

THE

CONSTRUCTION STORY

WHAT'S GOING ON IN METRO CONSTRUCTION

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\$804 or Less is More for Pasadena

There was a time when the Pasadena Blue Line appeared headed for the back burner, but all that changed at February's MTA

Board meeting when the board voted 9-2 to build the 13.6-mile light-rail system that will run from Union Station, through Highland Park, South Pasadena and on to east Pasadena. The vote was based on a staff recommendation that calls for opening the line a year earlier (May 2001) and for only \$804 million — \$194 mil-

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It's Getting Better all the Time

John Lennon and Paul McCartney were right on track in the 1960s when they wrote the song "Getting Better." Performed by the Beatles on their "Sgt. Pepper's Lonely Hearts Club Band" album, the song hit the airwaves during what turned out to be a major, worldwide "attitude shift." In 1996, the MTA is in synch with a similar universal shift that has to do with a willingness to change the way we've always done things.

The now-familiar words "faster, better, cheaper" are representative of the new mood brewing at the MTA these days. They explain, too, why the Pasadena Blue Line project was approved by the MTA Board last month: staff found ways to build it sooner and for less money — a prelude to doing it better.

With Joe Drew at the helm, the emphasis is on leadership over management. "Critical to maximizing our potential is leadership. I believe our people must be led, not managed. Put another way, you lead people, you manage programs and projects. We all react affirmatively to good leadership," said Drew in his oft-quoted Jan. 10 memo to the MTA board.

Leadership also demands good management. Metro construction's leader Stan Phernambucq obviously agrees when he talks about the changes being made in the way we do our work. Leaders such as Joe and Stan are responsible for defining an organization's mission and vision, but everyone must do their job, and do it well if we are to support the key priorities of the executive office, the board and the taxpayers of Los Angeles.

The progress reports are in: Several months ago, the construction safety and quality assurance functions were transferred from the construction management consultant's scope of services and repositioned directly within the MTA; the change order request process has been significantly modified and strengthened, with the goal of processing change order requests within 90 days; the "sinkhole" incident was addressed by terminating the contractor and initiating new

contract packages to keep the project on schedule; contracts staff has been increased to insure strict enforcement of contract terms, and the change control board is now co-chaired by the project manager and a contractor administrator.

These are only some of the changes under way. The point is, we're winning back our credibility with the public as shown by a Feb. 11 editorial in the Los Angeles Times, entitled "MTA's Got the Message — Now Let's See the Follow-Through." Among other things, the Times pointed out the changes that have been made in our underground tunneling plans for the 6.3-mile segment of the Red Line under the Santa Monica Mountains. In commenting about the MTA's "more thorough work," the editorial cites Stan regarding the North Hollywood-to-Universal City tunneling being 40% complete without any serious problems.

What's our follow-through? Taking one step at a time to focus our insights and develop new strategies to facilitate leadership and manage our projects. It's increasing teamwork possibilities internally and with our consultants and contractors. It's finding new ways to solve problems and resolve conflicts. It's stepping out of comfort zones, monitoring our performance as we go, and finding new ways to move forward quickly, carefully, consistently and cost-effectively. Sometimes it means showing up earlier and staying later. Most of all, it means staying committed to the MTA's vision and goals.

What do we get in return? Personal rewards such as promotions and pay raises are always welcome, and not out of the question. But, these are still budget-crunching, tight-funding times, so it's hard to know when that will happen.

But there can be a richer, less-visible reward in simply knowing we're working more efficiently than ever to provide the traveling public with the best possible, affordable transportation system ever built. Each of us can be proud of the important role we're playing to bring a better way life to Los Angeles in the 21st Century. It is getting better all the time.

"I've got to admit it's getting better, a little better all the time ..."

Lennon and McCartney

"At no other time have we been challenged as we are now to heed the bottom line and manage the project to the dollar," said Stan Phernambucq

lion less than originally estimated. The board also approved an amendment by MTA Board Alternate Vivien Bonzo that as of the June 26 meeting, "the MTA will accept no further changes to the Pasadena Blue Line."

The \$194 million reduction eliminates certain design features that will not affect the operation of the system. Cost savings were achieved by reducing the number of contract packages from over 40 to about 15, and by compressing the construction schedule. The result is a new design criteria and project scope that includes the elimination of a station at Avenue 51 in Highland Park.

Specifically, the cost reductions are as follows:

- \$119 million in capital construction costs, which includes saving \$35 million in guide way and station construction, \$24 million in system electrification, \$37 million in systemwide equipment, \$12 million in utility relocation costs, and an additional \$11 million in miscellaneous modifications.
- \$55 million by opening the line one year sooner.
- \$28 million in contract contingency and design allowance reductions.

