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## CURRENT EVENTS.....

# Urban Commuter / Light Rail / Modern Streetcar News!

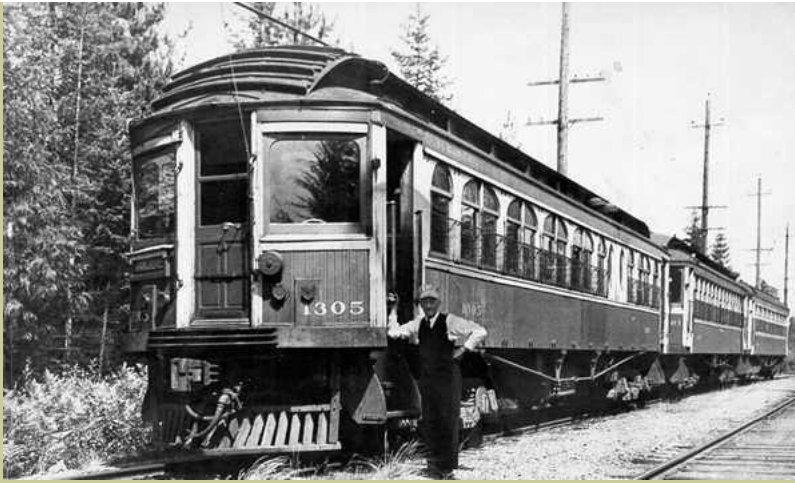
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*by Edward Havens*

**AUSTRALIA** - The Gold Coast light rail line on Australia's Pacific Ocean coastline is due to be extended and the Gold Coast Bulletin reported October 10 that seven stations are being proposed for the southward extension which is Stage 3. The extension will cost \$54.6 million per kilometer. The mayor hopes the business plan for the extension can be completed by the end of the year. Stops would be located along Gold Coast Highway from Broadbeach to Burleigh Heads.



**BRITISH COLUMBIA, CANADA** - A letter to the editor of the "delta optimist" by an organizer of Rail for the Valley says a diesel multiple-unit service could be deployed over the right-of-way of the former British Columbia Electric Railway from Vancouver to Chilliwack in western Canada. In the October 20th letter, Malcolm Johnston says the DMU could be installed for CAD \$750 million. Electric interurbans ran on the route until after World War II and part of it was retained for rail freight.



**CINCINNATI, OH** - Savings from the modern streetcar line in Cincinnati are funding a downtown traffic study to ease congestion for motor vehicles and urban rail transit. The Cincinnati Enquirer reported October 6. It's the first review of traffic patterns in the area in at least two decades. The goal is to adjust traffic signal timing to allow for speedy movement of autos, buses, the Cincinnati Bell Connector streetcar, bicycles and pedestrians.



**Cincinnati Connector #1175!**

The Cincinnati Enquirer reported in mid-October that nearly 27,000 people rode the city's modern streetcar line during a four-day street festival, double the usual number about 10,000 for the same days of regular service. On Thursday, October 12, the festival opener, service had to be suspended for three and one-half hours due to a traffic accident. The Blink Festival was designed to follow the streetcar route and this was its inaugural year.

**EL PASO, TX** - The El Paso Times reported on its web site October 16th that the infrastructure of the \$97 million, state-funded PCC heritage streetcar line -- including track and Overhead Contact System [OCS] trolley wire with curbside line poles should be completed by Thanksgiving, ahead of schedule. Raymond Telles, head of the agency overseeing the project, said infrastructure installation originally was to be completed early in 2018. That was to coincide with the return of two of six PCCs being rehabilitated by Brookville Equipment of Pennsylvania. Arrival of the first renovated PCCs will allow testing of the 4.8 mile system to begin. It will link the area just north of the international border with Juarez, Mexico, with downtown El Paso and the University of Texas-El Paso campus to the north.



Eight Ex-El Paso, ex-San Diego Streetcars in a lot in El Paso!

**FORT LAUDERDALE, FL** - The Federal Transit Administration has released \$60.8 million under the Small Starts program for the Fort Lauderdale, Florida, modern streetcar line expected to cost \$195.2 million overall, the "sun sentinel" web site reports. The state will contribute \$52.7 million with the remaining \$59.8 million from local sources including Broward County. Fort Lauderdale on the south Florida Atlantic Ocean coastline, was able to piggyback onto the Charlotte, North Carolina, order for the streetcar version of the Siemens S70 LRVs, as used in Atlanta, GA and Salt Lake City, UT. The S70 streetcar is essentially the S70 Ultrashort model as operated in both San Diego and Salt Lake City but it has no automatic couplers and MU capability to run in trains. They also lack the gearing to provide higher speeds.



Atlanta S70 Streetcar 1003!

