



- Watch for the Siemens S70 Ultrashort Models to be available on Shapeways in both N and HO scale soon. The

IN THIS ISSUE:

ANOTHER VIEW

[Another Opinion on the Direction of Railway Museums and Model Railroading in General!](#) *by A.J. Chier*

CURRENT EVENTS

- [Urban Commuter / Light Rail / Modern Streetcar News!](#) *by Edward Havens*
- [F-line \(San Francisco\) Evening Activity!](#) *from the camera of Peter Ehrlich*
- [Foothill Gold Line Construction Authority Hosts Industry Workshop!](#) *by A.J. Staley*
- [LA Metro Regional Connector Subway Tunnel Follow Up!](#) *by A.J. Staley*
- [More Urban Rail Happenings!](#)

MODELING INFORMATION

- [Another Great Scene From a North Carolina Layout!](#)
- [Using Commercially Available Poles with HO trolleys!](#) *by Richard Allman*

ANOTHER VIEW

Another Opinion On The Direction of Railway Museums and Model Railroading in General!

by A.J. Chier

I first joined the Orange Empire Railway Museum (OERM), Perris, CA, in my early teens. As member number 3109, I'm far from a founding member, and I'm a relative youngster compared to those that are. When I visit the museum I look around and see huge physical improvements since the 90s, but I also notice a sharp decline in the number of active volunteers and rail fans that come to the museum. It may be my often-faulty memory, or perhaps a real shift, but I can't help but wonder if we'd simply cease to be without that smiling blue locomotive that keeps our lights turned on.

Before the profitable children's events, the highlight of the year at OERM was Railfest, where the "real" rail fans came in droves to see OERM pull everything that would run (or could be dragged) out into the daylight. I just don't see that sort of thing at the museum now. I often wonder just how many people under the age of 50 could tell the difference between LARy types H and K, and just how many would even care to find out. It's not that classic equipment holds no value. These cars are a critical piece of the history of our region and tell a fascinating story, but they are relics of an era that has long since passed. The 27 and 32 year gaps in LA's and San Diego's rail transit histories created generations that only know of "red cars" from what they saw in a popular movie about an animated rabbit, or from stories grandma and grandpa told of riding to Venice Beach or La Jolla for the day. Those that rode a San Diego PCC, a "yellow car" or "red car" in service are now a critically endangered species.

Call it ego, but it's been very hard for me to accept, as I crest the hill at 40, that "modern" light rail cars like the U2 and P865 are actually not modern anymore and represent the state of the art in the 80s. Most of us are probably doing the math in our heads and combating the urge to think that this is recent history. It's not. It's been 36 years since a San Diego U2 first rolled to San Ysidro, and 27 years since a NipponSharyo P865 first rolled into Long Beach! These cars are to modern rail fans what the Blimps and PCCs were to the rail fans in the 60s. If we turn our backs on saving examples of them, we are effectively turning our back on generations of transit rail fans that could continue our mission. I admit that a light rail vehicle is not my cup of tea. Put one next to a PE Hollywood and I'd take the Hollywood any day of the week. But that's only my opinion, and I'm realizing more now that I'm an anomaly as a guy under 50 that feels that way.

I'm beginning to understand that these "modern" cars are what today's younger generations know as historic rail transit, and these are what can save our museum from becoming little more than a venue for Thomas, Percy and their always-smiling friends. Certainly these cars come with challenges. Troubleshooting modern circuitry is a bit different than troubleshooting a K controller. Thankfully, there are hundreds of people alive today working at the agencies these cars are coming from that would be glad to donate a day to help fix a glitch. Compare that to the number of people in Southern California with the skill to fix a K controller or rebuild a Westinghouse brake valve, and I'd say the light rail vehicles win hands-down in a "but nobody can fix it if it breaks" contest. Plus, modern schematics and manuals for these cars are readily available. It's also important to not underestimate the modern skill sets of the droves of younger fans that will keep these cars running long after I've "lowered my pole". Now is the time to make room and welcome these newcomers, both the steel ones and their human fans!

Note: A. J. Chier is currently Manager of Rail Fleet Services with the Los Angeles Metro at Division 14 which hosts the newest of their Light rail Lines, Expo, which runs from Los Angeles to Santa Monica. He is also a member of the Southern California Traction Club. The previous article was originally written for the Orange Empire Railway Museum Gazette and was reprinted in the Trolleyville Times with the author's permission!

CURRENT EVENTS.....

Urban Commuter/ Light Rail/ Modern Streetcar News!

by Edward Havens

Rider ship on the Atlanta modern streetcar line has risen by 10 percent since the start of the year and that is despite a \$1 fare that was implemented in 2016, the "atlanta curbed dot com" site reported June 9th.



Atlanta Streetcar #1004, one of four Siemens S70 vehicles currently in service!

The article said the 2.7-mile car line from Centennial Olympic Park through downtown to the Martin Luther King, Jr. visitor attraction "finally" is getting on track following construction delays and cost overruns and has resolved most of the safety issues with the rest to be addressed by the end of June 2017. The next big issue will be deciding how the street railway system should be expanded to other areas of Georgia's largest city. WXIA television reported June 20 that Atlanta plans to turn over operation of its downtown streetcar to Metropolitan Atlanta Rapid Transit Authority (MARTA). The agency board votes on it in July.



C.A.F.-built Cincinnati streetcar 1175!

