Focus on Maintenance Initiatives

Throughout the year, Passenger Transport highlights certain areas of interest to the industry including, among others, technology, sustainability and security. In this issue, a cross-section of APTA members discuss maintenance trends, training and safety initiatives for buses, rail and related infrastructure.

Invite Training to the ZEB Procurement Dinner Table

AC Transit Reveals the Secret Ingredient to Nearly 20 Years of Zero-Emission Success

BY MICHAEL FLOCCHINI
Training and Education Manager
Alameda-Contra Costa Transit District
Oakland, CA

LATELY, TRANSPORTATION CONFERENCES
and webinars around the globe have devoted considerable discussion to zero-emission bus (ZEB) technology. As an early adopter of ZEBs, the Alameda-Contra Costa Transit District (AC Transit) is proud to have slashed tailpipe emissions, cut dependence on petroleum fuels and reduced greenhouse gases over nearly two decades. So, we describe this evolving ZEB enthusiasm in two words: love it!

Admittedly, these global transportation discussions often spark a perennial debate. What is the best ZEB investment? Battery-electric? Hydrogen fuel cell? Hybrid technology? These are valid questions without easy answers.

AC TRANSIT ZERO-EMISSION BUSES
CONTINUED ON PAGE 7

A Safe and Happy Holiday Season from APTA!
Measuring and Communicating Performance, for the Benefit of All

The use of performance measures and benchmarking is critical for informing public transit agencies on how best to meet their more ambitious goals. Comprehensive measurement and evaluation of our performance in relation to our customers’ experiences and satisfaction can help inform the decision-making process on services and capital investments.

By identifying our relative performance, it allows us to collaborate and identify best practices to further advance our individual performance and that of the public transit industry as a whole.

Through measuring and benchmarking our performance, we can specifically identify the return on investment relative to the different technology solutions. Through customer satisfaction, we can establish what product is being used by our riders and the value they place on those products relative to the overall service we provide. Advanced platforms for providing real-time, accurate information about our services includes not only what we deliver services on time, but also what alternatives are available to riders and the integration of our services into an expanding menu of supplemental transportation modes.

The challenges in advancing benchmarking processes and partnerships is considerable, and it requires a focus from the top of the organization down. Without leadership and investment, the best intentions are just that. There are many public transit providers across the globe that have embraced benchmarking, and there are plenty of advocates. Practice and engagement are being adopted, but there is still a need for more opportunities for participation. It takes experience, confidentiality and the desire for continued improvement, but the value is being demonstrated every day.

As public transit agencies, we want to expand investment and provide the latest and greatest products and services to our communities, but to flourish it is imperative that we assist and communicate to our stakeholders the value they are receiving.

The way public transit agencies deliver mobility and communicate with customers now and in the future will be key to our success and relevance. By using a balanced scorecard to measure our performance, while working to continuously identify and advance best practices, we will be poised for the future. Through the benchmarking process with like providers, we can justify our strategies and resource allocations with confidence and share our experiences for greater benefit.

DIVERSIFICATION OF DEMANDS ON AGENCIES requires a balanced scorecard approach to navigate how we invest to sustain and enhance ridership and our communities. Public transit agencies are faced with ever-divergent demands on resources and expertise that push us to the very limits of our comfort zone. The days of focusing simply on bus and rail maintenance and operations are rapidly being replaced by the evolving expectations of society and our customer base for diverse services, information and payment methods. These expectations require us to expand our capabilities and network of service providers and continually review our allocation of resources and capabilities. This, in turn, creates a need for specific tools to both inform our decisions and educate our constituents, including agency boards, elected officials, the media and our riders.

The requirement for tools that can accurately measure and benchmark, coupled with a desire to increase transparency, is leading to increased engagement between public transit agencies and benchmarking groups to increase the value of the data we generate—agencies have historically been challenged with data collection and management. Being a data-driven organization is not easy, and a desire to benchmark with peers increases the challenge of developing comparable data. Most public transit agencies measure on-time performance and miles between service interruptions, which is a great tool to assess trends. In order to gain additional value from our data, we need to see how we are doing relative to our peers. This requires common definitions and approaches to data collection and reporting. By identifying our relative performance, it allows us to collaborate and identify best practices to further advance our individual performance and that of our industry as a whole. With ever increasing demands on our resources, it is imperative that we leverage that data to the greatest benefit possible.

Investing in new technology is one of our primary methods for delivering improved services and programs. But the very same technology that is answering many of our most difficult challenges also requires significant growth in resource allocation. The investment in technology professionals, hardware, software, support contracts and the evolving security landscape continues to put pressure on our ability to maintain core services. Investment in technology has become one of our core service offerings, whether it is improvements in efficiency and operations or the latest apps for paying fares or obtaining information on service and disruptions. And the need continues to rise.
Knoxville Welcomes First All-Electric Bus

MAYOR MADELINE ROGERO recently joined Knoxville Area Transit (KAT) in celebrating the arrival of the agency’s first all-electric bus. KAT plans to begin operating the New Flyer bus early in 2021.

“KAT has played a big role in helping us exceed our goal of reducing greenhouse gas emissions for city operations—20 percent by year 2020,” Rogero said. “Investing in this new fleet of electric buses builds on this history of sustainability as we embrace the next generation of transit technology.”

Over the past several years, KAT has been expanding into alternative fuel options and now one-third of the current fleet consists of hybrid-electric vehicles. The next stage, all-electric vehicles, is part of the city’s overall sustainability strategy, which also includes LED streetlight installation, energy upgrades to housing in the Community Development Department, and encouraging biking, walking and public transit.