"This action reaffirms the MTA's commitment to the Pasadena Blue Line, as well as the funding capacity to build it," said Stan Phernambucq following the board's decision. "However, at no other time have we been challenged as we are now to heed the bottom line and manage the project to the dollar. It may mean fewer bells and whistles, but we can do it!"

A concerted effort by all

The successful funding approval is a culmination of the board's commitment, strong community support, aggressive cost-containment measures and staff leadership that brought about a significant savings of time and money.

At the board's direction, MTA staff had performed a cost containment analysis of the project. A task force, consisting of staff from construction, operations, and planning and programming, evaluated various studies and reports, including a Pasadena Blue Line Peer Review Panel, a Value Engineering Study prepared by

Fluor Daniel, an Operations Peer Review Committee Report, and a Turnkey Implementation Analysis prepared by Booz, Allen & Hamilton.

Turnkey Options

Turnkey, also referred to as "design-build," describes a unique type of public-private business partnership that is sanctioned by the FTA. The concept is that a government agency such as the MTA can enter into a contract with a private builder, who then oversees the entire construction project, including any subcontracts. The completed project is then "turned over" to the government agency. The public entity does not have to become mired in the diverse details associated with a large project because the contractor handles all of the particulars, and the overall cost savings are usually substantial.

Although the turnkey option was seriously considered and proposed for the Pasadena Blue Line, in the end it was not recommended for the project. Since design is already at 80% completion and some contracts are in progress, staff and the MTA Board deemed it impractical to switch to a design-build approach. The potential cost savings would probably not be realized because of the inherent risk in trying a new type of construction procurement.

However, the MTA board instructed staff to analyze whether or not some Pasadena Blue Line projects would benefit from turnkey applications. Specific stations, the yard and shops, train control system, system equipment and system electrification are being considered for the design-build approach.

A detailed staff report addressing these turnkey options is scheduled to be presented at the Cost Containment, Contracts and Efficiency Committee April meeting. The board also approved a motion by Los Angeles County Supervisor and MTA Board Member Michael Antonovich to begin an analysis of other MTA projects that might benefit from turnkey applications.

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Economic Development

Officials from Highland Park, Pasadena, South Pasadena and Chinatown came to the board meeting to support the project. "This is exciting," said Cynthia Kurtz, director of Pasadena's Public Works and Transportation Department, following the vote. "It shows what can happen with very strong support from the community."

South Pasadena, for example, expects the Blue Line to act as a catalyst for economic development, adding foot traffic to the 11-block corridor that stretches from Fair Oaks Avenue to its western terminus at Pasadena Avenue. Referring to the small-town character of the businesses located on Meridian Avenue, William Cross, a consultant who serves on the city's Planning Commission, said "Once the Blue Line comes to town, everything is going to change...[it] will be like dropping a seed and everything starts growing." ✕

The Date that Always Was

Wilshire Corridor Opens on Time

Neither rain, earthquakes nor funding freezes could hold us up. We're ready to roll along the Wilshire Corridor — literally right on schedule! The next component of the Metro Red Line opens on July 13, adding two miles and three new stations to our growing system.

The final touches now under way include completion of architectural finishes at the Wilshire/Vermont Station, final installation of SCADA (Supervisory Control and Data Acquisition) panels and equipment, and systems integration testing.

"Thanks to cooperative work between the MTA's construction and operations staffs, we're looking forward to bringing it in on time and fulfilling the commitments to our funding partners and the people of Los Angeles," said Charles Stark, project manager for both the Wilshire extension and the North Hollywood portion of Segment 3.

Continuing from where the subway now ends at MacArthur Park, the train will soon be making stops at Vermont, Normandie and Western avenues. Bus riders bound for downtown will be able to transfer to the Red Line at a new transit hub at the Western Avenue Station. It's estimated that as many as 4,000 bus patrons a day will make the switch initially, easing congestion along Wilshire Boulevard. ✕

Endless Possibilities

The CCS Story

The list of kudos for the Construction Division's own creation continues to grow. In 1991, staff headed by Director of Configuration Management, Louisa Simpson, designed and built the automated Change Control System (CCS), a fully-networked information system for documenting and tracking the status of contract changes, requests and other contract deliverables.

Since its introduction into the marketplace, the CCS has attracted a string of commendations from outside agencies and auditors. Over thirty agencies and private firms are considering purchasing the system, which staff and consultants say improves productivity from 40 to 400%.