The Cincinnati City Council was set in June to finalize an operating budget for the city's 3.6-mile modern streetcar line between downtown and Over-the-Rhine historic zone. There was some consternation among members of the council transportation committee about a request from the regional transit authority for a six percent increase or \$226,000 over the previous annual operating budget of \$4.2 million. Echoing the language of President Donald Trump, Councilman Chris Seelbach called media reports that the car line is failing a case of "fake news," KVVU public radio reported June 6. The winter chill depressed ridership but by the end of April, the car line had a positive black ink surplus of \$172, 976. In May, preliminary rider ship numbers showed 53,116 passengers compared with only 49,966 during April 2017. The streetcar line, using C.A.F.-built "Urbos 3" streetcars, began carrying passengers in September 2016.



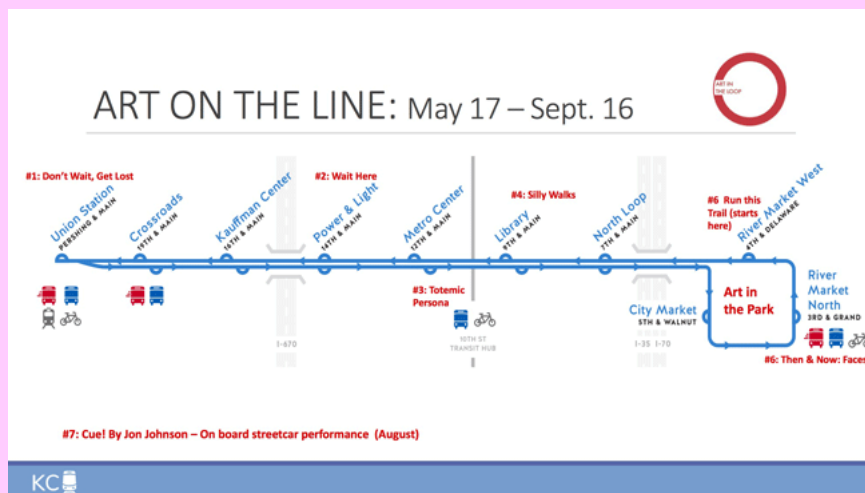
"A" end of Cincinnati Connector Car #1175!

According to sources, it is rare for The Cincinnati Enquirer to issue a correction to a streetcar story but that is exactly what happened on June 9th. The Editor-In-Chief said in an online post that the regional transit agency and the city did not release all documents pertaining to the funding of street railway operations. So instead of facing an operating deficit in Fiscal Year 2017 of \$474,930, the system actually will have an accounting black ink surplus of \$45,634, so said said Peter Bhatia, a multiple winner of the Pulitzer Prize for journalism. With new documents in hand, he was able to report that the surplus comes from tax incentives from companies along the streetcar line from downtown to Over-the-Rhine historic zone.

The Q Line modern streetcar at Detroit will offer free rides though Labor day thanks to funding from Kresge Foundation, the "M Live" site reported June 22.

Jackson County Court in Kansas City has certified 5,752 people along a three-mile proposed modern streetcar extension to vote in a mail-in ballot tax election, the Kansas City Star newspaper reported June 12. Completed ballots must be returned to the court by August 1. The plan is to extend the two-mile streetcar southward by three miles from Union Station to the University of Missouri-Kansas City campus. It is a cumbersome three-step process. If voters approve the project, tax board directors must be elected, followed by a third election to set tax rates. The urban rail expansion would cost an estimated \$227 million.

Meanwhile the KC Streetcar folks are promoting events such as the Summer Music Series & Art On The Line projects, aimed at precisely the group of Greater Kansas City residents learning to once again appreciate public transit and the relative smoothness and quiet of a streetcar. Meanwhile rider ship continues to climb.



And the KC Streetcar Authority just received approval from the City council to purchase two additional streetcars for the existing downtown route. Currently there are four streetcars and three are required daily. The total projected cost is \$11 million, with the CAF-built cars at \$4.9 million each plus parts and inspection support. The daily rider ship, projected as 2,700 has been running at 5,700.

Little Rock, the capital city of Arkansas, is offering free rides all summer from June 1 to August 31 to build rider ship and curry public favor for expanding the 3.4-mile service operated by heritage-style Gomaco-built double truck replica Birneys (see below) to other areas of the city.



Gomaco-Built Little Rock Double Truck Birney 408!

The city's bus system only operates until 8 p.m. nightly but the trolleys ply the rails until midnight from Thursday to Saturday nights, KATV television reported June 6. When regular fares resume this fall the streetcar will charge \$1.00 for a ride compared with \$1.35 on the buses. The first generation streetcar network with 21 miles of track and mostly single truck Birneys was abandoned on December 26, 1947.

Sacramento Regional Transit District serving California's state capital city shut down parts of three light rail routes during the second weekend in June for replacement of a 30-year-old track switch at 13th Street station, television station KCRA reported also on June 9th. Crews were working 24 hours a day to complete the project before the start of Monday morning commuter service on the Blue, Green and Gold lines. The district reported that buses were to be used to bridge the gaps in LRT service. The 13th Street station was closed throughout the weekend.



Sacramento 1985-86 vintage Siemens U2A #108 heading a four-car train on their Blue Line!

Orange County Transportation Authority in Southern California south of Los Angeles expects to finalize a full funding agreement with the U.S. Department of Transportation by December 2017 for a 4.1-mile, \$299.3 million modern streetcar line from Santa Ana to Garden Grove, the Los Angeles Times reported June 11.



Artists Concept of Orange County Streetcar!

The "OC Streetcar" as the project is named will have four traction power substations and a trip over the line will take 30 minutes. Santa Ana, the newspaper reported, is the nation's fifth most densely populated city so there is lots of rider ship potential. Garden Grove Mayor Steve Jones called the

streetcar project "a major step forward." About two miles of the car line will be built on former Pacific Electric "Red Car" right of way alongside Santa Aria River channel. The Red Car once ran about 20 miles from Santa Ana to Paramount in Los Angeles County.