Public Transit Ridership Up For Third Quarter of 2019

AMERICANS TOOK 2.5 BILLION public transit trips in the third quarter of 2019, 54 million more than the same period in 2018 or an increase of 2.2 percent. This is the second quarter in a row to show an increase, and the first set of consecutive quarters with an increase since the third and fourth quarters of 2014, according to APTA’s quarterly Transit Ridership Report.

Heavy rail ridership increased by 5.46 percent, with an increase of 4.38 percent for commuter rail. Bus ridership rose by 0.59 percent.

“Public transportation organizations are consistently improving their services to be more customer focused to meet the needs of today’s riders,” said APTA President and CEO Paul P. Skoutelas. “The landscape of American transportation is changing; the public transportation industry continues to implement technological innovations and improved access that benefits communities and is a critical part of the transportation network.”


APTA Workshop Attendees Discuss How to Make a Difference in Transit Referenda

MORE THAN 140 PEOPLE attended APTA’s 2019 Transit Initiatives & Communities Workshop Dec. 15-17 in Tampa to explore the best ways to plan, organize, implement and finance public transit campaigns. Speakers included Tampa Mayor Jane Castor, former Tampa Mayor Bob Buckhorn, Phoenix Mayor Kate Gallego and Los Angeles Mayor Eric Garcetti (via video).

Transit ballot measures are an increasingly important source of revenue for transit investment and 2020 will be an important ballot year with many measures expected. Attendees included elected officials, business leaders, public transit agency reps, community advocates and campaign professionals.

APTA President and CEO Paul P. Skoutelas welcomed attendees and described how the Center for Transportation Excellence was founded 20 years ago to serve as a resource for communities considering transit ballot measures, to promote the merits of public transit and equip local leaders with information to be successful with their ballot measures. He noted that in 2019 there were 16 wins and 4 losses for an 80 percent success rate for transit. Altogether, $7.5 billion in funding for transit investment was approved by voters this year alone, he said, underscoring the strong support for public transportation in communities across the country.

RFTA Introduces Battery-Electric Buses

THE ROARING FORK Transportation Authority (RFTA), Aspen, CO, has introduced eight battery-electric buses to service on selected routes, the result of a partnership that also involved FTA, Colorado DOT, area municipalities and an energy provider.

In addition to improved energy efficiency, the new vehicles are significantly quieter than traditional buses. Each bus contains 36 passenger seats and is equipped with wireless Internet, a passenger information system, automated passenger counting system and automated vehicle location system. RFTA drivers and maintenance workers received special training on the New Flyer buses prior to the launch.

The electrification of a portion of RFTA’s fleet is a publicly supported initiative from RFTA Destination 2040. In addition, the Colorado Association of Transit Agencies honored RFTA and the city of Aspen with its 2019 Transit Team of the Year Award for its efforts to secure funding and community support for the project.

Television Journalist Nora O’Donnell to Address APTA’s Legislative Conference

NORAH O’DONNELL, CBS Evening News anchor and contributor to 60 Minutes, is the March 16 keynote speaker at APTA’s 2020 Legislative Conference March 16-17 in Washington, DC.

Prior to becoming anchor of CBS Evening News in 2019, O’Donnell served as co-host of CBS This Morning and as CBS News chief White House correspondent. A journalist for more than two decades, she has covered six presidential elections and traveled around the globe to interview some of the world’s most notable individuals.

The Legislative Confer- ence will feature discussions on important federal legislation; opportunities to shape industry policy and APTA’s federal advocacy efforts; sessions with key government officials, including members of Congress and the administration; and educational panels of congressional staff and DC opinionmakers.

Registration is now open. Visit apta.com/conferences-events/legislative-conference and register by Feb. 15 for early-bird rates.

New CEO Named

DE MARTINO, LOSSAN

THE LOS ANGELES-SAN DIEGO-SAN LUIS OBISPO (LOSSAN) Rail Corridor Agency has named Donna DeMartino its new managing director. The agency is a joint powers authority with responsibility for the state-supported Pacific Surfliner intercity passenger rail service. DeMartino is stepping down from her position as chief executive officer of the San Joaquin Regional Transit District (RTD) in late January after 19 years with the agency.

During DeMartino’s tenure at RTD, the agency received the 2018 APTA Outstanding Public Transportation System Award, among other honors. She is a graduate of the Leadership APTA Class of 1999, a member of the APTA Board of Directors, chair of the Mid-Size Operations Committee and a member of many other APTA committees.
APTA Mid-Year Safety Seminar Breaks Records

APTA ANNOUNCED THE LARGEST attendance in the history of its Mid-Year Safety Seminar, Dec. 3-5 in Seattle, with more than 120 registrants, a 50 percent increase over the previous year. APTA hosted the seminar in conjunction with King County Metro Transit and Sound Transit.

Sound Transit Chief Executive Officer Peter Rogoff kicked off the seminar with a welcome address highlighting safety in the public transportation industry. The conference program also offered updates from APTA partner organizations including FTA, FRA and Operation Lifesaver Inc. Expert panels reported on safety management systems, fare evasion, bus operator assaults, safety certification, cybersecurity and APTA standards. King County Metro General Manager Rob Gannon discussed safety and equity in transportation at his keynote luncheon address.

Tours scheduled by the host agencies showcased public transit innovations in the Seattle region, such as the world’s first floating bridge project to carry light rail, King County Metro’s electric bus infrastructure and the regional water taxi. The tours also highlighted the region’s vastly growing public transportation infrastructure.

APTA noted the success of the safety seminar in bringing together APTA members, including public transit agencies, government entities and business members, to discuss the major issues surrounding public transit safety, security and emergency management.

Emerging Leaders Program Accepting Applications

APTA IS ACCEPTING applications through Feb. 3, 2020, for the Emerging Leaders Program (ELP) Class of 2021. APTA invites public transportation professionals who have worked in the industry approximately three to five years—including one to three years managing tasks, projects or staff—to apply.

