

TRANSIT

Calgary “unmasks” new LRT Car

Transit officials in Calgary recently unveiled a new C-Train LRT car, the S200, which they deem to be more reliable, more spacious and more accessible with a variety of new features.

Nicknamed the “Mask”, the winning design for the new LRT car is based on a hockey goalie mask. The first four-car train from Siemens Canada will arrive this spring with new cars arriving on a regular basis until early 2017.

In total, 63 Mask cars have been ordered to replace the aging U2 cars as they reach the end of their 34-year lifespan. Both have about the same capacity of 200 passengers per car, but the four-car Mask trains will add space for 200 more riders.

The retirement of the U2 LRT cars in Calgary will leave Edmonton as the only North American city still operating U2s. The Edmonton cars were recently refurbished to provide additional years of service.

“A new member of our family has arrived,” said Doug Morgan, Calgary Transit Director, addressing reporters at the Oliver Bowen maintenance facility. The cars feature heated floors for winter, air conditioning for summer, more interior space, and more comfortable seats, including a leaning pad in the articulated area of the train. The front doors have been moved further back to improve passenger flow, and ramps have been replaced by sloped floors so all doors are wheelchair accessible. LED lights at the doors turn green to let passengers know when they are opening, and red when the doors are closing.

Digital monitors onboard the trains provide passengers with route information and news updates during their rides, and there are double the number of interior speakers to provide improved sound for announcements. Morgan said they are still working on content for the “infotainment” system.

The cars are also equipped with multiple high-resolution cameras for improved safety and security. A glassed-in operator’s compartment will allow the driver a better view of pedestrians, and a wide open concept allows peace officers to see from one train to another.

The cars cost approximately \$3.2 million each, with some funding provided by the Province of Alberta. They are expected to last 35 years. [Source: Calgary Herald, January 17, 2016]

Newest San Francisco Trolleybuses can go “off the grid”

MUNI’s new electric trolleybuses are ultra versatile and can sometimes be spotted running with the poles down. While MUNI’s older trolleybuses might get a block or two at most this way, the brand new Xcelsior class of trolleys were designed to run for upwards of five miles from a stored charge, allowing route changes and extensions—short or long term—without having to first build new overhead wire.

MUNI intends to start going wireless to provide Special Event service to the new Warriors Arena planned in Mission Bay, where the planned 2018 opening date means the 22 Fillmore Route will need to serve Mission Bay a few years ahead of plans to erect any new wire. (continued on p. 2)

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First of Calgary's sleek new S200 "Mask" LRT cars.
(Calgary Herald, via CNW Newswire)

New SF Trolleys (con't from p. 1)

The new San Francisco articulated trolleybuses were ordered jointly with Seattle. It's called buying in bulk for better pricing! The first prototypes arrived in the summer of 2015, but now they are in service in numbers. Each new vehicle goes through a 5,000 mile test period to identify any manufacturing defects before entering regular service. [Source: Muniverse, November 11, 2015]

The Long, Long Trolley – Linz Austria Orders Extra Long Trolleybuses

At a November 4th press conference, the Austrian city of Linz announced an order for 20 new double-articulated Van Hool 24 metre trolleybuses with batteries for off-wire working. These will replace the entire present fleet. The first deliveries are scheduled for early 2017, and the complete fleet will be in service by 2019.

These will be the longest trolleybuses ever to be used in Austria as, apart from the test of a Zurich double articulated trolleybus in Salzburg and Linz a few years ago, 18 metre single articulated vehicles have been the longest vehicles in service. 18 metres is the standard length of articulated buses the world over.

The four Linz trolleybus routes--41, 43, 45 and 46--will all remain trolleybus operated and the transit authority also is reported to have some expansion plans. Streetcar and light rail expansion plans are also under development.

For some time, Linz administrators had sought to eliminate the trolleybus system there to simplify their jobs, arguing that they could only maintain two types of vehicles. However, electric transport has strong political support in Linz—and perhaps cities are slowly coming to the realization that the future means electric transport in all its forms, and not diesel buses. [Source: TBus Group, November 5, 2015]

Bangkok Thailand to Investigate Replacement of NGV buses with Trolleybuses

The Transport Ministry in Bangkok, Thailand will conduct a study on trolleybuses and electric vehicles (EV) in seeking replacements for Bangkok's natural gas fuelled (NGV) buses.