One of Valley Metro's 50 KinkiSharyo Low Floor Light Rail Vehicles!

Phoenix-based Valley Metro plans to extend the eastern end of its light rail system from the downtown area of suburban Mesa by two miles to Gilbert Road and will divert funding intended for roadway intersection upgrades to fund its 5.7 percent share of the \$186 million project, the "east valley tribune web site reported June 12. An increase in construction costs has raised the city of Mesa share to \$10.6 million. The original Valley Metro 20-mile starter line ended in west Mesa, one mile inside city limits, but this was followed by a three-mile extension into the central business district. The Gilbert Road extension is expected to stimulate economic and real estate development. Valley Metro's Rail Board had approved Kiewit as the construction manager at-risk for the South Central extension, which should start in 2019. Kiewit constructed a segment of the original 20 miles of the system that opened in 2008, as well as the 3-mile Central Mesa Extension that opened in 2015.



One of the 18 PCCII streetcars that run on the SEPTA route 15, Girard Avenue Line!

Philadelphia-based Southeastern Pennsylvania Transportation Authority will shut down all of the Route 15, Girard Avenue trolley Route 15 from June 18 to Sept. 17 from the western terminal at 63rd and Girard in West Philadelphia to the Delaware and Frankford short turn loop opposite Sugar House casino. A track replacement project will lay 4,100 feet of new track from Broad Street westward including rails across the Schuylkill River bridge. Buses will replace trolley service. The new rail will be encased in a rubber boot to smooth the ride and reduce vibration. This section was last replaced in the late 1950s, according to a SEPTA news release posted June 9th. Parking lanes on two sections of Girard will be closed to weld rail and store the T-rail strings until they can be installed.

*Editor Note: The route 15 trolley line is the only Philadelphia trolley line that runs east of the Schuylkill River into North Philadelphia. SEPTA, starting in 1968, systematically killed the other North Philadelphia lines over the years. These lines included **Route 6**, Ogontz Avenue; **Route 23**, Germantown Avenue; **Route 47**, 5th Street; **Route 50**, Rising Sun Avenue; **Route 53**, Wayne Avenue, **Route 56**, Erie Avenue and **Route 60**, Allegheny Avenue. Route 15 was also converted to buses in 1992 when the last two North Philadelphia routes, route 23 and 56 were converted to buses, however, political pressure forced SEPTA to bring back Route 15 in 2005. Luzerne Depot, that supported the other lines, by that time had already been sold and decommissioned. Eighteen PCC cars from the 1947 and 1948 buys were sent to Brookville and came back back as PCCII's, which are essentially LRV's in a PCC body.*



Sacramento Streetcar Concept!

Sacramento Regional Transit has pledged \$25 million toward a proposed downtown streetcar line that would cross the Tower Bridge and serve the independent municipality of West Sacramento opposite California's state capital city, the Sacramento Bee newspaper reported June 11. The funding would be part of \$100 million in state and local money toward the \$200 million urban rail project with another \$100 million to be sought in federal grant money. If some 300 commercial property owners along the portion of the route in Sacramento okay the project in a mail-in tax ballot vote, a full funding agreement with the Federal Transit Administration will be sought this summer or fall. The Sacramento Bee newspaper reported on June 21 that voters along the downtown route approved a special tax levy for the project.

F-Line (San Francisco) Evening Activity

by Peter Ehrlich

Peter Ehrlich, a former San Francisco Municipal Railway street car operator who operated the historic cars on the F-line before he retired, has become a world traveler, taking outstanding photos of the streetcars and other urban electric railway vehicles in his travels. Recently he took some photos of the San Francisco F-line and San Francisco that we could not resist bringing to you.



© 2007 Peter Ehrlich



© 2007 Peter Ehrlich

On June 7th, Peter caught PCC 1058 on a pull-in to Metro East where the F-line cars are now stored. The lights on the Bay Bridge make a startling background for this car. This car, formerly Philadelphia Transportation Company 2124, was the first of the F-line cars to get a second paint scheme. It started service in the last green and cream paint scheme of the Chicago Transit Authority (CTA) which was later judged to be inferior to this one.

Not to be outdone, Peter went back to the same spot, the Folsom Station stop on the T-line and caught Milano 1814 on its pull-in at the end of service.



© 2007 Peter Ehrlich

On June 10, Peter caught 1072 passing 1056 on Don Chee Way outside of the San Francisco Railway Museum (above left). Incidentally, of the 24 PCC cars obtained from Philadelphia and Newark, only 1055 (Philadelphia 1955), 1070 (Newark PSCT) and 1072 (TCRT) are wearing schemes that they actually wore when in service in their former venues. Two days prior, he snapped PCC 1011 along with Breda LRV 1446 with 2005 one of the new Siemens LRVs in Metro East (above right).



In March 2009, Peter photographed car 162 on Market street in the evening. This car had languished at a Southern California Railway Museum for years until rescued by the F-line. In June 2017, "Torpedo" 1009, dressed in the Dallas colors and running on the E-line [Embarcadero] sits in front of ex Minneapolis, ex-Newark car 1071, dressed in El Paso City Lines colors running on the F-Line. Both are at the Jones Street Terminal in Fisherman's Wharf.



Torpedos (double-end PCC cars) are required on the E-line since there is no loop at the South end. So Car 1007 (Red Arrow Lines) is shown approaching Pier 39 (above left) and Car 1010 (Muni pre-war) is shown actually using the Pier 39 short turn (above right).