The Emerging Leaders Program Committee will select 35 individuals from APTA member organizations who represent the rich diversity of the industry to participate in the 12-month program. The curriculum includes a variety of skill-building workshops, roundtable sessions, online collaboration and unique access to industry leaders through a national mentoring program.

The ELP provides public transportation professionals with the skills, knowledge and networks needed for advancement. Participants learn from industry leaders while participating in a program that provides opportunities to interact with areas of the industry beyond their specialization. Most importantly, participants learn from a talented cohort of professionals—their classmates—who will become lifelong colleagues and friends.

For more information and to apply, visit www.apta.com/emergingleaders.

US DOT FUNDING CONTINUED FROM PAGE 1

policy provisions to ensure FTA administrators the CIG program in accordance with the requirements of current law. For example, the bill prohibits FTA from impeding or hindering a project from advancing or approving projects seeking a CIG federal share of more than 40 percent; and implementing or furthering new policies detailed in FTA’s June 29, 2018 “Dear Colleague” letter to CIG project sponsors.

The administration’s Dear Colleague letter established geographic diversity as a factor in FTA allocation decisions and considered DOT loans “in the context of” all federal funding sources requested by the project sponsor, and not separate from the federal funding sources. APTA has repeatedly communicated its serious concerns with the CIG policies outlined in the letter to Congress and the administration.

Finally, the bill authorizes projects in the Expedited Project Delivery for CIG Pilot Program to be eligible for funding under the CIG program without further evaluation or rating. The CIG funding cannot exceed the federal share of 25 percent under the Pilot Program.

For more details, read APTA’s Legislative Alert at https://bit.ly/34EQjMZ.

Gold Coast’s ‘Elf on the GO’ Holiday Bus

The Gold Coast Transit District (GCTD) in Danville, CA, is operating its fourth annual "Elf on the GO" holiday bus through Jan. 4. The exterior depicts a snowy village where elves build toys and wrap presents, while the interior offers decorations and holiday music. The agency, with financial support from local businesses, operates the bus on various routes throughout the service area. GCTD Board Chair Cheryl Holtmann cuts the ribbon to dedicate the bus, with General Manager Steve Brown at third from left.

MCI Awarded Five-Year Contract with AC Transit

MOTOR COACH INDUSTRIES (MCI), a U.S. subsidiary of NFI Group Inc., has announced that AC Transit in Oakland, CA, has approved the purchase of 36 of its D45 CRT LE commuter coaches to operate on the system’s Transbay Network.

“For many riders with impairments, AC Transit is an essential lifeline to physicians, careers and recreation. With a passenger focus, we are assembling an entirely new bus fleet that not only accommodates all riders but mobility devices as well,” said AC Transit General Manager, Michael Hursh. He noted that the design of MCI’s D45 CRT LE incorporates an ADA ramp at the middle door, eliminating the need for stairs.

MCI worked with advocacy groups including the National Council on Independent Living to develop the new model. AC Transit became the first public transit agency to test the vehicle in revenue service, following its debut at APTA’s 2017 EXPO in Atlanta.

APTA, FTA to Host TAM Improvement Webinar

APTA AND FTA WILL JOINTLY HOST a webinar, Improving Your Asset Information and Embracing Continual Improvement, Jan. 21, 2:00 – 3:15 p.m. Eastern, covering the two critical elements of a Transit Asset Management (TAM) program: improving asset information and embracing continual improvement.

The webinar will guide public transit agencies in better understanding, specifying, collecting and managing asset information. It will offer practical examples, best practices and lessons learned from around the world.

The webinar will also introduce the notion of a generational approach to improvement, whereby a TAM process or document is defined, implemented and monitored, with improvements identified and incorporated into a second generation.

Learn more and register at https://bit.ly/2PYaK1I.

WTS Honors APTA’s Skoutelas

APTA President and CEO P. Skoutelas was honored by the Washington, DC, Chapter of WTS International as the Honorable Ray LaHood Award winner for 2019 at the organization’s annual awards ceremony Dec. 10. The awards recognize transportation professionals who have contributed to the transformation of the industry and the advancement of women in the industry. The WTS Honorable Ray LaHood Award is presented each year to a man who has been key to WTS International’s efforts to attract, retain and advance women in transportation. Left of Skoutelas is Adrienne Ameel Kimley-Horn, president of the WTS-DC executive board. To the right is Katie Kraft, 2019 chair of the WTS-DC Recognitions Committee.
APTA Supports Advocates and Next Generation with TRB

APTA IS PARTICIPATING IN TWO events in conjunction with the Transportation Research Board’s (TRB) 99th Annual Meeting, Jan. 12–16, at the Walter E. Washington Convention Center in Washington, DC. 

On Jan. 11, prior to the opening of the conference, APTA is a major sponsor for the 2020 TransportationCamp organized by Transportation for America. Because of its connection to TRB, this “unconference” will be the largest of the 10 TransportationCamps held annually across the country. Rather than working from a preset agenda, attendees create the agenda onsite and self-organize. Learn more at http://transportationcamp.org.

Through its sponsorship, APTA is playing a leading role in a growing, grassroots movement of professionals and advocates who are spearheading cutting-edge developments in transportation. APTA is developing a plenary session to convene during the event, focused on public transportation initiatives, which will bring together attendees with policymakers, national and city officials, public transit agency practitioners, young transportation professionals and students.

The following day, Jan. 12, APTA, a co-sponsor with TRB, is hosting and participating in the third annual “Careers in Motion” Networking Fair. This event is held in part to support the transportation community’s efforts to build awareness of and expand the transportation workforce and will allow prospective employers from a wide range of sectors and modes to meet transportation professionals interested in working for their organizations. Attendees will include individuals who span career levels from seasoned executive to recent graduate. Hiring managers from public transit agencies and businesses will be onsite and ready to offer career information and advice. Learn more at www.trb.org/AnnualMeeting/CareerFair.aspx.