Transport Minister Arkhom Termpitayapaisith said he had ordered the Office of Transport and Traffic Policy and Planning to work with the National Science and Technology Development Agency (NSTDA) to study the pros and cons of trolleybuses and other electric vehicles (EV) now that the government is officially considering them as alternatives. The change in attitude came in response to direction from Prime Minister Prayut Chan-o-cha's office. Bangkok Mass Transit Authority (BMTA) terminated the bidding for the first batch of 489 NGV-fuelled buses worth 1.7 billion baht in November. Officials later stated there was a problem with the terms of reference for the procurement.

The agencies will also look into the possibility of acquiring prototypes for the types of buses being considered.

"The good thing about the electric trolleybus is that the system would not require an overly large budget", Transport Minister Arkhom quoted Gen. Prayut as saying. The trolleybus would help save energy and would be environmentally friendly, he added. The transport minister said the BMTA tested battery electric buses produced by Loxley Plc on the capital's roads last year for a trial period and their performance was not unsatisfactory. [Source: Bangkok Post, December 8, 2015]

Seattle to Expand Trolley System after Ballot Measure Passes

With the passing of Proposition 1 on November 3, Seattle has secured funding for a wide variety of progressive updates to its transportation and transit systems. Among these are several changes that will enhance the city's large electric trolleybus system – the second largest system in the U.S.

As previously reported in Transit Talk, Route 11 is slated to be converted to a Bus Rapid Transit (BRT) service using trolleybuses. Although such services exist elsewhere in the world, this would be the first trolleybus rapid transit line in North America. As proposed, the service will run from Coleman Dock to at least 23rd Ave., although there is pressure to extend it to Martin Luther King Way.

The conversion of current diesel Route 48 to electric trolleybus is scheduled to be completed in 2018 following the rebuilding of 23rd Ave. from Rainier Ave. to the Montlake area. Previous reports indicated that the funds for this improvement were already secured before Proposition 1.

15 minute headways or less are now standard on most trolleybus routes in Seattle. Although there is no final word yet, there is the potential for the extension of trolleybus Routes 3 and 13. [Source: International Electric Trolleybus News, R. C. DeArmond, October 23, 2015]

Historic Thunder Bay Trolleybuses Await Completion of Museum

According to an administrative letter to the local City Council, the city of Thunder Bay has agreed to continue storing a pair of refurbished historic Brill trolleybuses that were built in Thunder Bay while work on a local transit museum continues. Administrators had previously pushed to move the vehicles out of their facility.

Acting General Manager of Community Services for the city, Gerry Broere, said the valuable historic vehicles will stay indoors at the city's main transit garage, despite space constraints. "We are working with this committee because we appreciate their concern that they don't want to have these out in the elements or in an area where they could be damaged," he said.

The chair of the Historical Transportation Committee, Charlie Brown, said that his organization is working to have a museum built to showcase the area's rich transit history. Brill trolleys were manufactured in the former city of Fort William until 1954, at what is now the Bombardier plant.

The two Brills in storage were brought back to Thunder Bay in 2001 from British Columbia and painstakingly restored. One bus was restored in the colours of Port Arthur, the other in the colours of Fort William. The cities of Fort William and Port Arthur eventually merged to form Thunder Bay. [Source: CBC News, January 19, 2016]

Moscow Russia Celebrates 82 Years of Electric Trolleybus Service

From the sleek, modern and electronically sophisticated vehicles of today, to rare vintage types dating back as far as the 1940s, electric trolleybuses paraded through the streets of Moscow on October 24th, 2015 to crowds of onlookers numbering in the thousands. The parade started at 12 noon on Frunzenskaya Embankment and traveling through the city centre to the banks of the Moskva River. The crowds were enthralled to see the vehicles, some of which are usually only seen in museums, and celebrate this milestone in the continuing story of Moscow's famed trolleybuses, often dubbed "soldiers of the streets".

A vehicle exhibition at the close of the parade drew huge throngs of visitors who were entertained by actors in historical costumes and presentations by the curators of the Moscow Transport Museum.