The first sale

Last month the MTA entered into an agreement with Professional Assistance & Consulting, Inc. (PACO), an East Coast program management consulting firm involved in a number of transit projects. PACO also purchased a copy of the software for client demonstration purposes. The sale constitutes the first revenue received by the MTA for the CCS.

PACO purchased single-user rights to the system, and will obtain exclusive marketing rights for one year in the states of New York, New Jersey and Florida. So far, PACO has presented the system to the New Jersey Transit Agency's Hudson-Bergen light rail project and to another major light rail project in Puerto Rico.

"The Secret of leadership is to be solution-oriented, not problem-oriented."

J. Donald Walters

The Secrets of Leadership

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*"Optimism
is a force
multiplier."*

General
Colin
Powell

FTA "lessons learned"

Last year the use of CCS was recognized as one of the initial seven nationwide "lessons learned" adopted by the FTA. Recognizing the value of a consistent method to process change and deliverable activity on rail projects, the FTA is considering CCS as a model for developing change management and tracking standards.

Top award finalist

In 1995, CCS was selected as a semi-finalist (top 6%) for the prestigious Ford Foundation/John F. Kennedy School of Government "Innovations in American Government" Act Award, which is intended to recognize government agencies that not only improve services and efficiencies, but that also have a high potential for adoption by other agencies. ☒

New Law Changes Contract Procedures

A new state law went into effect this month that modifies the policy and procedures for implementing changes to professional service and construction contracts. Effective March 10, AB1869 states that MTA's contract administrators must review and approve all changes for merit at the beginning of the change process.

Secondly, MTA legal counsel must also review and approve all proposed changes. Next, although the law applies to all dollar levels, if the contractor change proposal is over \$100,000, the MTA's internal audit must also perform a fiscal audit. The final step is MTA Board approval.

According to Construction's Director of Contracts, Lee Graw, the process will continue to follow the CF10 and CF11 policies and it will take no longer than 90 days to finalize a change order request, including board approval.

"This new system will guarantee that the processing of change orders follows a rational process designed to assure adequate control without sacrificing the element of timeliness," said Lee. ☒

How we Stack Up

Comparable Costs with Other Subway Projects

The cost of building the Los Angeles subway system is comparable, and in some cases less expensive, than similar systems in the United States. The following information was gathered to offer a perspective and clarifies where the MTA stands with its peers across the nation when it comes to spending money for its underground rail system.

When comparing subway and station construction costs for Los Angeles and other major U.S. cities, coming up with a fair and meaningful comparison involves adjusting construction costs according to inflation. It costs more to build things today than 10 or 20 years ago. Further, there are regional differences, such as the local cost of building materials and labor. Then there are increasingly stringent government mandates, such as the Americans with Disabilities Act and occupational safety regulations, and other factors outside an agency's control, like earthquake seismic requirements and difficult ground conditions.

The following is a breakdown of the costs for building a mile of subway in Los Angeles and various U.S. cities, as well as the cost for building a subway station:

Subway Construction Projects	Cost for One Mile of Subway
Los Angeles	\$35 million
San Francisco	\$42 million
Washington, D.C.	\$52 million
Boston	\$90 million

Subway Station Projects	Cost for One Station
Los Angeles	\$50 million
Boston	\$30 million



More Good News About Costs

When comparing completed projects, the Los Angeles Metro Rail program shines over other major construction programs when it comes to the percentage of actual capital outlay over the original forecast.

Heavy Rail (subway) Transit Projects	Increase Over Original Forecast
Los Angeles (Red Line, Seg. 1)	16%
Los Angeles (Red Line, Seg. 2)	11%
San Francisco	25%
Miami	31%
Baltimore	95%
Atlanta	132%
Washington, D.C.	156%
Light Rail Transit Projects	Increase over Original Forecast
Los Angeles (MBL)	8%
Los Angeles (MGL)	7%
Pittsburgh	12%
Sacramento	17%
Portland	28%
Buffalo	59%

(Source: "Urban Rail Transit Projects: Forecast Versus Actual Ridership and Costs," Transportation Systems Center, 10/89, and MTA Estimating Dept.) x

Shop Talk

New Safety Field Offices

Construction Safety has opened two new field offices: One is located at 3329 Wilshire Boulevard adjacent to the current Red Line Segment 2 construction activities; the other is at 4650 Lankershim Boulevard, Suite 510, North Hollywood, supporting Segment 3's construction project. In line with recent FTA mandates requiring the MTA to staff its own field offices, the offices will provide:

Things to do Today:

- ✓ 1. Drop off dry cleaning
- ✓ 2. Lunch with a colleague
- ✓ 3. Read a new book
- ✓ 4. Pick up kids at day care
- ✓ 5. Build a rail system
faster, better, cheaper

Faster emergency response; more on-site visibility; early problem resolution at the lowest level; and better relationships with contractor craft levels, management personnel and construction manager employees.