“APTA is proud to sponsor these exciting events,” said APTA President and CEO Paul P. Skoutelas. “Growing support for public transportation and engaging with and attracting the future workforce is of critical importance to APTA and the entire industry.”

APTA recently hosted a meeting of the Transportation Learning Center (TLC) Board of Directors. The center has been a longstanding partner of APTA through its focus on improving frontline workforce training with course-ware, apprenticeships and training for both mentors and trainers. APTA President and CEO Paul P. Skoutelas serves on the center’s board, along with other leaders in the public transportation industry and its workforce. During the meeting, Skoutelas nominated Amalgamated Transit Union International President John Costa to chair the board.

Topics addressed during the meeting were primarily on how to meet the need for adequate battery-electric bus training as well as the future work of the center’s courseware development consortia for railcar maintenance, signals maintenance and traction power.
San Diego MTS Implements Early Warning Device For Track Work

BY BRIAN RILEY
Superintendent of Transportation, Rail Division
San Diego Metropolitan Transit System
Vice Chair, APTA Operating Practice Working Group

A MARCH 2013 ORDER FROM THE California Public Utilities Commission (CPUC) required a Roadway Worker Protection Plan (RWPP) and the integration of an Early Warning Device (EWD) into the plan by November 2019. The San Diego Metropolitan Transit System (MTS) selected Miller Ingenuity’s Zone-Guard as its EWD. Essentially, EWDs are designed to warn work crews of any approaching rail traffic. MTS needed a product for its unique operating environment, which incorporates 106 miles of track, much of it at-grade in areas with high population densities.

The EWD selected by MTS includes three important elements: a Train Detection Module (TDM), Train Alert Module (TAM) and Employee in Charge and Watchperson/Lookout wearables.

The TDM can detect train or high-rail equipment approaching a work zone. The module is placed alongside the track or between the rails approximately 200 feet in advance of the work site. If activated by an approaching train, the TDM sends a signal to the TAM, which is set in advance of or with the work crew.

The TAM provides an audible warning and strobe light visible to approaching trains and on-track equipment operators, as well as to the watchmen/lookouts and employee in charge (EIC). In addition to monitoring the on-the-ground detection system, the watchmen/lookouts and the EIC are equipped with wearable devices to provide an additional layer of warning through vibration and audio alerting.

The integration of EWD technology into MTS RWPP required changes to management procedures through Rule Book, Standard Operating Procedure and RWPP manual revisions. All RWPP employees received specific training including “Rule of the Week” for train operators and flagmen. MTS also has added an EWD module to the required training it provides to all contractors before they can work on system property.

Throughout the process, MTS staff learned a great deal about EWDs and how implementation works. The agency offers these tips for other public transit agencies on the EWD path:

- **Start the procurement process early.** Understand that procurement often takes longer than expected.
- **Involve a team in the analysis process.** MTS included staff from the safety, maintenance of wayside, operations and training departments in the testing process for different perspectives.
- **Be sure to budget accordingly.** A public transit agency may need more than one budget cycle to accrue the appropriate financing for EWD systems. MTS’ cost for implementation was approximately $590,000 for 36 complete sets, each including two TDMs, four TAMs, three wearable devices and a battery pack.

The EWD selected by MTS includes three important elements: a Train Detection Module (TDM), Train Alert Module (TAM) and Employee in Charge and Watchperson/Lookout wearables.

As a train approaches the TDM, flashing lights alert the train operator. The TDM is placed 15 seconds prior to the train arriving at the work zone. The train passes over the TDM, activating the TAM and the watchperson/lookout and employee in charge wearables.

The TAM alerts a work crew with flashing visible strobe lights and audible siren.

Meeting Customer Needs With Safety and Reliability

BY LISA WOODRUFF
Senior Vice President, Rail Services
Washington Metropolitan Area Transit Authority (WMATA)

MOVING THE RIDING PUBLIC TO their destinations using multimodal vehicles safely and reliably, with good customer service, are the measures that define success for all public transit agencies.

I have had the privilege to be a part of the transportation industry for more than 30 years. Serving in roles in airline operations, rail and bus operations, maintenance and track allocation, as well as capital planning and delivery, has provided me with wonderful opportunities to participate in real change in an industry that is moving forward fast.

Technology advancements have been game changers in our business. Data tools have reduced safety risks. Safety management systems now identify hazards and track trends. Deploying equipment that prevents injuries has also produced a return on investment. Working in a Rail Control Center for many years, I never imagined that a controller would be able to see the same faults that the operators can see, in real time, on the train condition data display. Having the ability to use the information to troubleshoot and reduce the delay time is significant.

Reliability centered maintenance processes have enhanced the useful life of our equipment and productivity. One series of cars in our WMATA rail fleet has now traveled more than one million miles without a recordable delay of less than three minutes.

Using available data from passenger travel times has allowed us to successfully commit to our passengers during rush hour that we “Promise” to deliver them to their rail destination within 10 minutes of the scheduled trip time or their fare is credited for future travel.

This service guarantee—delivered automatically to customer accounts within a day—not only was a new WMATA commitment to riders, it changed the way we think internally.

WMATA SAFETY AND RELIABILITY CONTINUED ON PAGE 8
Innovations in Escalator Maintenance—Automated Chain Lubrication

EACH DAY, MILLIONS OF commuters ride escalators as part of their daily travel to work and home again. Public transit agencies recognize the importance of keeping this critical equipment in service and invest heavily in maintenance and support. In recent years, technologies have emerged that have had a favorable impact in lowering maintenance costs and burdens on busy public transit maintenance teams. One of them is automated lubrication of escalator chains.