Costs to build the Fort Lauderdale modern streetcar line along the Atlantic Ocean coastline of south-central Florida are exploding, as reported by the "sun-sentinal dot com" web site. Four construction bids were presented on October 23 and this means that the projected price tag to build the car line could rise from \$195.3 million to \$270 million. Project officials had estimated \$114 for infrastructure construction. But officials are not saying if the higher than expected bids could derail the urban rail project.

**KANSAS CITY, MO** - Kansas City residents and businesses along a proposed streetcar line expansion elected a seven-member board in an unusual Saturday election October 7th to govern a special tax district to fund the streetcar project, The Kansas City Star reported. A citizens' group is proposing to extend the 2.2-mile starter line between downtown and Union Station south to Country Club Plaza and the University of Missouri-Kansas City campus. Another election must be held to set tax rates for the streetcar expansion.



**KC Streetcar #801!**

On September 28, 2017, the KC Streetcar logged its 3 millionth rider, far surpassing original projections. During the Labor Day weekend, more than 39,000 rides were taken on the KC Streetcar. Visit the KC Streetcar web site for more information about rider ship.

**MEMPHIS, TN** - Memphis television station WMC reports that testing of the rehabilitated downtown heritage streetcar system will take place starting Monday, November 6th. The three-route system was suspended after two "W" class, ex-Melbourne trams caught fire and burned to their frames. The testing will continue day and night on Main Street but the revamped fleet may not be ready for several months. It has to be noted that ex-Melbourne trams have operated in other U.S. cities, including San Francisco without these types of major issues.



**One of the ten ex-Melbourne Cars, #454!**

Equipment used on the three Memphis lines (Main Street, Riverfront Loop and Madison Avenue) include six single-truck semi-convertible cars from Oporto, Portugal; ten large double-truck cars from Melbourne, Australia; a single-truck Gomaco replica former Rio de Janeiro open streetcar. Each car, like San Francisco, carries a unique paint scheme.

**MILWAUKEE, WI** - The city of Milwaukee has struck a \$10 million, 12-year deal with a tribal hotel and casino to fund streetcar operations. Rider ship continues to climb as the KC Streetcar enters its 18 month of service. The initial 2.5-mile downtown car line will open in 2018 and because of the naming rights agreement with Potawatomi Hotel & Casino, the first 12 months will allow streetcar patrons to ride free. The agreement was announced October 6 at a news conference by Mayor Tom Barrett, The Journal Sentinel newspaper reported. The car line will be branded for marketing as "The Hop" meaning hop on, hop off. Brookville Equipment Corp. of western Pennsylvania is supplying dual-mode "Liberty" model low-floor cars (battery power and pantograph current collection) for the new service.



Artists Rendering of "Liberty" streetcar in service!



Newly laid section of rubber-booted T-rail track!

**MINNEAPOLIS / SAINT PAUL, MN** - There is considerable concern by Met Council, the Twin Cities' regional planning organization, that the costs of building the Southwest Corridor light rail line from Minneapolis to suburban Eden Prairie may escalate. The project was to be re-bid October 30 because the lowest in the initial bidding was \$797 million, above the budget. Because of hurricane damage in the U.S. Southeast, some are concerned that construction workers in critical trades needed for LRT may be in short supply, driving up costs. The 14.5-mile Southwest line is estimated at \$1.9 billion overall as reported by the Minneapolis Star Tribune on October 20th.



Metro Siemens S70 Low-Floor Light Rail Vehicle!

**NEW YORK CITY, NY** - MTA New York City Transit (NYCT) yesterday began an accelerated maintenance, cleaning and repair project along its Seventh Avenue Line, which is used by the 1, 2, and 3 line trains. The work is being carried out between 34th Street-Penn Station in Midtown Manhattan and the Atlantic Avenue-Barclays Center in Brooklyn.



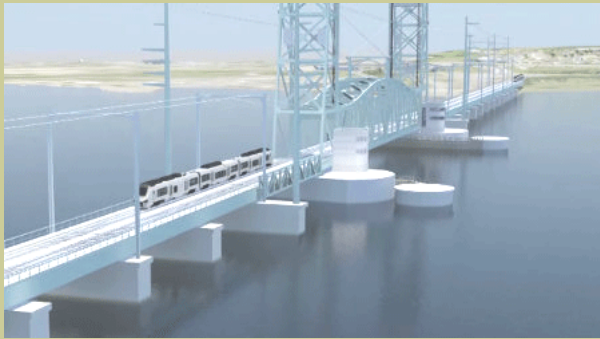
Crews are working on weeknights between Oct. 16-19 and Oct. 23-26. During the overnight closures, maintenance workers will repair and replace track, third rail, electrical and signal components. Crews also will remove debris from tracks and under or around the third rail. The project is being carried out as part of MTA's FASTRACK program, which involves temporarily suspending service on a given line segment stints to complete maintenance work. "FASTRACK enables workers to do more in less time because it effectively allows us to consolidate maintenance forces in a concentrated area and perform proactive maintenance," said Wynton Habersham, NYCT's senior vice president for the department of subways. The Seventh Avenue Line project is aligned with the MTA's Subway Action Plan, which calls for fixing the key drivers of major incidents causing delays in the system.

