

# National Bus Trader

The Magazine of Bus Equipment for the United States and Canada Volume XXXVII, No. 12 November, 2014

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- BusCon 2014 In Indianapolis
- IBP Industries 27 Years of Experience With Body Parts for Buses



Freightliner Custom Chassis displayed three of their chassis on the show floor. This one in the center was noteworthy for two reasons. One is that it is the S2C model, a fairly recent addition to the Freightliner product line that has become popular. The second is that it moves in the direction of alternative fuels with propane power by Powertrain Integration.

BusCon 2014 took place at the Indiana Convention Center in Indianapolis, Indiana from September 28-30, 2014. Sponsored by Bobit Business Media, Bus-Con traditionally showcases mid-size buses for smaller groups. It caters to both the public and private sectors with an extremely wide range of operators including paratransit, airport shuttle, limousine buses, charters, tours, scheduled service and pretty much anyone using mid-size buses for transporting people.

This 19th annual event was noteworthy because the location moved to Indianapolis after several years at Chicago's Navy Pier. The reason for the continued Midwest location is obvious. A significant percentage of the body builders are located in northern Indiana and several of the automotive suppliers are located in Michigan. In our case the drive was longer but accommodations were easier to deal with. I would also add that the traffic was easier to deal with in Indianapolis. Some people who flew in mentioned that it was more difficult getting flights to Indianapolis than to Chicago.

A few people reported driving through rain on Monday to get to the show. However, the weather was generally good on Tuesday and Wednesday when the show was in progress. A new record was set with 65 vehicles on the show floor. In addition, at least another 10 were outside. Floor traffic on Tuesday, the first day of the show, was very heavy and made photography difficult.

At least a few attendees echoed my comment of "So many buses, so little time" in thinking that extending the show beyond nine hours would give us more time to look at the huge display of buses. However, some of the exhibitors were already packing up by 2 p.m. on Wednesday. As a result, I never did get to some of the booths without buses and would have wished for more time to look at the buses and talk to the exhibitors on the show floor.

While the buses on display are always very diversified, there are trends from year to year. This year there was an obvious movement to smaller vehicles. There were no full-size intercity coaches or big integral transit buses on the show floor. Cutaways still dominated the vehicle types but were less numerous this year. According to my notes, the cutaways fell below half of the vehicles on display for the first time. What we did see was an increase in the number of vans on display.

In recent years the Sprinter vans dominated this segment of the market. The new Ford Transit was introduced at BusCon 2013 and a few were displayed at this show. We also noted several Dodge Ram 2500 vans on display. Two of the vans had electric drive and the Sprinter people showed a two-door model for transit applications.

We also noted a continuation of the trend to alternative fuels. More than 20 percent of the vehicles on display were powered by something other than conventional gas or diesel engines. This included CNG, propane autogas and some form of electric power. An increased number of propane-powered units was perhaps expected for two reasons. One is that the recent move to liquid propane



One of the larger buses on display was the Thomas Transit Liner C-2. The bus shown had room for 48 passengers in cloth seats and was optionally available with propane power.



BYD got into the mid-size bus mood by displaying their Mid-E 30-foot battery-electric bus. For those who want more, they now also offer a 60-foot all-electric articulated transit.

has made propane more practical while being more economical. The second is that there were some restrictions on displaying propane-powered vehicles at Navy Pier. I noted that there was an educational session on Tuesday morning specifically geared to the use of propane power.

As an interesting observation, I would point out that the alternative fuel power was more prevalent among the chassis builders and bus rebuilders than with the body builders. Ford, GM, Freightliner and Complete Coach Works all had an alternative fuel bus or chassis in their booths. There is an obvious trend toward battery electric buses but this continues to be held back by the state-of-the-art in battery development. I would suggest that any major development in improving battery capacity will tip the

scales substantially towards battery-electric drive buses.

We also found several new exhibitors. In talking to exhibitors, I mentioned that I had not seen them at previous shows. Some of them said that this was their first BusCon show. It is nice to see new names appearing on the show floor.