Escalators are chain-driven people conveyors, moving step plates and handrails in a continuous loop. In many public transit environments, they operate all day long, every day of the year, sometimes fully exposed to the elements. The challenge for engineering and maintenance leaders is to ensure these chains receive adequate care and maintenance, often in tight windows, to maximize in-service time and minimize replacement costs. Typical step chains can cost upwards of $10,000 for materials alone and can lead to extended escalator downtime, depending on the availability of parts and labor.

Regular lubrication is a critical aspect of preventive maintenance, helping to keep the chain running smoothly and quietly while greatly improving the length of time between replacements. Conventional manual application requires the maintenance technician to take the escalator out of service, climb into the pit with a garden-style sprayer, then run the chains to apply lubricant.

On the other hand, automated lubrication allows the escalator to remain in service while lubricant is applied to each chain in a designated application, reducing mechanic time in the escalator pits, which contributes to safety. The most common automated lubrication systems, which are often factory pre-installed on the escalator, have small reservoirs and brush systems that apply traditional mineral oil lubricants to the entire length of the chain. However, chains don’t wear evenly. Generally, each link wears at its points of contact with adjoining links, so much of the lubricant in brush applicators is wasted on areas that don’t need protection.

Additionally, mineral oil lubricants remain wet after application and can attract the dirt and debris in their environment, which often speeds up breakdown of the lubricant and ultimately accelerates chain wear through a lapping effect.

In 2015, Castrol LubeCon, based in White Cloud, MI, adapted an automated lubrication system for escalators from the company’s world of industrial applications, including automotive plants and steel foundries. The system combines a larger reservoir (from approximately 1.5 gallons up to 55 gallons), a programmable controller with four independent channels and shot-to-point application of dry-film lubricant.

The San Francisco Bay Area Rapid Transit District conducted the first successful trial of this system, which then was adopted by the Washington Metropolitan Area Transit Authority (WMATA). Other installation sites now include select stations at Calgary (AB) Transit, BC Transit, Metrolink St. Louis and MTA New York City Transit. The lubricant is specialized and designed to be applied only to wear points on the chains (pins, bushings, etc.) where metal-to-metal contact is concentrated. Its fluid is a fast-penetrating carrier, delivering protective formula materials to target surfaces and then evaporating, leaving the chain essentially dry. It doesn’t attract debris, so the chains stay clean after application.

In 2016, WMATA tested the Castrol LubeCon automated system for just over 11 months at the busy Dupont Circle Metrostar station in Washington, DC. The escalators at this station are some of the largest in the North America, rising nine stories from the train platform to the street surface. Castrol and WMATA mechanics measured the chain “take-up” at the

AC TRANSIT ZERO-EMISSION BUSES

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“Even when you make a decision on capital investments, expect growing pains,” said AC Transit General Manager Michael Hursh. “We now have a fleet of 29 battery-electric buses (ZEB) and fuel cell electric buses (FCEB). However, as an early ZEB pioneer, the district initially discovered our maintenance demands were outpacing the resources available from manufacturers.”

We soon realized that this conundrum got its start in the “bus-by-process.” Considerable energy goes into procurement and planning for revenue service, but what about the training? If we draw the curtains on our own internal discussions during the early ZEB years, it would have sounded a bit like this: “The buses are here; get the training done.” Workshops and subsequent breakout meetings during many industry conferences revealed that public transit agencies across the nation are facing similar dilemmas.

With the demand for California public transit agencies to move toward a 100 percent ZEB fleet by 2040, AC Transit learned that simply buying ZEB buses was only one part of the equation. We recognized that journey-level mechanics were no longer mechanics, wrenching their way through engine and transmission issues; they are highly specialized technicians. Drive motors, for example, are fueled by batteries charged from electrons generated from a fuel cell. This new propulsion system is replacing diesel combustion engines. Along with other new ZEB-based sub-systems, AC Transit had to rethink how we train.

“So, we got inventive,” said AC Transit Chief Operating Officer Salvador Llamas. “Our ingenious mechanical technicians designed an in-house maintenance protocol. That protocol enabled our ZEB fleet to eclipse even manufacturers’ expectations. So successful, AC Transit’s ZEB fleet has clocked over 2.8 million miles in service, in fact, one of the original fuel cell power plants has logged more than 30,000 hours of operation.”

A successful ZEB evolution means that training must work hand-in-glove with the procurement process. AC Transit’s Training Department was not only an invited dinner guest, but expected to help in preparing the feast. Inclusion in the procurement process now means that training is better positioned to build working and lasting relationships with vendors (OEM and sub-component suppliers).

Since trainers need to learn these new systems, reliance on OEMs’ real-time experiences and practices are essential to transforming the new technician workforce. Additionally, the procurement partnership ensures that funding for training is built into the bus buy. Earnarked funding enables OEMs to proactively create working training calendars, critical to launching ZEBs into AC Transit’s revenue service implementation plan.

Ultimately, the ZEB training calendar created an inclusive training culture of managers, trainers and technicians assembled in one forum. As mechanics evolved into specialized technicians, AC Transit found that the maintenance staff required a similar upskilling. The team developed increased efficiencies in all tasks from Preventative Maintenance Inspections to troubleshooting. New training protocols permitted supervisors to increase productivity and develop innovations, all while adhering to safety and quality standards.

The procurement and training partnership has so successfully enhanced overall performance that AC Transit is now codifying those experiences into courses offered through our own ZEB University. Unmistakably, we have learned that employees who are competent and on the leading edge of a changing transportation industry not only increase morale but also reduce turnover. We have emerged as a go-to employer for recent graduates of training programs and those seeking mid-career changes. Overall, re-engineering our internal partnership is a paradigm shift that has helped our public transit district maintain its position as a worldwide leader in ZEB technology.