Government Contracting Training

An important in-house training seminar called "Government Contracting for Engineers and Project Managers" will take place on May 30-31. The program is tailored for a specialized audience in the practicalities of government contracting. All interested project managers and engineers should contact Carlos Rodriguez at x27213 (or through E-Mail) to register.

Cellular Phones

Joe Drew has reviewed and implemented new policies regarding the use of cellular phones. He's ordered a 20% reduction in the number of cellular phone accounts by mid-April, with the goal of reducing the number by 50% over the next year. This will be accomplished by encouraging employees to purchase their own phones, with MTA reimbursement for all business use — similar to the way employees are now reimbursed for business miles in their personal vehicle. It will save substantial accounting costs.

TLAMP

A new MTA-sponsored training, with matching funds from the FTA, is kicking off this month. According to Joe Drew, the Transportation Leadership and Management Program "offers an exciting opportunity to mold our decision makers into a tighter, higher performance team." Tailored to the MTA's unique needs, and designed in conjunction with UCLA's

Advanced Public Service Institute, the program offers a one-year series of courses. About 20 executives (deputy executive officers and above), 20 to 30 managers, and 20-30 supervisors/senior staff will participate in this year's initial program. Although the application deadline has passed, employees who do not participate this year may apply next year.

"The Secret of leadership is to view whatever you do as a path to some greater good."

J. Donald Walters
The Secrets of Leadership

New Construction Division Employees in March:

Hortencia Alba, Secretary, Third Party Coordination; **Stephanie Kaping**, Secretary, Construction Safety; **David Hotchkiss**, Project Engineer, Engineering; **Laura Mohr**, Project Engineer, Engineering; and **Shirley Scales**, Secretary, Environmental Services. ✕

Hats off

(...Hard Hats, that is)

Who's doing an extraordinary job and should be recognized? Is it a whole team



or a particular construction project? Who's been promoted? If you know someone — or a group — that should be listed in this column, send it to Editor Wendy Taylor, Dept. 8100, 17th Floor.

• The MTA's Metro Green Line

has been selected as this year's winner of the Western Council of Construction Consumers (WCCC) Distinguished Project Award in the transportation category. The MTA, represented by David Sievers, deputy executive officer, Construction, and the Green Line's project manager and the Green Line's construction manager O'Brien-Kreitzberg, represented by Vice President Ted Branton, received the award on Feb. 26 at a WCCC Annual Conference Awards Banquet at the Hyatt Regency in Irvine.

• The Metro Blue Line Station

art project by artist Horace Washington has been awarded a major national design award by the Department of Transportation and the National Endowment of the Arts. Maya Emsden, the MTA's director of the Metro Art program says: "We share credit for this award with MTA Construction, who assisted with engineering review and MTA Operations, who carefully maintain the project."

• William Brown

a senior cost scheduler analyst who provides scheduling oversight for Segment 2's Wilshire Corridor and the Eastside Extension projects, has received a "Golden Spike" award from Parsons-Dillingham. The award is given for special achievement by the construction manager to his "team." The award is usually given only to P-D personnel, but because Bill took over the position of P-D employee Kurt Miller last year when Kurt became too ill to work, P-D's George Morschauser nominated Bill.

George wrote the following to Bill's supervisor, Project Control Manager Richard Mora: "Bill developed and provided guidance to the schedulers monitoring individual contractor performance....he helped develop and implement alternative schedule scenarios to accommodate conditions encountered during integrated testing....his unwavering commitment to Segment 2 and his ability to work as a team player helped the project meet its ROD."

Bill also received a special MTA in-house "Above and Beyond Award" certificate for his excellent work, which was presented to him by Jeff Christiansen, deputy executive officer, Program Management. ✕

Feedback

Thank you to all who took the time to offer comments about the first issue of *The Construction Story*. Your ideas were all good ones! Send your opinions and suggestions for future articles and/or issues you would like to see addressed in the newsletter, to: Wendy Taylor, Dept. 8100, 17th Floor, ext. 22715.

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Masthead Photo: By award-winning Metro construction photographer Ken Karagozian, taken at a Noreth Hollywood, Segment 3 construction site.