

## Start Your Engines

## Racing Teams in Virginia, North Carolina Win X Prizes

**Two car companies in the Fifth District won a total of \$7.5 million in the Progressive Insurance Automotive X Prize for Super Fuel-Efficient Vehicles contest.**

Both have roots in racing. Edison2 of Lynchburg, Va., won \$5 million for its entry in the mainstream class; Li-ion Motors of Mooresville, N.C., won \$2.5 million for its Wave II electric car. The remaining \$2.5 million went to the Swiss X-Tracer Team in the motorcycle-style two-seater class. The competition drew 111 teams from 15 countries; winners were announced in September.

Edison2's "Very Light Car #98" was required to seat four people, travel 200 miles on a tank or charge, and meet performance, handling, safety, and emissions standards; all entries were required to get more than 100 miles per gallon or its energy equivalent.

The team of racing engineers and designers was already exploring the idea of light-weighting parts for racing, according to spokesman Scott Brown. They formed the company officially as Edison2 to go for the prize, and entered all three categories. The team's racing backgrounds together total more than 19 victories at Le Mans, Sebring, and Daytona. "Our engineers feel the innovations you see in racing that allow a car to crash at 200 miles per hour are the same ones that allow a car with low mass to still be a safe car on the highway." Innovations include a diamond-shaped chassis that deflects impact and a lightweight, sturdy steel frame.

*Edison2 of Lynchburg, Va., won \$5 million for its entry in the mainstream class of the Progressive Automotive X Prize with its Very Light Car #98.*



The Edison2 vehicle weighed in at 830 pounds. The internal combustion-powered vehicle gets 102.5 miles per gallon of 85-percent ethanol fuel. The team designed and built the car from the ground up. "We would design on the computer, make the parts in-house or send to a machine shop in Rustburg (Va.), and have it back the next day." The Edison2 team works in a 360,000 square-foot former textile factory owned by founder Oliver Kuttner, a Charlottesville developer. The company is located in downtown Lynchburg. The presence of the machine-tool industry led to quick turn-around in component redesign. The vehicle's lug nut, for example, weighs 0.1 ounce rather than the typical one ounce.

The prize money will accelerate the company's next generation vehicle, an electric version of the Very Light Car. "We view the X Prize as the beginning of something, not the end," Brown said.

Li-ion Motor Corp. beat out competitors in the "alternative" category. Despite its heavy lithium-ion battery, the Wave II still weighed only 2,176 pounds, and achieved a 187 mile-per-gallon equivalent. The company intends not only to manufacture vehicles but also to license its technology to manufacturers worldwide, according to team leader Ron Cerven, a former racer. Li-ion Motors' team includes fabricators who formerly worked in NASCAR.

The prizes capped 30 months of car and business plan development. The idea was to jump-start the next generation of efficient, clean, affordable, safe cars. Entries were judged, in part, on whether business plans proved that 10,000 of the models could conceivably be produced, annually, by 2014.

The X Prize concept is modeled after the 1919 purse of \$25,000 to inspire the nonstop flight between New York and Paris. In 1927, Charles Lindbergh won. These privately funded, performance-based prizes encourage innovation, with competitors typically spending 10 to 40 times the amount of the purse to achieve a goal. The foundation is also sponsoring the \$10 million Archon Minerals X Prize for genomics, the largest prize in medical history. To win, a team must sequence 100 human genomes within 10 days for less than \$10,000 per genome. The foundation has also launched the \$30 million Google Lunar X Prize for the first team to send a robot to the moon, travel 500 meters, and send images and data to earth.

— BETTY JOYCE NASH

PHOTOGRAPH COURTESY OF EDISON2

## Supersizing College Sports 16-Team Conference Put on Hold

Fans may loyally follow their favorite college sports teams, but the teams follow the money — and there is a lot of money in television.

How much? The Atlantic Coast Conference (ACC) just signed a new deal with ESPN worth \$1.85 billion over 12 years. Each of the 12 schools (eight are in the Fifth District) will receive nearly \$13 million per year. That's twice the previous contract, but less than the \$17 million annually that schools in the Southeastern Conference (SEC) get from its TV deals. It's also less than the \$17 million payout to schools in the Big 10, which also operates its own regional television network. That's a lot of money for athletic departments, which typically operate at a loss. In 2009, only 14 of the 120 schools in the top-tier division made money on athletics, and the median loss was \$10.2 million. (When schools do make money, it's generally only on football and men's basketball.)