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UPCOMING APTA CONFERENCES

Business Members Annual Meeting
January 29-31, 2020
Carlsbad, CA

Marketing & Communications Workshop
February 23-26, 2020
Orlando, FL

Legal Affairs Seminar
February 23-25, 2020
San Diego, CA

Legislative Conference
March 15-17, 2020
Washington, DC

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Related APTA Resources
- **Join APTA Committees!**
  The Bus Technical Maintenance Committee seeks to improve the safety, efficiency, reliability and cost effectiveness of transit bus maintenance. The committee helps maintenance professionals share experiences and understand issues around new bus designs, propulsion systems, engine emissions, fuels, on-board equipment, facilities, maintenance management and training.
  The Battery Electric Bus Subcommittee is a subcommittee of the Clean Propulsion Committee. Members facilitate discussion and sharing of information and best practices concerning battery-electric bus deployment. Issues include maintenance, training, procurement, operations, energy management and more.
  For more information, contact Lisa Jerram, director–bus programs and emerging vehicle technologies, ljerram@apta.com.

- **Participate in Bus Technical Maintenance Committee Webinars!**
  APTA’s Technical Services and Innovation department hosts groundbreaking and informative webinars throughout the year. Learn more and view a recording and presentation of the most recent webinar, Diesel Aftertreatment Systems, at https://bit.ly/2QcbVuX.

- **Access APTA’s Standards!**
  APTA’s Standards address many facets of the industry including technology, procurement, operations and training for bus and rail transit systems. Documents are performance-based and serve as a resource for all sizes of programs. Learn more at apta.com/research-technical-resources/standards or contact standards@apta.com.

AUTOMATED CHAIN LUBRICATION

**CONTINUED FROM PAGE 7**

beginning and end of the trial and determined that the 400-foot chain had only stretched by approximately 5/16 inch. As a result, the life expectancy of the very expensive set of chains went from a few years to greater than 10 to 12 years. Just as importantly, the out-of-service time for preventive lubrication maintenance was reduced as mechanics quickly do a visual check on the reservoirs, check the alignment of the lube heads, then close the pit back up.

The massive Dupont Circle escalators now consume only a few pails of lubricant per year.

Escalator manufacturers recognize public transit as one of the most demanding and difficult applications for their products in contrast with office buildings or retail stores. Preventive maintenance is critical. Learn more at www.castrol.com/escalator.

A Castrol LubeCon 12 gallon reservoir automated lubrication system installed in a WMATA escalator pit.

WMATA SAFETY AND RELIABILITY

**CONTINUED FROM PAGE 6**

We developed strategies for dealing with major delays or incidents because we learned that consistency and communication are paramount when we encounter these occurrences.

WMATA is establishing an asset management system that identifies not only fixed assets, but linear assets as well. At first this process seemed daunting, but having access to information for predictive and cyclical maintenance will be the rewards we reap.

There’s more to come. We are exploring Automated Track Inspections; tagging relays for traction power breakers; a track rights system that not only provides the reservation for the work zone, but also includes the affected power breakers, emergency exit information and offers a Roadway Worker Protection briefsheet, among other advancements.

While our dependency on technology will only continue to increase, the one thing systems cannot do is provide a human connection with our customers. Our customers continue to tell us that a few kind words, such as “Good morning” and “Thank you for riding Metro,” matter more than ever in an increasingly digital world where riding public transit is one of the few places left for people to experience a sense of community.
PHILADELPHIA—Jeffrey D. Knuepnel, P.E., has joined engineering firm KCI Technologies Inc. as corporate transit practice leader, to start in January. He will be responsible for expansion of KCI’s planning, engineering and construction services for bus and rail transit.

Previously, Knuepnel served for more than three decades at the Southeastern Pennsylvania Transportation Authority (SEPTA), rising to the position of general manager. Under his leadership, SEPTA was the first on the east coast to implement PTC on an entire commuter rail network. Knuepnel developed a stimulus program that led to 32 individual improvement projects and supported the passing of Pennsylvania Act 89 to increase the funding for a multitude of transportation projects throughout the state.

For APTA, Knuepnel is a member of the Board of Directors; serves as chair of the Commuter Rail Committee, Commuter Rail CEOs and Commuter Rail PTC subcommittees; and as a member of numerous other committees.

DENVER—Doug Allen has joined Denver Transit Partners as its chief executive officer. He will lead the firm’s efforts as concessionaire to manage and deliver the operations and maintenance of three rail lines in Denver for the Regional Transportation District.

Most recently, Allen spent seven years with Virginia Railway Express in Alexandria, VA. Earlier he was chief development officer and interim CEO of the Capital Metropolitan Transportation Authority in Austin, TX, leading the startup of its commuter rail line. During a 24-year career with Dallas Area Rapid Transit, Allen led efforts to secure more than $1 billion from FTA and to build and expand DART’s light rail system. He also oversaw Trinity Railway Express commuter rail.

For APTA, Allen served on the Executive Committee and Board of Directors; as chair of the Commuter Rail and the Planning, Policy & Program Development committees; Planning, Policy & Program Development Steering Committee; Commuter Rail CEOs and Major Capital Investment Planning subcommittees; and as a member of numerous other committees.

SAN CARLOS, CA—Julie Mates has joined the San Mateo County Transportation Authority Board of Directors, representing the Central Judicial Cities. She also serves on the Belmont City Council.

SEATTLE—Sound Transit has named Mary Cummings chief administrative officer.

She began her career as an executive with Verizon, then became an adjunct professor at Carnegie Mellon University. In 2012, Cummings joined Waynesburg University, a private university near Pittsburgh, as vice president of student services. She held several vice presidential and senior vice president roles at the university and served as interim chief financial officer.