Finally, I should mention that we are seeing more bus dealers at BusCon. Some of the more obvious included Midwest Transit as the dealer for Newport Coachworks and Metro World Wide as the distributor for the Winnebago Metro Link. Best Bus Sales from Des Plaines, Illinois had a booth indoors but a bus outside. I am tempted to suggest that the age-old conflict between manufacturer and dealer over who pays for marketing is

being resolved in some places by working together.

Trying to present the vehicles in some order is an uphill battle. Hence, I have resorted to some arbitrary categories. Where possible, I will try to place more emphasis on the interesting and unusual. Please bear with me.

## Coaches, Transits and Big Buses

As mentioned earlier, we saw fewer bigger buses and coaches this year, but the ones on the show floor were among the more interesting on display.

A regular at BusCon has been **CH Bus Sales**, the exclusive distributor for **Temsa Coaches** in the United States. This year they showed their 35-foot TS-35 coach.

Originally introduced to the market in 2008, the TS-35 is unusual in offering full integral construction and other amenities such as underfloor luggage, air ride suspension and similar design and amenities as the big coaches. Hence, it is an ideal choice for operators who want big coach durability, comfort and long-distance ability for groups as large as 40 passengers. The TS-35 became so popular that CH Bus Sales offered the 30-foot TS-30 in 2012 for operators who want these same big coach features for groups of up to 30.

The Temsa coaches have done so well that many operators have come back for additional orders. Based on customer requests and following a long engineering and design stage, CH Bus Sales recently introduced a full size 45-foot Temsa coach as the model TS-45. They are the only coach builder on the market to offer integral coaches in lengths of 30, 35 and 45 feet.

Another regular exhibitor is **BYD**, a Chinese company that began offering electric

The Temsa TS-35 displayed by CH Bus Sales could easily be classed as the queen of the show. With a length of 35 feet it certainly qualifies as a mid-size bus. An an integral coach, it offers all of the features, durability and long distance capability of the big coaches.



buses after becoming a major producer of batteries. On display was their 30-foot Mid-E high-floor, battery-electric bus. It had room for a driver, 22 passengers and two wheelchair positions. Plans are to build a low-floor version of the Mid-E at the new plant in Lancaster, California. It will incorporate a ZF low-floor axle.

One of their 40-foot models, already Altoona tested, was outside for the Ride and Drive. BYD now has a 60-foot articulated electric transit bus at Altoona for testing. Some of the BYD buses can drive as far as 170 miles between charges.

Another larger bus on display came from **Thomas Build Buses** in High Point, North Carolina. Known as their Thomas Transit Liner C-2, it looked similar to a school bus but was painted white. Inside was room for 48 passengers in cloth 2+2 seating plus overhead parcel racks. The Tomas CS is available in several sizes and offers several options including air ride suspension, various entertainment systems and even propane power.

Complete Coach Works and Transit Sales International had one of the larger and more unusual vehicles on display. Already well known for installing their ZEPS electric bus system on rebuilt transit buses, they now have it operational on a trolley-themed bus they had on display.

The University of California at Riverside wanted to go green. CCW took their two-door 2000 Cable Car Classics 33.5-foot themed bus built on a Freightliner chassis, rebuilt it, and then converted it with a ZEPS



Another interesting bus on display was the two-door Sprinter Citybus 65 from Dortmund. Based on the basic Sprinter design, it offers a small transit interior plus paratransit capability. This photo looks from the seats near the rear door on the right towards the front of the bus that has a ramp and wheelchair tie down locations.

electric power system. It now charges in 3.5 hours and provides zero-emission transportation on the campus.

#### Vans

As mentioned earlier, the number of vans on display increased substantially at this show. I counted a total of 18 vans, which amounts to more than one-quarter of the vehicles on the show floor.

The single largest booth with vans was under the name **Sprinter Vans** although I noted that most of the units on display carried the Mercedes-Benz tri-star while one was marked Freightliner. They had four Sprinter vans on display. One was a 4x4 passenger van painted blue. Next came a 3500 with a 170-inch extended wheel base that was marked as a shuttle van or limo prep. The interior was empty much like a bus shell. Painted silver was an 11-passenger paratransit van with room for two wheelchairs.