The lure of those revenues nearly broke up the Big 12 Conference last spring. Six teams, including perennial powerhouses the University of Texas and the University of Oklahoma, were expected to depart the Big 12 and join the existing Pac-10 Conference to form a new 16-team "super-conference." The Pac-10's current television contract is up for bid this year, and Texas would have been a huge new market for both the major networks and a potential new Pac-10 channel (following the Big

10's lucrative example). Plus, more schools would mean more high-stakes intra-conference and championship games, which are worth millions of dollars each year.

The breakup of the Big 12 would have been a huge change, but also one that was part of a larger trend. Just seven years ago, 19 teams switched conferences, and even the Big 12 has only existed in its current form since 1996, after attracting some schools from the old Southwest Conference. The conference shuffle can be traced to a 1984 Supreme Court decision, which found that the National Collegiate Athletic Association had violated the Sherman Antitrust Act by restricting the number of games that could be broadcast each week. This decision freed schools to negotiate television contracts. Within a decade, conference alignments seemed determined largely by the potential viewing audience.

In the end, Colorado and Nebraska were the only teams to leave the Big 12. Conference commissioner Dan Beebe convinced his members that the conference's next TV contract would be worth at least as much as they could earn in the Pac-10, and announced a generous revenue-sharing agreement. For now, the idea of a "superconference" has been put on hold. But as long as the TV contracts keep getting bigger, the conferences surely will.

— JESSIE SACKETT

## Franchise Fight GM, Chrysler Dealers Must Leave the Fold

John Bell, owner of a Chevrolet dealership in rural Sistersville, W.Va., breathed a sigh of relief in September: An arbitrator ruled against General Motors' effort to terminate his franchise. The decision was based on an array of factors, including the arbitrator's findings that Bell's dealership is "economically viable," and that its closure would require customers to travel great distances for sales and service at another dealership and would create a hardship for the dealership's employees.

GM had given Bell notice in June of 2009 of its intention to end his status as a GM dealer as part of an effort to shrink its dealer network. At the time, GM notified a total of 1,454 dealers, and Chrysler did the same with 789 of its dealers — nearly a quarter of each company's network. Within the Fifth District, some 218 GM and Chrysler dealers were slated for termination (out of 2,024 new-car dealers in the region representing all automakers).

Hundreds of the dealerships targeted by GM and Chrysler were not as fortunate as Bell's. GM prevailed in all but four of its 62 arbitration cases that were litigated to completion, and Chrysler won all but 32 of the 108 completed cases against it. In addition, GM offered 702 dealers the opportunity to stay on if they met various conditions.

The terminations have the potential to be economically significant to the affected communities. New-car dealerships generate significant state sales taxes and employment. In 2007, new-car dealers employed an average of 54 people each, with an average payroll of \$2.6 million. To be sure, some of the terminated dealers may be able to continue doing business in the used-car market or as dealers for other brands.

U.S. automakers have long desired to reduce their number of dealerships. Supporters of scaling back the dealer networks believe that smaller networks would allow the remaining dealers to become more profitable

and to invest in upgrading their facilities. Foreign auto brands such as Honda and Toyota have far smaller networks than Detroit.

For decades, the discretion of automakers to terminate dealer franchises has been highly limited. Auto dealers, as major employers, have significant influence within state legislatures. The states have thus enacted dealer-friendly laws that limit an auto manufacturer's ability to terminate a franchise.

Economists have criticized these laws. For example, economists Francine Lafontaine of the University of Michigan and Fiona Scott Morton of Yale argue in a recent paper in the *Journal of Economic Perspectives* that the laws have been "to the detriment not only of manufacturers, but also of consumers, resulting in higher cost of retailing and higher prices for cars, inflexibility of the dealer network, and a lack of innovation in car distribution."