FORT WORTH, TX—The Trinity Metro Board of Directors announced the election of Jeff Davis as its chairman, Tito Rodriguez as vice chair and Ray Taylor secretary.

Davis, chairman of the Fort Worth Division of Republic Title, joined the Trinity Metro board in 2013 and was reappointed in 2014. As chair, he succeeds Scott Mahaffey, who served from 2013-2019. Rodriguez was appointed to the board in 2015 and also serves on the North Richland Hills City Council, where he was mayor pro tem in 2013-2014. Taylor joined the board in 2017. The board also welcomed two new members, Sylvia Alcala, who succeeds Mahaffey on the board, is president and founder of J Anthony Group, a consulting and professional services firm. Stephen Baldwin, who succeeds Jeff King, retired from Oncor Electric after 43 years of service.

PHOENIX—The city of Phoenix Public Transit Department has named Sara Kotecki BRT administrator and Shelley Reimann as transit compliance administrator.

Kotecki spent 22 years in various positions with the city’s Street Transportation Department. Reimann worked for the city as an internal auditor before joining the Public Transit Department.

PEORIA, IL—CityLink has announced the promotion of Steve Green to director of maintenance and the hiring of Jamie Arbo gast as director of procurement.

Green is a U.S. Army veteran and a 27-year veteran of the Peoria Police Department. He became a CityLink security officer in 2008 and became the agency’s director of safety and security in 2015 following his retirement from the police department.

Arbo gast previously worked at CityLink, in the finance department, from 2011-2016.

MONROVIA, CA—The Foothill Gold Line Construction Authority Board of Directors voted unanimously to re-elect Pomona Mayor Tim Sandoval as chair and La Verne Council Member Robin Carder as vice chair.

ST. PETERSBURG, FL—The Pinellas Suncoast Transit Authority (PSTA) has named its slate of officers for 2020 and the appointment of a new board member.

Bellear Bluffs Commissioner Joe Barkley will chair the PSTA board, with Pinellas County Commissioner Pat Gerard as vice chair; Gina Driscoll, St. Petersburg, secretary-treasurer; Dan Saraccki, Oldsmar, at-large executive committee member; and Pinellas County Commissioner Janet Long, past chair.

Pinellas County Commissioner Ken Welch, who previously served on the board from 2006-2016 and as its chair for two years, has returned to the board. He succeeds David Eggers.

WASHINGTON, DC—Marsha Smith has been appointed chief financial officer of Siemens USA while retaining her current position as CFO with Siemens Mobility North America. In her new position, where she succeeds 38-year Siemens employee Heribert Stumpf, she will oversee the finance organization for Siemens USA, which includes Smart Infrastructure, Digital Industries and Siemens Mobility. Smith has worked for Siemens for more than 22 years.

NEW YORK CITY—The Metropolitan Transportation Authority has named Mario Péloquín chief operating officer. He is a senior executive with more than 30 years of expertise in the public transportation industry, most recently as a senior vice president at SNC-Lavalin and earlier as president and CEO of Thales Transport & Security Inc. Péloquín also has worked for Nova Bus, Siemens and AECOM.

JACKSONVILLE, FL—The Jacksonville Transportation Authority Board of Directors has elected Kevin J. Holzendorf to a second term as its chair and Ari Jolly will remain as vice chair. Debbie Buckland was selected as board secretary and Ray Driver as board treasurer.

Holzendorf, a member of the APTA Executive Committee and numerous APTA committees, was originally appointed to the JTA board in 2013 and reappointed in 2017. He is an account manager at CISCO Systems Inc. Jolly has served on the board since 2015. She is senior assistant general counsel at Florida Blue.

Buckland and Driver both joined the board in 2019. Buckland is market president for BB&T, now known as Truist Financial Corp. Driver is a founding partner of Driver, McAfee, Hawthorne & Debenow.

SACRAMENTO, CA—Kate Breen, director of government affairs for the San Francisco Municipal Transportation Agency, has been elected chair of the California Transit Association Executive Committee for 2019-2021, succeeding Carl Sedoryk, general manager/chief executive officer for Monterey-Salinas Transit. Karen King, CEO of the Golden Empire Transit District in Bakersfield, was named vice chair.

CLEVELAND—The Cuyahoga County Mayors and City Managers Association and the city of Cleveland have appointed members to the Board of Trustees of the Greater Cleveland Regional Transit Authority. Shaker Heights Mayor David E. Weiss was elected to fill the term previously held by Mayor Georgine Welo of South Euclid and the Cleveland City Council approved the appointment of Luz N. Pellot to fill the empty seat vacated by Kelley Britt.
Palm Tran Connection Adds Vehicles to Fleet

Executive Director Clinton B. Forbes said, “It is critical we continually pursue the latest upgrades and innovations to advance Palm Tran Connection, a service which increases travel mobility for some of the most vulnerable residents of Palm Beach County.”

Palm Tran riders use Palm Tran Connection to access employment, recreational activities and, most importantly, medical services. The vehicles operate seven days a week, all hours of the day. They can use Florida’s Turnpike and have Sun Pass transponders installed. Palm Tran Connection has already seen a noticeable difference in on-time performance since the vehicles hit the road.

The paratransit system is preparing for delivery of 35 new traditional paratransit vehicles, of which 32 will replace older vehicles and the remaining three being growth vehicles. These new vehicles are currently in production at Collins Bus in Hutchinson, KS. Palm Tran Connection also is making plans for its Connection Efficiency Project, which will evaluate the service’s overall operations from eligibility, reservation trip negotiations, ADA services and more.