Not usually seen on this side of the Atlantic, the fourth Sprinter was a two-door, low-floor Citybus 65 from Dortmund. The front area had room for wheelchairs and there was a ramp at the front door. To explain this I should note that there are a huge variety of various Sprinter vans and trucks in Europe that have not been offered in the United States and Canada. I suspect that this two-door Sprinter might have substantial application for transit service in smaller communities and on less-patronized lines.

Meridian Specialty Vehicles had the next largest number of vans with three Sprinters on display with custom interiors. One had 2-1 seating with 14 passengers and a plug door. It was marked as a Valet Shuttle. Next was a hotel shuttle with 2+1 seating for 16 and rear luggage. The third Sprinter had an unusual limo-type interior with perimeter seating and a 32-inch, 12-volt TV at the rear.

**Dur-A-Bus** from Toronto takes credit for the most modified Sprinter body. It featured a larger windshield and larger passenger windows modified by Dur-A-Bus plus a

Complete Coach Works showed one of the most interesting buses on the show floor. This 2000 Cable Car Classics trolley-themed bus operates for the University of California at Riverside. Complete Coach Works not only rebuilt the bus but also converted it to battery electric operation using their ZEPS system.





Dur-A-Bus showed this Sprinter that had been modified from the original design with a larger windshield and larger passenger windows. The interior featured colored leather seats.



Fenton Mobility had a Ford Transit modified with their Abilitrax system that allows seats to be moved around or removed to reconfigure the interior for different needs as required.

plug door. The interior was very attractive with colored leather fully reclining Lazzerini seats for 16 and three-point seat belts, an overhead parcel rack and a woodgrain floor.

Introduced a year ago, the Ford Transit van is now starting to appear with custom interiors. **Mobility Transportation** had one on display for paratransit use. It offered flipup seats to make room for wheelchairs and a lift at the rear. **Fenton Mobility** from Jamestown, New York showed a Ford Transit with their special track system on the floor and a rear lift. Known as their Abilitrax, the seats could be moved around in minutes on the tracks in order to reconfigure the interior as needed.

Two exhibitors displayed customized Dodge Ram 2500 vans. Prime-Time Specialty Vehicles from Elkhart, Indiana showed their Premier Shuttle model with 2+1 seating for nine passengers plus rear luggage. Prime-Time's second Ram was their Med-Transit model with a lift at the rear and wheelchair tie downs.

Based in Akron, Ohio, **Transit Works** also showed two customized Dodge Ram 2500 vans. One was set up for paratransit use with 3+0 seating with a side aisle plus a lift and tie-downs in the rear. The second ram provided seating with a side aisle for 11 passengers plus the driver.

There were two electric vans on display. **Zenith Motors** from Wilder, Kentucky, showed a Dodge Ram 2500 with an airport shuttle van interior including perimeter seating and a luggage rack. It had been converted to a battery-powered electric drive. It used lithium batteries with regenerative braking and could go 110 miles on a charge.

Via Motors from Orem, Utah, showed a Chevy Express van. It retained its gasoline engine and used it to power a generator that in turn fed an electric motor. The system was similar to a diesel locomotive in that it retained an internal combustion engine but powered the wheels with an electric motor. It also offered regenerative braking to help reduce fuel consumption.

Located in Newark, New Jersey, **KLAM America** displayed a Sprinter up on a lift. They were showing their electric retarder that is built in Spain. It could be operated by a wand on the dash or connected to the normal foot brake pedal. Many of these smaller buses do not come with a retarder. Installing one can not only extend brake life but also improve safety.

# **Chassis Builders**

Three major chassis builders displayed at BusCon this year. **Freightliner Custom Chassis** from Gaffney, South Carolina had three chassis in their booth area. The first was a low-floor XBA chassis of the type used by Arboc for their low-floor buses. It was powered by a 240 horsepower Cummins ISB 6.7 liter engine and had an Allison transmission. Also on display was an S2C chassis with a cutaway cab and a Cummins diesel engine. I should note that the S2C chassis that comes with a cab is a relatively new addition to the FCCC product line but has proven to be very popular.

