The Final EIR is brought back to the Board, they certify it and adopt it," says Mieger.

For the Expo Line, the green light – EIS/EIR certification – was received last December. "With the help of many others, we've taken the project all the way from concept, through the environmental clearance, to preliminary engineering," he adds. "Now it's in the hands of the Construction Authority."

An Important Partnership

Metro and Community

The Face of Metro in the Community

Part diplomat, part creative problem solver, Metro's Community Relations Manager for Capital Projects, Yvette Robles, works hard to earn the public's trust during construction of the Metro Gold Line Eastside Extension project.

As Metro's on-site representatives, both Robles, shown at far right with a local resident, and Community Relations Officer Olga Lopez, continuously relay information between the contractor, the project team and those affected by the project.

"Our goal is to better coordinate the work between Metro's contractors and the public's daily activities," she says. "So we walk the construction alignment and go door-to-door to explain the various impacts to the community – it's how we learn what the community's needs are. Furthermore, we work closely with the business community to mitigate impacts of construction that make it difficult to operate as usual."

Collaborating, Informing and Succeeding

Sometimes resolving an issue is as simple as muffling a noisy piece of equipment or putting up a storefront "Open During Construction" sign. The construction impact mitigation program implemented by Community Relations has helped small businesses get through some difficult periods.

In addition to holding weekly briefings, Robles and Lopez have office hours to solicit suggestions and complaints, and are on call 24/7 if needed.

"Metro is a lot more involved in shaping our communities than just constructing transportation lines," Robles says. "Part of the work we do is to provide opportunities for organizations in the areas where we build to grow their businesses as well."

Uncovering a Forgotten Past

Uncovering long-forgotten waterways, historic bridges and ancient fossils – it's all in a day's work for Metro's Carl Ripaldi. As the agency's Environmental Specialist, he works with a team of specialists to address any historical, archeological or noise issues that may crop up before, during or after a construction project.

An interesting find near the Metro Gold Line rail yard was a 100-foot segment of the Zanja Madre – the “Mother Ditch” – a historic conduit that once served as the main water supply for early Los Angeles. “The first segments of the Zanja Madre date back to when the Pueblo was founded in the late 1700s,” he says. “The structure that we found was probably built around the 1870s.” Metro realigned tracks and a roadway, and will build a wall to protect the brick-and-concrete-lined channel. Metro and the Los Angeles Conservancy plan to seek National Historic Act status for the site.

Archaeologist Armando Akejeta clears debris from the historic Zanja Madre.
Since debuting last October 29, it’s clear that passengers have embraced the convenience of Metro’s new Orange Line.

“The first four months of revenue service on the Orange Line have been very successful,” says Richard Hunt, general manager of Metro’s San Fernando Valley Service Sector. “Passenger boardings exceeded our expectations. After combined ridership reached 31,900 in the first two months, we recorded 16,100 riders in January and 17,636 in February.”

Results from a recent Metro customer service survey echo Hunt’s impressive statistics.

Metro Orange Line riders registered an overwhelming approval of the service. More than 90 percent of respondents indicated that they normally have a seat for their trip, and that they like the Metro Liner buses and the pre-paid boarding system.

And while there has been a handful of minor collisions as drivers adjust to the Orange Line’s presence, a plan to install traffic safety cameras at 12 Orange Line intersections should help to deter additional traffic violators. “We expect the work to begin at the intersections this spring and hope to have them all installed and in operation in June,” Hunt says.
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