"Today we are delighted to invite visitors to the birthday celebration of the Moscow Trolleybus," said Yevheniy Mihailov, General Director of the Moscow Transport Authority. "This parade of vehicles gives city residents a unique opportunity to get in touch with their city and see how public transit has changed over time." The first electric trolleybus in Moscow made its maiden journey on November 15, 1933. Today, Moscow is proudly served by 83 trolleybus routes and some 1,200 trolleybus vehicles, carrying more than 1.1 million passengers per day. [Source: Sputnik News, November 24, 2015]



Thousands gather to see Moscow trolleybuses of the past 75 years and celebrate 82 years of silent, fume-free electric trolley service. Moscow opened its trolley system in 1933. While many cities today grapple with finding alternatives to diesel buses, Moscow is now ahead of its time with a clean, modern electric trolley system. [Photos: Trolleymotion, S. Fedorov via D. West]

Chicago's Union Station Confirmed Home to Heavy Diesel Pollution

Confirming what Chicago-area commuters have experienced for years, US Federal regulators have now documented spikes of lung- and heart-damaging pollution in the blue clouds that hover between diesel locomotives at Chicago's Union Station. In a report released in November, the U.S. Environmental Protection Agency said testing conducted during the summer found that soot concentrations on the platforms were significantly higher than on the streets outside. Air quality generally was worst during the evening rush hour, when the most people are present. The findings provide new evidence of chronic pollution problems at the region's busiest commuter station, despite well-publicized efforts to improve air quality: The two operating agencies installed more efficient air filters on passenger cars and switched locomotives to cleaner fuel; they also secured federal funding to equip locomotives with technology that automatically powers down the engines inside Chicago's downtown stations.

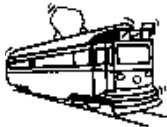
"These locations are not healthy areas to spend much time in," said Scott Fruin, a University of Southern California researcher who studies air pollution during commuting but was not involved in the EPA study.

Federal regulations generally don't address situations in which people breathe highly polluted air for short periods every day. Instead, the EPA determines violations of the Clean Air Act by measuring soot pollution over longer periods. The 24-hour legal limit for particulate matter smaller than 2.5 microns, the most commonly used measure of soot, is 35 micrograms per cubic meter of air. At Union Station, average levels of soot jumped from 43 micrograms per cubic meter of air outside the station to 129 on the north platform, according to a summary of the EPA's results. Soot levels were significantly higher on the south platform -- 203 micrograms on average. Commuters were exposed to the dirtiest air at 5 p.m., when rush hour trains packed into the station led to average levels of 299 micrograms per cubic meter.

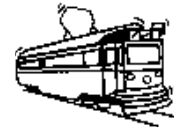
"The conditions at the station and on the train are disgusting," said Matthew Kempf, who works in the financial district and rides Metra from Schaumburg to Union Station. "Often many people are covering their face and nose and are coughing until we get out of the station and get some fresh air."

Diesel exhaust is a major source of tiny soot particles, which are one-thirtieth the diameter of a human hair and can lodge deeply in the lungs. It also contains toxic substances such as benzene, arsenic and formaldehyde, many of which can cause cancer. Breathing even small amounts of soot can inflame the lungs and trigger asthma attacks, researchers have found. Several studies have linked soot with heart attacks and premature death.

Potential targets for legal action, if it comes to that, include Metra, the regional commuter rail agency, and Amtrak, the passenger rail operator that runs up to 56 trains daily out of Union Station. Neither agency has taken the initiative to discontinue the use of diesel trains altogether and switch to electric, which would eliminate the pollution problem entirely. [Source: Chicago Tribune, November. 6, 2015]



Electric Streetcar News



Fourteenth new Streetcar Enters Service in Toronto

The TTC's newest low-floor streetcar, car number 4415, has now entered service on the 510 Spadina route, bringing the total number of new streetcars in service to 14.

The new accessible streetcars are equipped with Presto machines and ticket validators to allow customers to pay their fare. The machines will also allow customers without a smart card to purchase a single-ride Proof-of-Payment (POP) ticket using coins or tokens.

The new streetcars have been plagued by delivery delays, causing many headaches for the TTC. Bombardier originally committed to delivering 67 streetcars to the TTC by October 2015, however to date only 14 have been delivered and put into service.

Bombardier recently informed the TTC late last year that it was unable to meet a revised timeline calling for the delivery of a total of 23 streetcars by the end of 2015. Instead, Bombardier said it will provide the city with 19 streetcars by Dec. 31, 16 of which should be fit for service by the new year. All of them have not yet materialized on Toronto streets.

In October 2015, the TTC board voted unanimously in favour of initiating legal action against Bombardier for delays in the delivery of the city's new streetcar fleet. The motion authorizes the TTC's legal counsel to commence legal action against Bombardier for "all damages sustained by the TTC relating to or arising from the schedule delays in the delivery of the streetcars." A second motion authorizes TTC management to "consult with alternative suppliers for delivery of the remaining TTC streetcars should Bombardier be unable for whatever reason to fulfill this order within contractual timelines."