The Trolleyville Staff is somewhat fascinated by double-end PCC cars since relatively so few of them were built. Of the ten double end PCC cars built for San Francisco, seven of them are still in that city running and one exists in a museum in Australia. The double end PCC cars built are listed below:

Pacific Electric 5000-5029	30 cars ordered from Pullman-Standard in February 1940 and delivered in November 1940!
Dallas Railway & Terminal Company 601-625	25 cars ordered from Pullman Standard in 1942 and delivered in 1945!
Municipal Railway of San Francisco 1006-1015	10 cars ordered from Saint Louis Car Co in June 1946 and delivered in summer of 1948!
Illinois Terminal Railway Company 450-457	8 cars ordered from Saint Louis Car Company in 1946 and delivered in October 1949!
Philadelphia Suburban Transportation Co 11-24	14 quasi-PCC* cars ordered from Saint Louis Car Company and delivered in May 1949

*** cars with double End PCC bodies but riding on Saint Louis MCB trucks!**

Two of the remaining cars, 1006 and 1008 are painted in their original 1948 colors. Here is 1006 on Embarcadero at Pier 23.



It was reported on June 26th that the [two ex-Red Arrow double-end quasi-PCCs](#), 18 and 21, have departed the Shore Line Trolley Museum in Connecticut for Brookville and will eventually run on San Francisco's E line.

It is hard to beat San Francisco for continuously great urban electric railway action.

Foothill Gold Line Construction Authority Hosts Industry Workshop!

A very successful Industry Workshop was held on May 31, 2017, to bring 200 small business representatives and prime contractors interesting in upcoming business opportunities with the Foothill Gold Line Construction Authority. The event took place at the Double Tree Hotel in Monrovia, California and begins the procurement phase for the nearly \$1.4 billion, six-station Foothill Gold Line light rail extension project from Glendora to Montclair.



Room Full of Attendees at the Workshop!

The Foothill Gold Line Construction Authority is an independent transportation planning and construction agency created in 1998 by the California State Legislature to plan, design and build the Metro Gold Line light rail system from Union Station to Montclair, along the Foothills of the San Gabriel Valley. The ground work for this stage was started in 2003 and the project was environmentally cleared in March 2013 under the California Environmental Quality Act (CEQA). The advanced conceptual engineering was completed in September 2016 and ground breaking is set for October 21, 2017, with substantial completion anticipated in late 2025 to early 2026.

The agency completed the first segment of the Foothill Gold Line from Union Station to Pasadena in 2003, and the Pasadena to Azusa segment in 2015; both were on time and under budget.



Two-pack* of the 50 AnsaldoBreda-built (2006-2011) P2550 cars crossing the I-210 freeway en route to Azusa!
(*Metro term for a two-car train!)

When the Glendora to Montclair segment is completed, the extension will add 6 new stations in the cities of Glendora, San Dimas, La Verne, Pomona, Claremont and Montclair. Rider ship on the extension alone is anticipated to exceed 18,300 boardings on weekdays by 2035.

Event attendees were given the opportunity to network and meet potential teaming partners before receiving information from key project representatives on the upcoming contracting opportunities, project status and timeline. They also learned about the Construction Authority's Small Business Enterprise (SBE) program, which has a goal of 16.6% participation by SBE's in all contracts.



Networking Session!

“The event marked the beginning of the procurement phase for the Glendora to Montclair project; a day many have been tirelessly working towards for many years” said Doug Tessitor, Chairman of the Foothill Gold Line board of directors. “With Measure M’s passage last November 2016, the majority of the funding needed for the project was secured; and because the Construction Authority was able to complete the segment from Pasadena to Azusa under budget, we are able to kick the Glendora to Montclair segment off a few years earlier than anticipated in Measure M, using residual Measure R funds.”

Two significant contracts will be awarded in the next 18 months by the Construction Authority. The first Requests for Bids (RFB) will be for the Utility Relocation contract and is expected to be issued in July 2017, with the contract award anticipated in September 2017. The Request for Qualifications (RFQ) for the Alignment design-build contract, the first step in a multi*step procurement process, will be issued in November 2017, with short-listed teams determined in February 2018. Short-listed teams will then receive the Request for Proposals (RFP).

“There was tremendous interest and turnout at the workshop, which bodes well for the quality of the potential bidder,” stated Habib F. Balian, CEO of the Foothill Gold Line Construction Authority. “Having a large pool of highly qualified contractors and skilled talent to work with benefits the project and taxpayers.”



Habib F. Balian, Construction Authority CEO, conducting the Question & Answer Period!

Small businesses in attendance ranged in key specialties to designing and building a light rail project, including civil, structural, systems, utilities and architecture. All attendees were added to the Project Interest List that will be given to prime contractors who will be bidding on the two contracts

There will be plenty of challenges involved in building this phase of the Foothill Gold Line light rail system. The 12.3-mile extension will include not only the 6 new stations, but multiple parking facilities, bridges, and two dozen at grade or street-level crossings. Much of it will be built along the former Atchison, Topeka and Santa Fe right of way and will share a 100-foot-wide rail corridor with ongoing freight movement and Metrolink. Some of their rail will have to be relocated. It will include opportunities for hazardous waste collection, carpentry work and graphic design to trucking, engineering and plumbing. Amid these challenges, there is one certainty – people will be needed to do the work.