MARTA Unveils Mural at East Lake Station

The Metropolitan Atlanta Rapid Transit Authority (MARTA) recently unveiled a new mural by artist Nico Romeno at its East Lake Station. The mural was inspired by Romeno’s interaction with members of the communities surrounding the station: Kirkwood, East Lake, Decatur and Oakhurst. Each image relates to a conversation, experience or story told to the artist by a community member. MARTA’s public art program, Artbound, supports visual and performing arts to enhance the ridership experience, funded with 1 percent of the agency’s annual budget.

CLASSIFIEDS

BIDS/PROPOSALS

NOTICE OF REQUEST FOR PROPOSALS

BATTERY ELECTRIC BUS AND INFRASTRUCTURE PROJECT

Long Beach Transit (LBT) is issuing this Request for Proposal (RFP) for the provision of all equipment, labor, materials and management necessary to manufacture and deliver up to forty (40) 30/35-foot Low Floor Battery Electric Buses (BEB) and infrastructure. Obtaining Proposal Documents

The RFP, Terms, Conditions Requirements and Specifications may be obtained electronically from Planet Bids via this link: https://www.planetbids.com/portal/portal.cfm?CompanyID=28908

This link will also be posted on LBT’s website, rideLBT.com, under ABOUT US > VENDOR PORTAL. Proposal due Date and Submit Requirements All proposals will be due at 2PM PST on February 27, 2020.

Pre-Proposal Meeting Information

A Pre-Proposal Conference Call will be held on Tuesday January 7, 2020. Participation is highly recommended but not required to submit a proposal.

Proposers may participate via conference call. To join the meeting, please click this link https://zoom.us/j/495793433 if the webinar uses Zoom meeting you may be required to download and install Zoom Meeting software to run the webinar on your computer. We suggest you join the conference call early to complete the download and installation prior to the start of the webinar.

To join the conference call, dial 1-408-638-0968 and follow the instructions. Enter the access code 695 734 435 when prompted.

Proposers are reminded that any changes to the RFP will be by written addenda only, and nothing stated at the Pre-proposal Meeting shall change or qualify in any way any of the provisions in the RFP and shall not be binding on LBT. Proposers may submit written questions to the Procurement Manager via PlanetBids Q&A section only, identified above up to the date specified in “Proposed Schedule for the procurement.” Responses will be shared with all prospective Proposers by written addenda.

The following is the solicitation schedule for Proposers:

Pre-Proposal Meeting/teleconference January 7, 2020, 10:00 AM PST

Proposal questions and requests are due by: January 21, 2020, 5:00 PM PST

Responses to Proposers’ questions will be released by: February 10, 2020, 5:00 PM PST

Proposal Due Date February 27, 2020, 2:00 PM PST

All proposals must be submitted in strict compliance with the Proposal Instructions as prescribed in the RFP, and must be completely uploaded to https://www.planetbids.com/portal/portal.cfm?CompanyID=28908 no later than 2:00 PM PST on the Due date.

LBT hereby notifies potential proposers that all firms will be afforded equal opportunity to submit proposals in response to this request and will not be discriminated against in consideration for award on the basis of race, religion, color, sex, creed, marital status, ancestry, physical or mental disability, medical condition, sexual orientation, national origin, age, or any other consideration made unlawful by federal, state or local laws.

Identification of Source of Financing Financial support of this project is provided through a financial assistance from the Federal Transit Administration (FTA).

Janet Laht, Manager of Procurement

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (LACMTA)

INVITATION FOR BID

LACMTA will receive Bids/Proposals for OP67223 - One Ten Utility Trucks at the 9th Floor Receptionist Desk, Vendor/Contract Management Department, One Gateway Plaza, Los Angeles, CA 90012.

A Pre-Bid conference will be held on Thursday,
COMMUNITY TRANSIT – DATA PROGRAM MANAGER
SNOHOMISH COUNTY, WA

A managerial level position responsible for leading and synthesizing management of data flowing from all data entities. The role is critical to the agency’s Mission. The position is responsible for aligning data efforts and developing data governance. This role is critical to the agency’s Mission. The position is responsible for aligning data efforts and developing data governance. This role is responsible for leading and coordinating the implementation of data governance and ensuring compliances with the governance. The position is responsible for leading and coordinating the implementation of data governance and ensuring compliances with the governance. This role is responsible for leading and coordinating the implementation of data governance and ensuring compliances with the governance. This role is responsible for leading and coordinating the implementation of data governance and ensuring compliances with the governance. This role is responsible for leading and coordinating the implementation of data governance and ensuring compliances with the governance.

Assistant Vice President of Safety and Security

The Assistant Vice President of Safety and Security (AVPS&S) is a key leader in the organization responsible for the development and administration of safety & security policies and procedures for all of the agency’s operations. The AVPS&S plays a critical role in the agency’s mission by ensuring that all employees are trained in the latest safety & security practices and procedures to protect the agency and its customers.

General Counsel

The General Counsel is responsible for providing legal advice to the executive management team and for ensuring that the agency is operating in compliance with all applicable laws and regulations. The General Counsel also acts as the primary point of contact for all legal matters affecting the agency.

Senior Financial Analyst

The Senior Financial Analyst is responsible for performing a wide range of financial analyses and preparing reports for senior management. The Senior Financial Analyst is also responsible for ensuring that all financial reports are accurate and timely.

City and County of San Francisco Municipal Transportation Agency

Senior Financial Analyst

The Senior Financial Analyst position is responsible for the development and administration of financial policies and procedures for all of the agency’s operations. The Senior Financial Analyst is also responsible for ensuring that all financial reports are accurate and timely.
ESCALATOR MAINTENANCE SIMPLIFIED

SWITCH FROM MANUAL TO AUTOMATIC LUBRICATION

Let us help you simplify your process, improve your uptime and reduce your safety risks.

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