The transit commission hopes to recoup a \$50 million penalty for late delivery and seek additional damages for "maintenance and overhaul costs of the existing streetcar fleet, service and customer impact costs, and TTC staff time that has been expended on this matter." Sources: TTC, January 15, 2016; CP24.com, October 28th and November 20, 2015]

Historic Streetcar Fundraiser Launched in Seattle

A citizen campaign is underway to maintain the presence of the George Benson historic streetcars that once operated Seattle's Waterfront line as part of Seattle's new streetcar network. Friends of the Benson Trolleys, is launching a two-year fundraising effort to retrofit two of the five streetcars so they can operate on Seattle streetcar tracks and be placed in service alongside the modern cars.

Three of the cars have been sold to the city of St Louis and will be placed into service on the heritage trolley line that will serve that city's Delmar Loop district.

"While we would prefer to have all five cars stay in Seattle, we believe that if we can put the remaining two cars back in service we will honor George Benson's legacy and provide a link between the historic districts in Chinatown-International District, Pioneer Square and the Pike Place Market," said former Metro General Manager Tom Gibbs, who has long advocated for the Benson cars. Gibbs and other advocates are leading the Friends of the Benson Trolleys.

The Waterfront streetcars - originally operating along the Seattle Waterfront and the Chinatown-International District - have been stored in a warehouse in SoDo since being taken out of service in 2005. The Benson streetcars were originally constructed in Melbourne, Australia and were brought to Seattle in 1982 by Seattle City Councilmember George Benson to operate on Seattle's waterfront [Source: King County Metro, Jan 18, 2016]

Texas: Streetcars to Return to El Paso

Construction began on three Downtown El Paso streets in late 2015 as part of a \$97 million project to return streetcars to El Paso. Trackwork is to begin in January. The 4.8 mile streetcar route will take about 3 years to complete.

El Paso Electric has coordinated with the mobility authority to replace its existing poles on Father Rahm Avenue with taller ones to provide clearance for the streetcars. The utility will then transfer the existing equipment onto the new poles and remove the existing ones, officials said.

As planned, the streetcars will run north from Stanton Street near Downtown to the University of Texas at El Paso, loop through the campus and run back south on Oregon Street. They will make 27 stops along the way.

Six vintage President's Conference Committee (PCC) streetcars that were used in El Paso until 1974 are in Pennsylvania being restored by Brookville Equipment Corporation while the track construction is underway.

A spokesperson said the first two vehicles will be ready for testing in either late 2017 or mid-2018. The remaining four vehicles are set to be delivered mid to late 2018, including the ceremonial vehicle with perimeter seating reminiscent of the original trolleys that traveled to Juarez.

A future phase of the project may restore service to Juarez. [Source: El Paso Times, June 29 and November 10, 2015]

Atlanta Georgia Approves Streetcar Plan

Despite a rocky start to its return in Atlanta, officials are moving forward with an ambitious long-term plan for citywide streetcar service.

In December, officials released a 50-plus mile map that proposes five crosstown routes, connections to multiple MARTA stations and 22 miles of streetcar lines along the proposed Atlanta Beltline circle. Although the plan will take years and billions of dollars to realize, it is the city's first step toward securing the funds for the project.

The existing Atlanta Streetcar operates on a 2.7-mile track in downtown Atlanta. It cost about \$98 million to launch.

The most likely way the streetcar expansion would be developed is with a mix of federal and local funding, said John Orr, Transportation Division Manager for the Atlanta Regional Commission. Voters may also be asked to approve a transportation sales tax in a referendum.

The now-approved plan deletes a proposed route that would have put streetcars on Peachtree Road, from the Lindbergh MARTA station to Lenox Square. District 7 Councilman Howard Shook, who represents much of Buckhead, asked that the leg be eliminated. The request came after controversy erupted over adding bike lanes to Peachtree, a proposal that drew the ire of area residents who didn't want to share the now gridlocked road, forcing the Department of Transportation to scrap the idea. Buckhead was formerly served by electric trolleybuses, but a return to electric transit does not appear to be in the cards.

[Source: Atlanta Journal-Constitution Dec 11, 2015]

Kansas City Welcomes First Streetcar

Kansas City welcomed its first streetcar vehicle to town in early November, transported from a manufacturing facility in Elmira, N.Y. A crowd of about 75 to 100 people were on hand for the arrival. "It's an historic day for the city," said Tom Gerend, Executive Director of the Kansas City Streetcar Authority. "It's the result of years of hard work toward a vision for a robust transit system."