Noteworthy was the third chassis, a Freightliner S2C with the standard cab. It also had an Allison transmission but was propane powered. Powertrain Integration supplied the Plthon  $^{\rm TM}$  8.0 liter V8 LPI engine. The Plithon engine comes from Powertrain Integration's propane autogas engine experience and was developed with fuel system

As you might have guessed, the Freightliner Propane chassis seemed to always have people around it. This view shows the propane tanks located between the rails. Powertrain Integration provides a Pithon 8.0 liter LPI engine for the propane power.



partner CleanFUEL USA with support from the Propane Education Research council.

Ford Motor Company had three complete vehicles on display. The first was one of their new Ford Transit models that is now in production and rapidly increasing in popularity. The unit on display was painted blue and had somewhat of a passenger van interior with four seat rows seating three, two, two and four.

Also displayed was an E450 chassis with a Turtle Top cutaway body. It offered a wood floor and an airporter configuration with perimeter seating and a luggage rack. The third bus was a large cutaway on an F650 chassis. The body was a Concord II from Glaval and it had propane power.

The people from **GM Fleet** had both a bus and a chassis on display. The cutaway bus was built on an Express 4500 chassis with a 159-inch wheelbase. It had a body by Goshen Coach and a Vortec 6.0 liter gas engine. Adjacent was an Express 4500 cutaway chassis, also with a 150-inch wheelbase. The chassis was equipped with propane power.

#### **Alternative Fuels**

There were several vehicles on display powered by alternative fuels that do not fit well into one of the other categories. Here is a list of what we found.

The **Propane Education and Research Council** is a regular exhibitor at BusCon. As the name implies, their primary interest is in promoting the use of propane. They had two buses on display. One was an E450 chas-



This Winnebago Metro Link was on display in the Propane Education and Research Council booth. Icom North America provided their JTG II Bi-Fuel Liquid Propane Autogas Injection System for the power. One of the best features of the system is that it will switch automatically to gas for longer trips.

sis with an ElDorado / National body. It was painted white and lettered for the RTA. This bus was equipped with the Rousch Clean Tech propane power system from **Rousch**, a company that is regularly seen at BusCon.

New this year was a Winnebago Metro Link cutaway on an E450 chassis. It was equipped with an **Icom** bi-fuel gas/propane system using a 6.8 liter gas engine. Icom has partnered with Winnebago Industries for the installation and distribution of the Icom JYG II® bi-fuel and mono-fuel liquid propane autogas injection system. What made this system interesting is that it could

switch automatically to gas if it ran out of propane or if longer travel distances were required.

IMPCO Automotive from Union City, Indiana, showed an Arboc low-floor bus built on a GMC chassis. It was powered by the IMPCO CNG system that could be installed at either the manufacturer or the dealer. The CNG tanks were in the rear of the bus similar to a rear luggage compartment.

Based in Ontario, California, **Phoenix Cars** showed their electric shuttle bus. It was built in an E450 chassis and had an ElDorado/National body. The interior was a standard airporter with perimeter seating and a luggage rack. It had a range of about 100 miles, was equipped with regenerative braking and required five to nine hours for charging time.

Proving that virtually every type of alternative fuel system was on display, XL **Hybrids** from Boston, Massachusetts showed their XL3 Hybrid Solution. Their bus had a Supreme body on an E450 chassis and was displayed up on a rotary lift so you could see some of the components. Available either OEM or retrofit, the system installs in as little as six hours and offers regenerative braking to reduce fuel costs.

While cutaways have always been the largest group represented on the floor at Bus-Con, this year they dropped below half of the vehicles for the first time in recent memory. Here is a quick review of the Cutaways and other vehicles not previously mentioned.

**Cutaway Bus Builders** 

A significant number of the buses on display offered alternatives to gas and diesel power. Phoenix Cars showed this ElDorado-National body on an E450 chassis. It had an airporter interior and was powered by an electric system with regenerative braking.





While there were fewer cutaways on the show floor this year, they continued to dominate the show. This example is an ElDorado-National Aerotech on a Chevy chassis with an airporter interior.



Glaval had four buses on display including three cutaways. This is their flat front Apollo that is built on a Freightliner chassis and comes in several lengths with seating for up to 45 passengers.