LA Metro Regional Connector Subway Tunnel Follow Up!

by A. J. Staley

On June 1, 2017, L A Metro completed the first pass for the connector subway tunneling project that we reported on last month. The tunnel boring machine broke through the wall at the future Grand Avenue Arts/Bunker Hill Station, which will be located at the intersection of Second and Hope Streets.



Crews Waiting with Anticipation for the Break Through at Second & Hope Streets.
This will be the site of the Grand Avenue Arts/Bunker Hill Station.

From the future location of the Grand Avenue Arts/Bunker Hill Station, the enormous 400 foot tunneling machine named Angeli, will proceed Aproximately 1000 feet to the intersection of Fourth and Flower Streets, where it will be taken apart and reassembled to reverse direction of the machine. Angeli will then dig the second of the two tunnels alongside of the existing tunnel which together will service three of the new stations.



First Signs of the Break Through at the Same Location as previous photo!

This portion of the tunneling will link the Blue and Expo lines to Union Station, where they will connect with separate portions of the existing Gold Line and the work is expected to be completed by 2018.

Editor Note: The completion and use of this connector plus the extension of the Gold Line to Montclair will change dramatically the way Angelenos travel using public rail transit. This will be the most dramatic change since the reintroduction of light rail in 1990 as three of the existing light lines in the city, Blue, Expo and Gold will be changed!

More Urban Rail Happenings!

CHARLOTTE, NC - Last month, during the week before Memorial Day, the Charlotte Area Transit System, (CATS) tested the overhead catenary on the new Blue Line light rail extension. The agency powered the overhead catenary System (OCS) and ran trains under their own power at 5 to 10 mph from the North Yard facility to the Old Concord Bridge. The was the first time a train had run north of the North Yard.

The 9.4 mile extension was originally slated to open this August but construction coordination challenges and remaining tests of system integration and signalization pushed the date to March 2018.

CHICAGO, IL - It was reported late last month by Progressive Railroading that Metra's board yesterday approved an \$11 million contract with Railhead Corp. to install a new inward-facing camera system on locomotives, cab cars and Highliner cars. Metra, the Chicago area commuter railroad, will use the system to verify that train crews are following safety laws and operating rules.

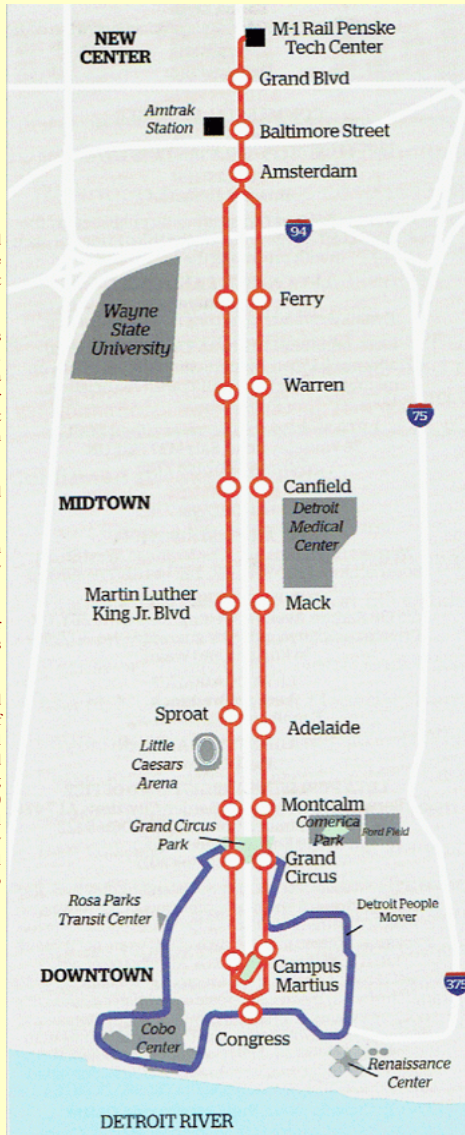
The system also will be used to gather information in accident investigations and document any criminal acts, Metra officials said in a press release. The system includes recorders, forward-facing cameras, rear-facing cameras, microphones, storage memory and crash-hardened memory. "These cameras will give us another tool to ensure we are operating as safely as possible," said Metra Executive Director and Chief Executive Officer Don Orseno.

In 2015, Congress ordered the U.S. Department of Transportation to draft rules requiring passenger railroads to install inward-and outward-facing cameras in all locomotives and other operating compartments such as cab cars. Those rules are expected from the Federal Railroad Administration by 2017's end, according to Metra. The National Transportation Safety Board (NTSB) also has advocated for the use of cameras inside locomotive cabs as an aid in accident investigations. The cameras also can be used to help railroad managers prevent accidents by identifying safety issues before they lead to injuries or deaths, according to the NTSB.

Meanwhile, Metra's board also approved contracts to replace or repair several bridges along the Union Pacific North Line on the North Side of Chicago. The railroad awarded a \$17.2 million contract to Judlau Contracting Inc. to replace bridges that carry inbound UP North Line tracks over 11 streets from Grace Street to Balmoral Avenue.

In addition, Metra awarded a \$15.5 million contract to Kenny Construction Co. to rehabilitate the UP North Line bridges over Webster Avenue and the North Branch of the Chicago River. Finally, the railroad also approved a \$15.5 million contract with IHC Construction Co. to build the new inbound half of the Ravenswood Station, which is the busiest station on the UP North Line outside of downtown.

The projects are part of Metra's 2017 construction program, which includes \$216 million in infrastructure improvements.



DETROIT, MI - We reported to you last month that streetcars had returned to the streets of Detroit after an absence of over 61 years. The last PCC car ran on Woodward Avenue on April 8, 1956. The Detroit Street Railways (DSR) had around 700 active streetcars at one time.