**OKLAHOMA CITY, OK** - The date for delivery of the first of seven modern streetcars from Brookville Equipment Corp. of western Pennsylvania has been pushed back to mid-November, KWTW-TV reports. The car line is expected to debut to public service about one year from now. The first car delivery is several weeks later than originally projected but should coincide with completion of the car barn (streetcar storage and maintenance facility). The \$131 million project is expected begin service in November/December 2018.



First of seven Oklahoma City Streetcars under construction at Brookville, PA!

**PERTH AMBOY, NJ** - The Federal Transit Administration (FTA) last week issued a finding of no significant impact for New Jersey Transit's project to replace the Raritan River rail drawbridge. NJ Transit this month will begin the final design plans, which are slated to be completed by the end of 2018.



Artist's Concept of New Raritan River Bridge.

Built in 1907, the bridge carries NJ Transit's North Jersey Coast Line trains over the Raritan River between Perth Amboy and South Amboy, New Jersey. Each day, those trains carry nearly 10,000 riders across the bridge, which is also used by Conrail. The new bridge will be on an alignment adjacent to the existing structure, which was damaged during Hurricane Sandy in 2012. NJ Transit will use new materials that can withstand ocean surge forces and saltwater immersion, agency officials said in a press release. The new structure will feature reinforced concrete piers, a new steel superstructure, and a new drive motor and electrical controls. "Replacing [the Raritan River bridge] will allow NJ Transit to continue to move customers to critical job centers and Shore communities for years to come, without prolonged service disruptions related to severe weather events," said NJ Transit Executive Director Steve Santoro. The Raritan River Bridge replacement project is being funded by a \$446 million grant administered through the FTA's emergency relief program for resilience projects.

**SAINT LOUIS, MO** - The St. Louis Post-Dispatch posted a story on October 20th which said the first powered testing of the Delmar Loop heritage streetcar line to train five new operators was to take place during the fourth week of October. The 2.2-mile car line will serve the inner ring suburb of University City. No date has been set for public operation but it could be before the end of the year. The heritage line towed a trolley previously to check clearances and other potential problems.



Ex-Portland Replica Semi-Convertible Trolley being prepared for Saint Louis Service.

**SAN DIEGO, CA** - The "NBC San Diego" web site reports that a casino is spending \$25.5 million over 30 years to buy naming rights for the Metropolitan Transit System Green Line light rail route. The Sycuan Casino will brand the nearly 24 mile line from downtown San Diego to Santee. On the same day, October 20th, the Union Tribune reported that work will begin to rebuild the 32-year-old electrical catenary on the Orange Line, a project lasting until mid-2018. Work was to begin October 23 on the 18-mile line from downtown to El Cajon.



**One of San Diego's Siemens S70 Ultrashort Low Floor LRVs!**

**SPRINGFIELD, MA** - China Railway Rolling Stock Corp.'s (CRRC) new rail-car plant in Springfield, Massachusetts, was expected to be completed last month, the Massachusetts Bay Transportation Authority (MBTA) announced.



**Massachusetts Governor Charlie Baker touring the CRRC Plant on October 12.**

New rail cars for the MBTA's Orange and Red lines will be manufactured at the 204,000-square-foot plant. Full rail-car production is slated to begin in April 2018, with the first units built in January 2019. CRRC recently received a permanent certificate of occupancy, which marks a milestone toward the \$95 million plant's completion, MBTA officials said in a press release. "The upcoming opening of this state-of-the-art facility represents major investments in the future of public transportation in greater Boston that our customers deserve," said MBTA General Manager Luis Manuel Ramirez. The plant will include a nearby 2,240-foot test track, as well as a staging and storage area. In 2014, CRRC was awarded a \$566 million contract to design and manufacture 152 Orange Line vehicles and 132 Red Line units. In December 2016, the MBTA ordered 120 additional Red Line vehicles so it could completely replace the fleet on that line.

## **More Urban Rail Happenings!**

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**GERMANY/FRANCE** - It was reported by Progressive Railroading that German industrial group Siemens and French competitor Alstom announced on September 26th, that they had agreed to merge their rail operations.