With seven buses on the show floor, Allied Specialty Vehicles was the single largest exhibitor and also one of the newest. The story behind this is that Thor Industries acquired Federal Coach and moved that production to Champion. Next, they acquired the bankrupt Krystal Coach of Brea, California in a last-minute courtroom deal and moved Krystal production to ElDorado/National. Then, on July 31 of 2013, Thor announced that they would retain their RV product lines but sell their bus manufacturing to Allied Specialty Vehicles.

On display was a **Goshen** Impulse cutaway on an E450 chassis and a **Champion** low-floor Transport cutaway with a front door ramp on a E-450 chassis. Built on an F550 chassis, the **Krystal** K-33 model had room for 25 passengers on black leather seats and it featured a wood floor. Also sporting black leather seats but with room for 23 passengers was a Federal Spirit on an E450 chassis.

The other three buses came from **ElDo-rado/National**. One was their Axess low-

floor, two-door transit bus. It had a ramp at the front door and was available in both a 35- and 40-foot model. The Amerivan PT is a low-floor Dodge minivan for paratransit uses. A ramp at the side door provides easy access for wheelchairs. Also on display was an Aerotech cutaway on a Chevy chassis that featured an airport shuttle interior with perimeter seating and a luggage rack.

Glaval Bus in Elkhart, Indiana had four buses on display. Included was a Legacy cutaway model built on a Freightliner chassis. This one was 102 inches wide and is a favorite of many operators because of its width. A Titan II Low Floor model on a Chevy chassis had a ramp at the front door and room for three wheelchairs and eight passengers. It was powered by the IMPCO CNG system.

An Entourage model on display was built on an F550 chassis. It featured black leather seats. The Entourage is available in three different lengths with either gas or diesel power. The fourth bus on display was Glaval's flat front Apollo model. It is built on a Freightliner chassis and comes

in several lengths with seating for up to 45 passengers.

Also showing four buses was **Ameritrans** of Elkhart, Indiana, part of ABC Companies. They displayed two larger cutaways, an M-2 and M-2 Vista on Freightliner chassis. Their Eco-charge cutaway model was built on an E450 chassis and had a fully electric drive system. It can go 125 miles on a charge and had a wheelchair lift on the side. The fourth vehicle was a two-door Midi Transit built by New Flyer.

Showing increased dealer involvement was the display area with buses built by **Newport Coachworks** of Riverside, California and sold by **Midwest Transit/Nationwide Bus Sales** in Kankakee, Illinois. Buses on display included a cutaway on an E450 chassis with a dark wood floor and black leather seats. A larger cutaway on an F550 chassis had a party bus interior with perimeter seating and a wood floor. Also on display was a larger cutaway on a Freightliner M-2 chassis with a dark wood floor and black leather seats.

Girardin from Drummondville, Quebec had their G5 special needs Micro Bird bus on display. Note the wheelchair lift at curbside in the rear.



This two-door low-floor New Flyer Midi transit bus was displayed in the Ameritrans booth. It offered a ramp at the front door for wheelchairs.





Among their several vehicles available for rides in back of the convention center was this bus on a Chevy chassis equipped with the Crosspoint Kinetics electric hybrid power system.



Best Bus Sales from Des Plaines, Illinois had this bus on a Ford chassis outside in the Ride and Drive area. They also had an indoor booth but had no buses displayed on the show floor.

Tiffany Coach Builders from Perris, California, had two attractive larger cutaways on display painted black. One was on an F450 chassis while the other was on an F550 chassis. The F550 Shuttle/Limo bus was available in sizes from 23 to 31 passengers. However, the larger model on an F650 or F750 chassis was available in different sizes to transport from 35 to 51 passengers.

Girardin Minibus from Quebec, Canada has been displaying under the **Micro Bird** name in recent years. Painted gray was an MB-II DLX cutaway on a GMC chassis. The other cutaway was identified as a G5 special needs bus and had a lift on the side at the rear. It also had a large window above the driver's cab.

Many BusCon attendees probably do not know that the Girardin operation goes well beyond the Micro Birds. Based in Drummondville, Quebec, the company traces its history back to 1935. The Micro Birds date back to a 2009 joint venture with Blue Bird. In addition, Girardin is a distributor of larger Blue Bird school and commercial buses and builds their own line of smaller school buses — some of the only school buses still built in Canada.