From the July 2017 issue of Tramways & Urban Transit Magazine comes a map of this new system which is called the **Q-Line** (See map at right). The line is named for **Quicken Loans**, a heavy investor in M-1 Rail, a non-profit organization formed in 2007 by a consortium of private sector partners who claim that this streetcar line is the first major transit project led and funded by private businesses and philanthropic organizations in partnership with local, state and federal governments.

The Q-Line uses six Brookville "Liberty" Streetcars which are equipped with rechargeable lithium batteries as the line is 60% catenary free.

Twenty-minute service is offered from 6 AM to 11PM Monday through Thursday, 6 AM to midnight on Friday, 6 AM to midnight on Saturday and 8 AM to 8PM on Sundays. Regular service uses four of the cars.

At this time a three-hour fare is \$1.50, with special reduced fares for Senior Citizens, mobility impaired and Medicare holders. All Day passes are \$3.00 with monthly passes at \$30.00 and annual passes at \$285.00.

LAS VEGAS, NV - Nevada Governor Brian Sandoval has signed legislation that enables the Regional Transportation Commission of Southern Nevada (RTC) to seek funding for a potential 8.7-mile light-rail line in Las Vegas, local media reported late last week. The line would connect McCarran International Airport to the city's downtown, according to the Las Vegas Review-Journal. RTC has until the end of the year 2020 to ask Clark County residents to raise sales taxes to pay for the light-rail line, which is expected to cost up to \$705 million. Although the agency doesn't have immediate plans to introduce a sales tax measure on local ballots, RTC will apply for federal grants and look for other sources to pay for the line, the Review-Journal reported.



Artists' Concept of Light Rail/Modern Streetcar along Las Vegas' Maryland Parkway!

LOS ANGELES, CA - "FAREWELL CAR 105!"

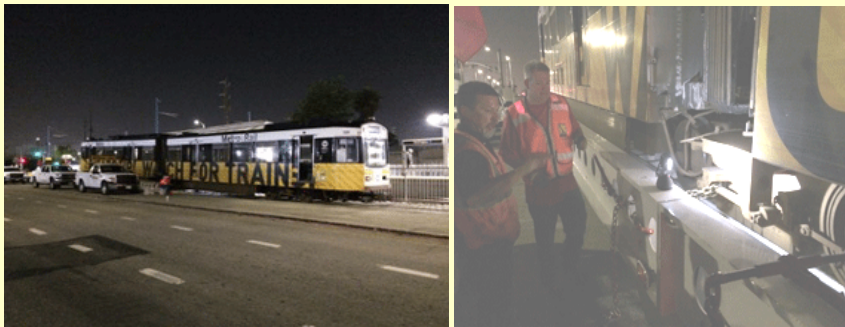
The city of Angels has now hit for the cycle in the urban transit field. On Monday evening, June 19, they officially retired NipponSharyo car 105, which was built in 1989 and faithfully carried passengers on the Blue and Expo lines until late 2016. Early Monday morning, veteran operator Warren Stockton Jr, operated a train consisting of NipponSharyo cars 109, 117 and 105. Car 105 was completely dead, having been stripped of everything useable and of interest to LACMTA staff and rail fans and requiring battery powered lights at the end of the train for the trip to Washington Street Station, where there is a loading track. This same track had been used for delivery of the Siemens P2000 cars in 1995. Warren, whose father Warren Stockton Sr, motored the first revenue train out of Division 11 in 1990 on the first Los Angeles Light Rail Line (the Blue Line), is also a member of the Southern California Traction Club.

When Trolleyville arrived at 7:40PM, this old workhorse was sitting on the siding looking forlorn, still coupled to the truck that would assist in the loading later that evening, but showing the twenty six years of working both the Blue and Expo lines. Most exterior lights were gone along with its relatively new TransTech Pantograph that it had as late as October 2016.



As the new P3010 KinkiSharyo cars continue to arrive, car 105 along with a few other 1989-1990 era NipponSharyo P865 vehicles will be scrapped in the next few months as they have not had all the modifications and have issues that are now deemed not cost effective to repair. As of June 19, there were over 85 of the new P3010 cars at LACMTA and about 75 in service on the Expo and Gold Lines, for which the first group were procured.

The long trailer that would carry the car to the scrap yard in Carson, CA arrived about 9:00 PM and got into position over the spur track. The tractor disconnected from the trailer and pulled the front half of the trailer from the second half and got out of the way. Then the truck shown in the above right photo pushed the dead car 105 across Washington Boulevard into position behind it, and eventually right to the ramp that would place it on the back half of the trailer. The rear portion of the trailer has its own winch to pull the car slowly onto back half of the trailer (below left). The car has two of the three trucks on the trailer when photo, below left, was taken. When loading is completed the tractor and the first half of the trailer back under the rear portion of the trailer with car 105 thoroughly chained to the trailer in at least six separate places (below right).



When the car is completely loaded, in position and secured to the trailer, the tractor and front half of the trailer backs into under the car (below left) and the job is complete. It was now 11:00 PM and quite dark! Of course there is the mandatory debriefing (below right) that the crew does to make sure that they are ready for the next one because there will be many more. All 54 of the P865s will be dispositioned over the next two years. This is the same or similar rig that is being used to bring the new P3010s from Palmdale to Los Angeles. So far over 85 of them have been brought using this equipment. At this time, Metro would like to have all 54 1989/90 P865 vehicles retired by the end of 2018. This will be a challenge due to the continuing growth in rider hip on the light rail lines.