Under the Memorandum of Understanding (MOU), Siemens would receive newly issued shares in the combined company representing 50 percent of Alstom's share capital on a fully diluted basis, according to a jointly issued press release.

The merged company will be called SIEMENS ALSTOM, with headquarters based in Germany and rolling stock based in France. Alstom Chief Executive Office Henri Poupart-LaFarge will be CEO of the new entity.

"Thanks to the global reach a cross all continents, its scale, its technological know-how and its unique positioning on digital transportation, the combination of Alstom and Siemens Mobility will bring to its customers and ultimately to all citizens smarter and more efficient systems to meet mobility challenges of cities and countries," said Poupart-LaFarge.



**Former France President, Francois Hollande, inspecting one of Alstom's high-speed TGV trains in February 2017!**

The two companies have combined sales of 13.5 billion euros ( about 18 billion U.S. Dollars) before interest and tax of 1.3 billion euros (about 1.4 billion U.S. Dollars).

"This [merger] will give our customers around the world a more innovative and more competitive portfolio", said Siemens AG President and Chief Executive Joe Kaeser. " The global marketplace has changed significantly over the last few years. A dominant player in Asia has challenged global market dynamics and digitalization will impact the future of mobility".

The new company will benefit from an order backlog of 61.2 billion euros (about 72 billion U.S. Dollars) and will target synergies of 470 million euros ( about \$551.5 U.S. Dollars) four years at the latest after this deal is closed, which is expected at the end of 2018. Siemens Alstom will employ 62,300 people.

It is felt that the new Siemens-Alstom rail merger will eventually absorb Canadian rival Bombardier and a Spanish competitor in the face of emerging Chinese rail car builders, according to French Minister Bruno Le Maire.

**BOLINGBROOK, IL** - In addition to the major merger activity reported earlier, Progressive Railroading reported on October 9th that Siemens and Wi-Tronix are launching a partnership to expand digital predictive maintenance for rail services.



**Shown left to right are:  
 Duane Hong, Wi-Tronix Vice-President, Customer Success;  
 Larry Jordan, Wi-Tronix President and Chief Officer;  
 Johannes Emmelheinz, Siemens Mobility Division CEO Customer Services;  
 Mike Hellmann, Wi-Tronix Executive Vice-President; and  
 Lisa Matta, Wi-Tronix Vice-President, Produce Development.**

As part of the deal, Siemens has made a "significant equity investment" in Wi-Tronix, the companies announced today in separate press releases. Financial terms of the agreement were not disclosed. Based in Bolingbrook, Illinois, Wi-Tronix provides remote monitoring, video analysis and predictive diagnostic systems for rolling stock and rail infrastructure, making critical data available to operators in real time through its "Software as a Service" (SaaS) solution.

Siemens will have a minority stake in Wi-Tronix, as well as a seat on the firm's board.

"Wi-Tronix will continue to operate as an independent legal entity under the control and leadership of our founders," Wi-Tronix officials said in their press release. Having access to Siemens global reach and resources, Wi-Tronix will accelerate development of its products to serve customers across platforms around the world, said Larry Jordan, president and chief technology officer of Wi-Tronix.

"Siemens shares our commitment to improving the world by making the transportation of people and goods safer, more reliable, and more efficient," Jordan said. "This requires rail operators to have access to critical data which supports both real-time decisions and predictive maintenance."

About 12,000 locomotives — primarily in North America and Australia — are equipped with Wi-Tronix technology. "The company [Wi-Tronix] has profound expertise in key technologies such as video analysis, providing unique information for both real-time and predictive applications," said Johannes Emmelheinz, chief executive officer of customer services at Siemens Mobility Division. "Partnering with developers of exceptional technologies is a key part of our strategy to deliver expansive digital services for predictive maintenance."

**LOS ANGELES, CA** - The Los Angeles County Metropolitan Transportation Authority (Metro) has begun considering a series of public-private partnerships to deliver new transportation projects faster than expected. The partnerships, which will be established through competitive bids, could help accelerate three projects funded by the Measure M sales tax, Metro officials said in a press release.





Partnerships will be established through a competitive bid process. LA Metro Gold Line train!

Two of these identified projects are:

1. The Sepulveda Transit Corridor, where the agency is considering building light-rail, subway or bus rapid transit; The agency issued requested for proposals (RFP) on this project last April. This line would connect with the Metro Expo Line (Santa Monica to Los Angeles) and would serve the 11-mile corridor connecting the orange Line bus route in the San Fernando Valley with the future extended the Purple Line subway.

2. The West Santa Ana Branch light-rail project; The 20-mile line would connect Downtown Los Angeles to southeast Los Angeles County.