Arboc Specialty Vehicles from Middlebury, Indiana is well known for their specialized product line of low-floor buses for the elderly and handicapped. They had two buses on display. One was their Spirit of Mobility model. Built on a GM 4500 chassis, it featured a ramp entry, REI electronics and the Q'Straint Q'ube restraint system.

Also built on a GM 4500 chassis was their Spirit of Freedom model that also had a ramp entry at the front door. This bus had an electric hybrid power system provided by Crosspoint Kinetics. Fuel costs were reduced by having a regenerative braking system.

Based in New Paris, Indiana, **Turtle Top** has been around for years and is one of the better known companies producing cutaways. They had two buses on display. One was their Van Terra cutaway model. It was built on a Chevy Chassis and had 2+1 seating for 12 passengers with wood floor. The second bus was their Terra Transit model built on an E450 chassis. It offered 2+2 seating for 25 passengers.

Two Winnebago Metro Link buses were shown. They are built by Winnebago in Clear Lake, Iowa but are engineered substantially different than their RV product line. These buses are distributed by Metro World Wide.

One cutaway with an airport shuttle interior was built on an E450 chassis. It had room for 14 passengers and a wheelchair with perimeter seating and a luggage rack. There was a lift at the side in the rear. The second bus was also built on an E-450 chassis and had 2+2 seating. It could seat up to 20 passengers and had a rear luggage area. Also available but not shown was a 28-foot model with 25 passengers and rear luggage or 29 passengers without luggage space.

There were also two display areas with smaller vehicles that I have not yet mentioned. **Braun Ability** from Winimac, Indiana, showed their commercial side-entry minivan vehicle for paratransit use. Built on the Dodge Grand Caravan, it has a ramp on the side and is fully ADA-compliant.

Mobility Ventures of South Bend, Indiana, had two of their MV-1 vehicles on display. The MV-1 is not a converted anything but is actually built specifically for paratransit and handicapped transportation. On display was the DX standard model. The new LX luxury model was showcased at Buscon.

Arboc Specialty Vehicles is a regular exhibitor with their line of low-floor buses for the handicapped and elderly. The bus nearest the camera was their spirit of Mobility model that was built on a GM 4500 chassis. The other bus is their Spirit of Freedom model that was equipped with an electric hybrid power system by Crosspoint Kinetics.



### **BusCon Ride and Drive**

In addition to the buses on the show floor, there were something like 10 or 12 additional buses outside. These buses took on extra meaning at this BusCon show with the introduction of the BusCon Ride and Drive. Just a short walk out the back door of the con-

vention center was a parking area where several buses were available for inspection, for driving or just for taking a ride.

Some of the buses in the Ride and Drive program had special features that were best seen close-up or while driving. This included BYD Motors, Crosspoint Kinetics, Phoenix

Cars and Zenith Motors. There were also buses in back that were not represented on the show floor. MCI brought one of their new J4500 coaches with the ZF axles for people to drive. Best Bus Sales from Des Plaines, Illinois had a Ford shuttle bus outside even though they did not have a bus on the show floor.

# Other Inside Booths

Because of time constraints, I never did get to see all of the booths on the show floor without buses. However, here are a few notes on those I was able to see.

Angel Trax had a booth to show their video surveillance systems. However, this is the first time in recent memory they did not have their Stallion bus with their products on the show floor. Both MCI and Best Bus Sales had booths on the show floor, but their buses were outside. LaFrance Industries from LaFrance, South Carolina, showed new seat fabrics with holiday patterns that include snowflakes, snowmen and Christmas trees. This is obviously an interesting option to highlight the holiday season.

#### BusCon 2015

BusCon will remain in Indianapolis next year. The dates will be September 28-30, 2015, a little later in the month than normal. Visit BusConExpo.com for information.

Several of the buses lined up for the outside Ride and Drive program offered various alternative fuels. On the left is a Zenith Motors battery-electric Dodge Ram 2500 van. The bus adjacent is an electric shuttle bus from Phoenix Cars in Ontario, California.



From the November, 2014 Issue of

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