Just before the car was to leave Metro rails forever, this photo was taken of George Huckaby, Trolleyville Webmaster and owner of Custom Traxx with Car 105. The Washington Station of the Blue Line is behind them.



George Huckaby (Custom Traxx) with Car 105!

Next car on the "scrap list", as of 6-26-17, is 129!

OKLAHOMA CITY, OK - According to a June 5th report from Progressive Railroading, the Oklahoma City transit agency, Embark, awarded an \$173 million to Herzog Transit Services, Inc for the startup, operation and maintenance of the Oklahoma City Streetcar system, now scheduled to open in 2018. According to Embark officials, the six-year agreement will provide turnkey operations, vehicle and facility maintenance for the future streetcar system. Herzog will be responsible for scheduling, training and maintenance of the system's 4.8 miles of revenue track, less than a mile of non-revenue track and all streetcar-related assets.

Herzog constructed and/or operates 13 other passenger rail systems in the U.S. including the Kansas City Streetcar that opened in 2016.

SALT LAKE CITY, UT - Utah Transit Authority's (UTA) S-line (formerly known as the Sugar House Streetcar) streetcar rider ship grew 8% in 2017's first quarter compared to the same quarter in 2016. Rider ship was up 15 percent in 2016 over 2015. In fact rider ship has increased every single month from January 2014 and December 2016. The line connects the business district of the Sugar House neighborhood of Salt Lake City with the neighboring city of South Salt Lake as well as the TRAX light rail system. It opened for riders in December 2013.

Part of the right-of-way used for this line was originally built by the Denver & Rio Grande Western Railroad (D&RGW) in 1900. UTA purchased the right-of-way in 2002 and it was formally abandoned in 2005. The line is about 2 miles long and is the first streetcar line in the state of Utah in 50 years. The line uses the streetcar version of the successful Siemens S70 Ultrashort light rail vehicle, the major difference is that unlike the light rail vehicles, the streetcar do not have automatic couplers and multiple unit equipment to permit train operation.



TRAX Car 1125 on the Red line at Daybreak Parkway.
These 72 S70 cars are identical to San Diego's 4001-4065 series cars!



S-line S70 car 1175 at the Fairmont (end of the line) stop.
These five cars are similar to Atlanta Streetcar's four vehicles!

MODELING INFORMATION.....

Another Great Scene from a North Carolina Layout!

We acquired two additional photos from Harvey Simons fine layout. The advantage of a small but detailed layout allows a lot of attention to be paid to little details. Here are two views of a building under construction, a highly detailed scene, while Harvey's Milano, featured in our February 2017 issue passes on Market Street.



We know that there are a lot of you with great layouts that the rest of us would like to see. Please consider sharing your great work with others. This promotes the great hobby we all enjoy!

Using Commercially Available Poles with HO trolleys!

by Richard L. Allman

The trolley poles I especially like are the PCC type poles manufactured by Miniatures by Eric (MBE) and the variety of poles by Rich Eaton.

Eric's poles are a standard length with very strong springs and some bend in the shaft of the pole. Using them requires tight overhead to avoid mischief in the frogs and crossings, but some of my cars really run better with a lot of upward tension and in such cars, the Eric poles are the cats meow. The MBE (Eric Courtney) HT-P2 (shown below left) is their PCC type trolley pole. It is the prototype for the Bowser 12600 trolley pole and has a lot of good spring tension. The MBE HT-P4 (shown below right) is available from Custom Traxx and in my mind is a very underrated pole. It is incredibly versatile and can be used in many cars. It also tracks beautifully. It was designed as a two-spring version of the four spring US-13 pole that was used on a variety of cars starting in the 1920s. It is a winner and should be tried.



Miniatures by Eric - HT-P2 Trolley Pole



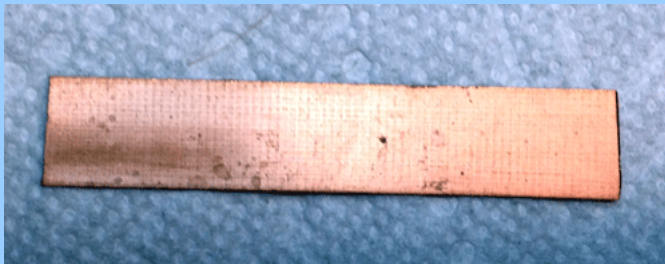
Miniatures by Eric - HT-P4 Trolley Pole

Rich Eaton custom crafts his poles to order. He provides them with either two or four springs. He makes them to custom length. (I have ordered them from 12 -20 scale feet length from yoke to wheel or slider. And yes, a choice of wheel or slider is available. In the next photo, the two poles on the left have wheel collectors and the two on the right have shoe collectors.

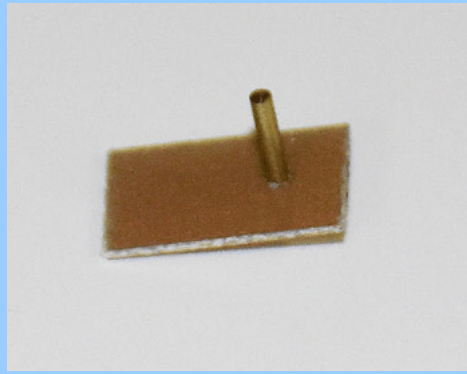


The Eaton poles are available with a choice of either thread base or a 0.032 pin-type base. I have no experience using the threaded base, but am aware that some cars have a wider opening in the pole aperture on the roof and are suitable for the threaded base poles with a fiber washer as insulator between the lead wire from the pole to the motor and the underside of the car roof. The Eaton poles track beautifully and look quite nice and his customer service is outstanding.