The announcement followed an evaluation process by Metro staff on separate unsolicited proposals. "The voters of Los Angeles County have given us a mandate to build new public transportation projects as quickly as possible — now, it's our turn to deliver on that promise," said Los Angeles Mayor Eric Garcetti, who also serves as Metro's chair. The next step is to issue requests for proposals that give firms a chance to offer proposals on how to accelerate the projects.

**NASHVILLE, TN** - Nashville Mayor Megan Barry on Tuesday unveiled a \$5.2 billion infrastructure proposal that would include a new 26-mile light-rail system. The plan would be funded by four tax increases that Davidson County residents would need to approve in a May 2018 vote.



Nashville Mayor Megan Barry (At the microphone).

The light-rail system would be built on Nashville's busiest corridors, which include Gallatin Road, Nolensville Road, Charlotte Avenue and Murfreesboro Road. The plan also calls for using existing track to provide light-rail service to Buchanan Street near Tennessee State University. "This comprehensive transportation solution will connect more neighborhoods with each other and open the door even wider to the city's job, education and entertainment centers," Barry said in a press release.

Barry's proposal also includes new rapid bus routes, as well as an increase in existing bus service. Beginning October 26th, Barry's office will hold a series of public meetings about the plan in neighborhoods along the proposed light-rail corridors. After the meetings, the Nashville Metro Council will consider an ordinance to authorize putting the proposed tax increases on a ballot. In April, Barry announced her support for a light-rail system in the city.

**NEW YORK CITY, NY** - Progressive Railroading reported on October 4th that the New York City's Metropolitan Transportation Authority (MTA) had returned to service the first round of rail cars that were refurbished as part of the agency's recent subway improvement plan. Before the R-160 cars re-entered service on the E line, crews replaced each trainset's "master controller," which is the system responsible for braking and accelerating the trains. The master controllers were identified as a leading cause of failure on the R-160s, MTA officials said in a press release.



One of the 100 refurbished R-160s with the exterior markings on the E line!

Workers also removed seats at the ends of each car to increase capacity and reduce passengers' time for boarding and disembarking. The seat removal is expected to boost capacity in each train by 80 to 100 passengers.

The R-160 subway car class consists of 1,662 cars built by Alstom Transportation and Kawasaki Heavy Industries that entered service in 2006. These cars replaced all the R38, R40, R40A and R44s. Some of the R32s and R42 class were also replaced by these cars. The R-160 class consists of the R160A subclass built by Alstom (series 8313 to 8372; 9233 to 9802; and 9943 to 9974, and the R-160B subclass built by Kawasaki (series 8713 to 9232; 9803 to 9942. 372 R160A of these cars are configured in 93 four-car sets (8313-8652; 9943-9974). The remaining R160A and all

R160B are arranged in five-car sets. These cars are very similar to the earlier R-143 (Kawasaki, series 8101-8312), built 2001 to 2003; and later R-179 (Bombardier, series 3010 to 3309), built 2016 to date. But they can not be "trained" together due to electrical differences.



**R160B 1888 leads two five-car sets on the N line.**

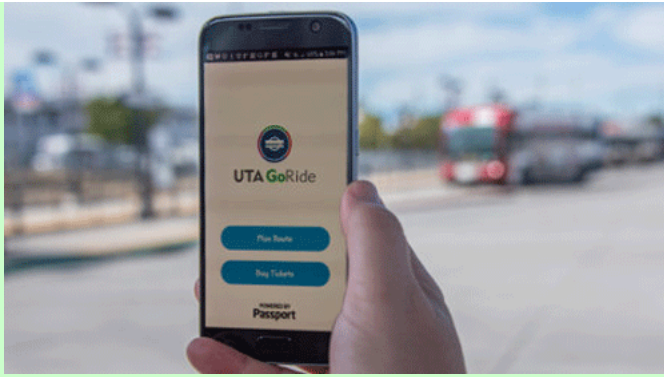


**R143 8152 with 8-car train!**



**R179b 3010 with 10-car train!**

**SALT LAKE CITY, UT** - The Utah Transit Authority (UTA) has launched its "UTA GoRide" mobile ticketing app, which enables riders to purchase light-rail, streetcar and bus fares on their smart phones. The app enables riders to buy single-ride fares or day passes for themselves or other passengers.



The new GoRide app can be used to purchase mobile tickets for light-rail, streetcar and bus trips!

GoRide isn't yet available on UTA's FrontRunner commuter-rail routes. Fares can be purchased in advance or activated once riders are ready to board their bus or train, UTA officials said in a press release.

On September 28th, the agency held a kickoff event for the app at its Murray Central TRAX light-rail station. UTA is just one of the latest agencies to roll out a mobile ticketing app.