The vehicle is a sleek, modern, bi-directional vehicle assembled in New York from components fashioned in Spain. It's climate-controlled and Wi-Fi enabled. It's approximately 77 feet long, weighs 78,000 pounds, and can carry a maximum of 150 passengers, most of them standing. The car was examined for any maintenance issues, and actual testing on the route began a few days later.

The streetcar will operate on a \$100 million, two-mile route from the River Market to close to Union Station. The line is due to open in March. This the first streetcar in Kansas City since the old system shut down in June 1957. It was assigned fleet number 801, picking up where numbering left off nearly 60 years ago with streetcar series 725-799.

Kansas City officials are still clarifying the prospective arrival times of the remaining three streetcar vehicles. [Source: The Kansas City Star, November 2, 2015]



Left: The sleek new Kansas City streetcar during testing. Kansas City is one of numerous U.S. cities in which the streetcar is resurging as the mode of the future due to its proven ability to attract riders and revitalize neighbourhoods.

[Photo courtesy KC Streetcar]

Milwaukee gets Streetcar Funding, chooses Streetcar Supplier

On October 26th, the City of Milwaukee was awarded a \$14.2 million federal grant for construction of a spur connecting the streetcar with the lakefront. The Lakefront Line, which was approved by the Common Council in February, aims to connect Cathedral Square to the lakefront using Broadway and Milwaukee, Michigan and Clybourn streets.

"This critical federal grant for the Milwaukee Streetcar will bring thousands of residents and visitors to major attractions and new developments on Milwaukee's lakefront," a spokesperson said in a statement. "This announcement builds on the positive momentum we're experiencing in the heart of the city and will also have a significant impact on our neighborhoods, creating hundreds of construction jobs and better connecting our neighborhoods to downtown."

On Nov. 13, a vehicle supplier was chosen for the streetcar system. Brookville Equipment Corp. will build The Milwaukee Streetcar's first four modern vehicles and possibly a fifth car for its Lakefront Line.

"We have reached another major milestone toward making The Milwaukee Streetcar a reality," Mayor Tom Barrett said. "I look forward to the economic development and transportation benefits The Milwaukee Streetcar and its modern new vehicles will bring Milwaukee."

Proposals from various streetcar vendors were evaluated on a "best value" approach that considered four criteria – qualifications, technical, budget and aesthetics. Each vehicle will be 67 feet long, hold up to 150 passengers, offer two doors per side and provide access for wheelchairs and for bicycles to be transported. They will be air-conditioned. The first vehicle will be delivered in approximately 24 months. All four vehicles are to be delivered by early 2018.

Brookville has been in the streetcar business since 2002, building new modern streetcars and overhauling, restoring and modernizing existing streetcar vehicles. [Sources: Milwaukee Journal Sentinel, October 28, 2015; City of Milwaukee, November 13, 2015; Brookville Equipment Corp, November 13, 2015]

Massive Light Rail Expansion to take place in Seattle Area in 2016

Sound Transit Board Chair Dow Constantine announced January 13th that an epic year lies ahead for expanding regional light rail service in the Greater Seattle area. Some milestones include:

- Opening light rail to the Capitol Hill and University of Washington areas in March and Angle Lake in September. Both projects are under budget and ahead of schedule
- Kicking off light rail construction to Mercer Island, Bellevue and Redmond in February
- Completing tunnel mining for the light rail extension to Northgate in late 2016
- Shaping a November 2016 Sound Transit ballot measure to seek additional funding

“In 2016 we will complete major light rail projects and present to voters a truly regional system that reaches Tacoma, Everett, Redmond, Ballard and West Seattle,” Constantine said. “It will be a landmark year of progress for our critical work to get commuters out of congestion.” [Source: Sound Transit, January 13, 2016]

Battery Electric Bus News

Chicago to Expand Experimental Battery Electric Fleet

The CTA is primed for a major expansion of its battery electric bus experiment using an \$8.1 million federal grant to buy as many as 27 of the zero-emission “green machines,” the Chicago Sun-Times reported. The Chicago Transit Authority was the first major transit agency in the United States to use battery electric buses as part of its regular service.

The CTA has been cleared to change an \$8.1 million federal grant for 26 hybrid buses to 27 battery electric buses under a plan approved January 7th. The battery powered buses will be more environmentally friendly and use three times less fuel than the diesel-electric hybrids, CTA officials claimed.