With the 0.032 pin-type stem for the poles, Bob Dietrich and I craft pole bushings that work very nicely. We make a contact plate from thin one-sided PC board, shown below:



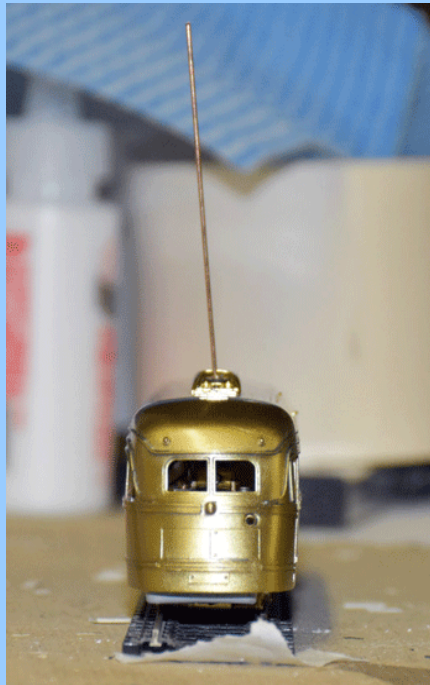
We drill a hole in it just wide enough for the thin brass tubing (I can photograph a piece of PC board-both sides before and after insertion of the tubing) that we cut somewhat longer than the distance from the top of the car to the underside of a piece of the PC board. You will need to look around a bit for the correct sized thin brass tubing. We currently use K&S Precision Metals 1/16" x 0.014" brass tubing, which is available from Amazon. It should be cut carefully with a razor saw or jeweler's saw to avoid crimping the hollow of the tubing. The tubing is carefully drilled out with a #60 drill using a pin vise. If the bushing is for a PCC car, it needs to be somewhat longer so that the pole will turn on curves without fouling the PCC pole shroud. Two views of this assembly are shown next:



The tubing is then soldered to the PC board with the metal side down, making sure the tubing is perpendicular to the PC board {will provide photo}. Before doing any of the connections, the piece fabricated with the PC board and tubing for the pole bushing is cemented into place. We use a generous dollop of Goop which is a slow-drying cement, available in most good hardware stores.



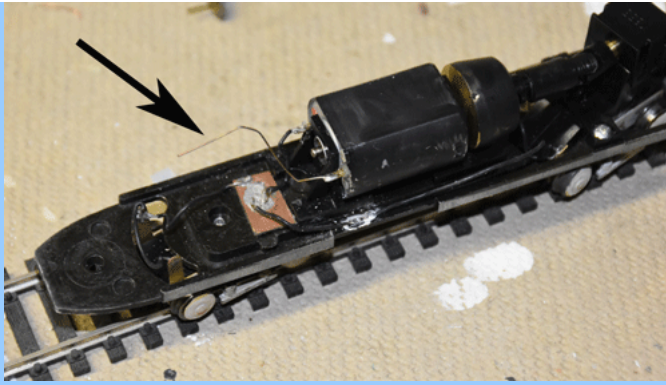
The slow-drying cement allows the bushing to be precisely centered in the car body and that the pole is an exact 90 degree vertical to avoid tracking problems.



The slow drying time allows adequate working time for perfect centering and alignment of the bushing. We place a pole in the bushing and make certain it is not leaning either left or right. The above left photo shows a pole perfectly vertical, while the left photo shows a car with a pole that almost certainly will provide tracking issues. We then allow the glue to set before attempting any further connections. This takes about 45 minutes to be absolutely sure.

We then have one of several ways to contact the underside of the PC board to the motor:

1. We solder a piece of 0.015 brass wire to PC board under the roof and can either route it straight down to where it will swipe against another piece of one-sided PC board which is cemented to the floor. Another wire is soldered to that piece of PC board and connected to the (+) terminal of the motor. For those modelers especially finicky about wires exposed inside the car, that wire from the pole bushing to the floor can vertically traverse a window post and not be visible, or:
2. A one-sided piece of PC board can be cemented on top of the motor with Goop (most feasible with a Bowser drive) and a piece of 0.015 wire soldered from that to the (+) terminal. Another piece of 0.015 brass wire can be soldered to that piece of PC board on top of the motor and bent to reach the roof and swipe the metal underside of the PC board with the bushing.



Another way with the Bowser traction mechanism is to use a piece of 0.015 brass wire and solder it to the + terminal of the motor (Note arrow in next photo) and bend it so it swipes the underside of the PC board bushing.



The above photo shows the bushing under the roof of the car where the wire from the motor can contact it. A complete assembly of pole to bushing is shown in the next photo:



This technique is also applicable for Bowser poles, old Kemtron poles or newer Precision Scale poles. The caveat is to be certain that the tubing used for the bushing holds the pole snugly for good contact, but also allows the pole to freely rotate. There is no such thing as "one size fits all." The Kemtron/Precision Scale Models poles have a 0.040 stem so a suitable piece of brass tubing is necessary. Bowser poles come with a bushing that can also be used and if so desired, can be soldered into one-sided PC board which in turn can be cemented to the underside of the car roof, observing the need for the bushing to be perfectly centered and perfectly vertical. The same applies to the excellent pole bushings manufactured by Bowser as part #12508 and sold by Custom Traxx which also can be used with the one-sided PC board. They also have an available insulating plastic bushing for stabilizing the metal bushing and insulating the poles in cars with metal bodies.

The entire process might sound complicated but can easily be done while accomplishing a bunch of other tasks on a busy evening of traction modeling!