SAN FRANCISCO, CA - The "Inside Track", the official newsletter of the Market Street Railway reported in their 2017, No. 3 issue that Muni will be stressing restoration of double-ended streetcars in their next contract for renovations. The E-line currently requires double-ended cars due to the lack of a wye or loop to turn single-ended cars at the southern terminal of the line, Sixth & King Streets. There are seven such cars scheduled for full renovation, which may include modern propulsion systems to reduce maintenance concerns and increase reliability. The seven cars are Muni 130 (1914); Market Street Railway 798 (1924); New Orleans Public Service Inc. 913 (1922); Johnstown Traction Co 351 (1926); Melbourne 496 (1929), Osaka 151 (1927) and Oporto 189 (1929). Modifications will be required of several of the cars to conform to the American with Disabilities Act (ADA).



San Francisco values their historic fleet and often pulls the historic electric and cable cars off the streets when there is the possibility of damage from the "sludge" contingent. Such a possibility existed on August 26, 2017 due to some downtown protest so Rick Laubscher, Market Street Railway President, took the above photo of the ex-Minneapolis, ex-Newark F-line cars at Metro East during their "Summer Vacation". From left to right are: 1076 (Washington, D.C.), 1074 (Toronto), 1079 (Detroit), 1080 (Los Angeles) and 1075 (Cleveland)!

It is also planned to renovate six of the current group of Milan Cars, perhaps with updated propulsion systems. San Francisco has committed to making the historic trolleys an integral part of their excellent transit system.

San Francisco held what many claimed was the best Heritage Weekend ever on September 9-10, 2017. This year, the celebration centered around the oldest Muni streetcar line, J-Church. Original Muni Streetcars, car 1 (1912) and car 130 (1914) made runs to 30th and Church (*the original terminal of the line*) all day long on both days and they were joined by PCC 1051 (Harvey Milk Car) and 1060 (Philadelphia 1938 "Cream Cheese"). Melbourne tram 496 operated along the Waterfront on the E-line from the Caltrain terminal to Fisherman's Wharf and the 1896 "Dinky" ran along with the Boat tram between the museum and Pier 39 on both days. 1907-built O'Farrell, Jones & Hyde Cable car 42 ran on the California Cable Car line. All the rail cars were full all day long. Several buses including 1956 "Mack" 2230 were on statid display along with a new hybrid electric coach.



Car #1's crew, Emma Gonzalez and Melvin Clark pose in front of #1 with new Siemens #2006 to the right!

San Francisco affords many photo opportunities and some are just too good not to bring to you. On October 25, 2017, as the second game of the World Series was getting underway in Los Angeles, the scene below at Metro East was recorded, with Siemens 2006 (2017), Saint Louis PCC 1015 (1948) and Holman Car Co #1 (1912) all being readied for service. Three vehicles spanning 105 years of urban rail transit represented in one photo!



**TORONTO, ONTARIO, CANADA** - Bombardier continues to deliver new "Flexity" trams to Toronto, although at a much closer pace than originally envisioned when the original contract for 204 vehicles was inked. The first 60 cars were scheduled to be equipped with both pantographs and trolley poles since it was estimated that it would take some time to convert the entire OCS to pantograph use. Finally, in September 2017, cars on the Harbourfront route began to operate with pantographs. The next photo by Steve Munro, published in *Tramways & Urban Transit* shows car 4434 on that line using its pantograph on September 17th.



**WASHINGTON, D.C.** - The National Transportation Safety Board (NTSB) has determined that two Union Pacific Railroad trains collided in Texas in September 2015 because the crew of one train was likely asleep before the accident occurred, the agency announced this week and reported by *Progressive Railroading*.



**The Texarkana Crash Scene - November 2015!**

Contributing to the incident near Texarkana, Texas, was the lack of a functioning positive train control system, according to the NTSB's accident brief. The incident occurred at 12:34 a.m. on Sept. 8, 2015, when a westbound UP train collided into the side of a northbound UP train. The striking train had been traveling west on the Pine Bluff subdivision's main track, while the other train had been traveling north on the Little Rock subdivision. The trains collided at a diamond crossing of the two subdivisions.

Two locomotives of the striking train derailed and seven cars of the struck train derailed. The lead locomotive of the striking train spilled about 4,000 gallons of diesel fuel. The engineer and conductor of the striking train sustained minor injuries. Neither crew member on the other train was injured.

NTSB officials determined that the probable cause of the accident was the failure of the westbound train crew members to respond to wayside signal indications that required them to slow and stop the train before reaching the Texarkana interlocking. The crew members could not provide NTSB investigators with detailed recollections for a period of time right before the collision, according to the NTSB report. "The NTSB believes that both UP crew members [of the striking train] experienced independent fatigue-induced disengagement that caused them to fall asleep while operating the train," the report stated.