The CTA will use various battery electric buses to make further in-service tests of the technology and to help the agency decide the right mix of buses when it makes its next major procurement, a purchase of more than 1,000 buses in 2020. Those new buses would replace over half the CTA’s existing fleet of 1,888 buses, offering the agency the chance to convert to a majority battery electric fleet if funding allows.

A single standard-sized battery electric bus costs around \$800,000. The federal grant provides \$300,000 per bus, which covers the cost difference between a battery bus and a diesel one. The environmental impact of such a switch is substantial. Each battery electric bus would save the CTA roughly \$25,000 a year in fuel costs and remove from the air the equivalent of 23 cars worth of particulate matter, CTA officials estimate.

“We want to increase the sample size so we have a broader test. Then, four or five years from now, we’ll have enough information to decide what our next large purchase will be,” said Brian Steele of the CTA. [Source: Chicago Sun Times, January 17, 2016]

Montreal Unveils Special Electric Bus Livery, joins City Mobility Program

The STM and Nova Bus have unveiled a visual identity for the electric buses to run in that city. People will recognize 100 percent electric buses with a distinct visual identity different from Montreal’s regular bus fleet.

Montreal is a major partner in the “City Mobility” program, which aims to mobilize key players in the implementation of innovative pilot projects. It includes new technologies designed by Volvo and its subsidiaries to increase energy efficiency and reduce emissions of greenhouse gases. This program is deployed in nine cities, and Montreal is the first North American city to take part.

In Montreal, the program consists of the installation of two fast charging stations on route 36. Two fast-charging stations will be built in spring in Victoria Square and Angrignon terminus. Testing will begin in 2016 and will be followed by commissioning. The testing of fast-charge battery electrics will continue until 2019.

The three buses to be used will be designed under the direction of Nova Bus and will have four batteries recharged via a rapid charging system.

[Source: STM, Dec. 1, 2015]

Ogden Utah Shows off Battery Electric Bus

OGDEN — Utah Transit Authority representatives showcased the company's first battery electric bus in Ogden on November 17. The 40-foot bus, powered by three batteries, gives off zero emissions and costs about \$850,000. While a similar diesel-powered bus costs about half this, the electric bus yields big fuel savings, according to Hal Johnson, a project development manager for UTA. The savings are estimated at \$400,000 over the life of the vehicle.

"What's unique about this bus is the drive train," Johnson said. "It's an all-electric battery-powered vehicle with three battery packs — one in the back and two on the roof." UTA is working on a federal grant application to purchase six such vehicles for use in Salt Lake County. "We're excited to show them because we have the potential to use electric buses on our Ogden-Weber Bus-Rapid-Transit project," Johnson added.

The bus is outfitted with an on-route system involving a rooftop pantograph device or arm that raises to make contact with a charger called a gantry. For each hour of use, six minutes of rapid recharging is needed. The vehicle also has a plug-in shop charger where it can park and juice up overnight. [Source: Ogden Standard Examiner, November 19, 2015]

Gardena, California converting Hybrid Buses to Battery Electric

Complete Coach Works (CCW) has announced the completion of a project to convert a gasoline hybrid bus operated by Gardena Municipal Bus Lines (GTrans) to a Zero Emission Battery Propulsion System (ZEPS). The conversion was completed for the city of Gardena, California.

After the vehicle was delivered, Gardena received a California Energy Commission grant to upgrade four more of its hybrid buses to electric. Gardena selected CCW, once again, to convert the buses to ZEPS in a project expected to begin early in 2016, said Kevin O'Brien, project manager for CCW.

Gardena Municipal Bus Lines appears to be the only transportation agency in California operating with all gasoline/electric hybrid buses. Management is evaluating if the fleet should go all electric, a spokesperson said. [Source: Complete Coach Works, December 29, 2015]

Greensboro NC Electric Buses

The Greensboro Area Metropolitan Planning Organization has cleared a path for Greensboro Transit Authority to buy battery electric buses. The board, made up primarily of elected officials from Greensboro, Guilford County and outlying towns, approved a plan that could enable GTA to deploy at least four buses that run only on batteries, with no on-board use of air polluting fossil fuels.

The GTA needs to replace a total of nine buses during the next two years and expects to receive about \$4 million in federal, state and local money for that purpose. Transit officials initially planned to do that with hybrid buses that alternate between diesel and electric power. But now that cleaner, battery electric vehicles are available, "we think this could be a good starting point to evaluate them," a spokesperson said of a potential, four-bus purchase.

The move does not mean Greensboro will buy the battery vehicles, but it simply opens up the possibility if they believe that the technology can meet their needs. [Source: News & Record, November 11, 2015]

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