**MODELING INFORMATION:**

**Another Approach to Overhead Wire Cleaning!**

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*by Harvey Simon*

Keeping overhead wire clean is one of the challenges of traction modeling. With only a single point of contact between wheel and wire, it's crucial to keep the wire free of dirt and grime. Everyone has their favorite method, and I've found the use of ATC 6006 Conductive Lubricant, Train Control System (TCS) Keep Alive Decoders and frequent running are very helpful. But sometimes it's still necessary to get underneath the wire with a Q-tip impregnated with some kind of cleaning agent (acetone or isopropyl alcohol are both effective) to clean the wire. This can be especially tricky with structures and other scenery in the way. So through some experimentation I came up with a different method.



Custom Traxx/Miniatures by Eric San Francisco Muni Milano 1811 used as Wire Cleaning Car.

As you can see from the above photo, I use the front pole of a two-pole vehicle turned around as my wire cleaner. I cut a very small piece of a handy wipe towel, twisted it tightly, wedged it into the trolley wheel (*I use NMRA S-5 Specification-compliant trolley wheels such as Bowser #12507, not sliders*) and then tape it around the pole. Power is supplied by the rear pole while the front pole does the cleaning.



Miniatures by Eric HT-P2 Pole with NMRA-compliant trolley wheel contactor used as Wire Cleaner!

Running the car slowly will clean the wire, and if you're careful the cleaning pole won't dewire, even through turnouts and crossings. If you have several cars you can run them behind each other, and with each pass the wire gets cleaner. The only thing you'll need to do is change the small piece of cloth as it gets dirty. Hopefully this method can work for you too.

## Building Our Shapeways S70 Model!

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We have been talking about modern LRV models for over two years. We tried to get one mass produced but we learned that if you want something done, do it yourself.

The ready-to-run phase of this hobby should have been foreseen if we had businessmen actually running most of the model railroad hobby. If we had those types in the hobby they would have been looking for ways to attract new customers instead of writing off an entire generation.

During the past two years, Custom Traxx and the Southern California Traction Club have obtained ten HO scale models of the S70 vehicle. While the majority were obtained directly from Volkmar Meier, three of them have been purchased in the Interurban Models store at Shapeways.

So we followed the instructions that are on this very site in our Trolleyville Schoolhouse. We used alcohol for the treatment as specified in paragraph 2 and we did allow the parts to soak overnight in the warm water bath. The instructions are not complicated and are easy to follow. The steps were easy to accomplish.

Then we followed the instructions that are on this very site in our Trolleyville Schoolhouse. We used Tamiya #87026 Surface (gray) primer that comes in an 100ml spray can for the inside of the three body shells and all three floors. Then we used tru-color TCP-009 Grimy Black for the inside of the bodies and all sides of the floors except the front of the bulkhead that can be seen through the front windshield. There are places that an airbrush cannot reach inside the car bodies, especially in the cab area. You will want to use a brush for those areas and the area around the destination sign and the areas behind where the windshield will be affixed. Getting the inside as black as possible will be greatly appreciated if and when you try to add lights. You will be using LED lighting. Do not even consider using incandescent bulbs even those as small as 1.5 volts. it takes almost nothing to warp or melt these 3D plastic castings.



**Unit 8 after initial painting. Touch-up will be required.**

As far as the front of the bulkhead in concerned, We brush painted that surface with TCP-833 Flat Foundation.

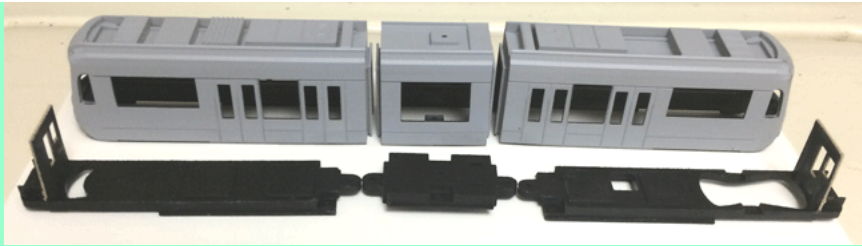
*Note: Most of the Tru-color line is marked as non-brushable. This means that the paint was designed to be applied with an airbrush. To apply with a brush, thin the paint and apply without going over the surfaces painted. Use many thin applications until the desired effect is achieved. This will take some skill but the model will look better especially if you later place an operator in the cab. Tru-color does make a line of brushable paints in their 800 series so we may try TCP-851, Brushable Engine Black on our next project.*

By the way, we are using an Iwata H-line HP-CH, gravity feed airbrush that has a 7ml cup. For years we used an Iwata Eclipse airbrush with Floquil and Scalecoat paint. We felt that with the major change in paints after so many years of use, we should start all over again with an airbrush and configure it for these paints.



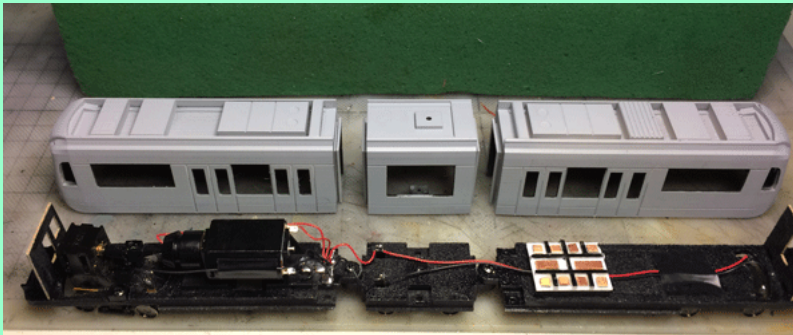
**Iwata Hi-line Airbrush used in this project!**

At this point in the project, the S70 bodies and floors appear as shown in the next photo:



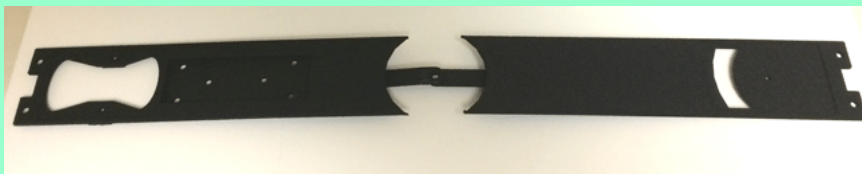
**S70 Bodies in Gray Primer and Floors in Flat Black!**

Using the 2-56 screws provided by Interurban Models, we assembled the floors and using 30AWG wire from Train Control Systems (TCS) wired the vehicle for two-rail operation. We will add the Dip Switch for overhead wire operation later. We also are preparing the model for the installation of a DCC decoder, preferably a TCS Keep Alive KAT26. We have already fabricated and installed our ten connector "pad" to ease the decoder installation. The decoder will be mounted in the B unit on the floor just to the right of the pad. Ten connections will allow two for track power, two for motor control, five for lighting or other functions and one for lighting common ground. Since we already have S70 models painted for San Diego, Minneapolis-St. Paul, and Atlanta. This unit is slated for Salt Lake City livery as soon as decals are prepared. So this vehicle will be painted white.



**Bowser-powered S70 in work!**

At the same time, we are assisting West Coast Traction Supply in the testing of their first HO scale Light Rail Vehicle model, the Los Angeles Metro P865. These 1989-1990 NipponSharyo built vehicles brought urban rail transit back to Los Angeles with the opening of the Blue Line from Los Angeles to Long Beach. In the next two photos, the two floors for the vehicle and the first completed test unit are shown:



**First test P865 floor (modifications already underway)!**



**Bowser-powered P865 test unit under evaluation!**

The P865 models are available on Shapeways in the West Coast Traction Supply (WCTS) Store. The bodies are \$148.00 and the floors are \$22.00. Decals are currently under development by Custom Traxx and should be available before the end of the year. Floors are designed for the Bowser traction mechanism.

Also available in HO scale from Shapeways in the West Coast Traction Supply (WCTS) Store are Pacific Electric "Hollywood Car" models in the Original, Valley Seven and the Modernized versions. These appear to be the best "Hollywood" Car models made in HO scale to date. One of the nice features is that the floors already have some interior items built in. The bodies are \$75.00 each and the floors are \$25.00 each. Floors include four St. Louis M-72 sideframes that fit the Bowser Traction mechanism. Decals are available from Microscale and Custom Traxx. Floors are designed for the Bowser traction mechanism.



**WCTS Original Hollywood Car Kit  
painted and finished!**



**WCTS Valley Seven Hollywood Car Kit  
painted and finished!**



**WCTS Modernized Hollywood Car Kit  
painted and finished!**

The Times just learned that WCTS is also working on HO scale models of the Illinois Terminal (IT) 470 class of Center Entrance Cars. Shown below is the first test model painted and finished. If you have interest in acquiring one of these cars, you should contact WCTS directly and soon using the ["Send Message"](#) link in their Shapeways store, found at <https://www.shapeways.com/shops/west-coast-traction-supply>.

The four Illinois Terminal 470-473 series cars began their life as East Saint Louis & Suburban 70-73 after being built by the Saint Louis Car Co in 1924. Since they were built by the same manufacturer at around the time the Pacific Electric "Hollywood" cars were being built. It is no wonder that there are considerable similarities between the two classes of cars. Illinois Terminal acquired the four in 1933 and were used until 1958 when all IT electric service ceased.