What made the terminations by GM and Chrysler

possible is that the federal government required the companies to submit restructuring plans last year to support their quests for federal assistance — including plans to cut back their dealer networks. The group from the Department of the Treasury responsible for assessing the restructuring plan and negotiating federal assistance to the companies, known as the Auto Team, pressed the companies to shrink the networks quickly. The bankruptcy courts approved the programs to terminate dealerships, overriding the protective state laws.

The auto dealers showed that they can also exercise clout at the federal level, however. Congress enacted the legislation to allow dealers to go to arbitration to attempt to save their franchises, known as the LaTourette Amendment, at the urging of the National Automobile Dealers Association and state and local dealer associations in response to the termination notices from GM and Chrysler.

— DAVID A. PRICE

## Sweet Drinks

### D.C. Extends Sales Tax to Beverages

The District of Columbia has approved a 6 percent tax on retail sales of sodas, sports drinks like Gatorade, and other sweetened nonalcoholic beverages except coffee/tea and carbonated fruit drinks.

The tax differs from the penny-per-ounce excise tax originally proposed, a move that soft drink makers, local stores, and restaurants fought through advertising. Retailers oppose the sales tax as well. Neighboring Virginia charges 2.5 percent in state sales taxes and Maryland, 6 percent. Washington, D.C., currently does not tax food purchases except in restaurants.

The estimated \$8 million from the tax will go, in part, to pay for physical education programs and more fruits and vegetables in school lunches.

It's unclear whether a tax as low as 6 percent will help curb soft drink consumption, thought to be a culprit in rising obesity levels, especially among children. But there is evidence that soda consumers are price-sensitive. A recent study published in the *American Journal of Public Health* found that sales of regular (not diet) soft drinks declined by 26 percent at the hospital cafeteria at Brigham and Women's Hospital in Boston when it raised its prices. The

decline persisted not only during the price-increase phase, but also through several other periods, including one in which the cafeteria returned to baseline prices. The add-on, however, was a hefty 35 percent.

In a separate study, from the Economic Research Service of the U.S. Department of Agriculture, economists analyzed a hypothetical tax on sweetened sodas, fruit drinks, sports and energy drinks, and powdered mixes. The authors used national data sets that included actual consumer purchases of beverages. One data set came from the longitudinal consumer panel of the firm Nielsen Homescan. Authors also used daily beverage intake data from the Centers for Disease Control's National Health and Nutrition Examination Survey, designed to assess the health and nutritional status of children and adults.

Results suggested that a 20 percent increase in the price of sweetened drinks could cut net calorie intake from all beverages by 37 calories a day for the average adult, with effects for children estimated at 43 calories a day. But that tax was much larger than the D.C. sales tax, leaving open the question of whether the sales tax will affect soda consumption.

— BETTY JOYCE NASH

## NASCAR Hall of Fame Opens in Charlotte A Slow Start but Hope Remains

The new NASCAR Hall of Fame in Charlotte is designed to appeal to both casual and hard-core race fans. Visitors can drive high-tech racing simulators, change a tire, or see up close Dale Earnhardt's famous No. 3 Chevy.

But so far, attendance has been below projections. Between its opening in May and the beginning of August, the Hall had 102,000 visitors, well shy of opening expectations. The NASCAR Hall of Fame is owned by the City of Charlotte, licensed by NASCAR, and operated by the Charlotte Regional Visitors Authority (CRVA).

As the Hall's spokesperson Kimberly Meesters points out, though, it's difficult to extrapolate a full year's performance based on three months' data, and the Hall also generates revenue through memberships and special event rentals. And many of the expenses are variable costs: Fewer people in the building means buying fewer cleaning supplies, for example.

The attendance numbers cast doubt on projections about the Hall's economic impact on the region. Prior to construction — and prior to the financial crisis — UNC-Charlotte economist John Connaughton estimated the Hall's annual economic impact at \$60 million. Although he used relatively conservative multipliers to calculate potential increases in spending and employment, such projections are uncertain and often overstated.

"They're based on the best available information at the time," Connaughton explains. "We would never have contemplated a recession as bad as it was."

The U.S. Travel Association reports modest improvements in the travel outlook, but characterizes the recovery as "rocky." Many consumers are looking for the most frugal options when they do travel, such as staying with relatives instead of in hotels.

Still, there are positive signs. Charlotte's hotel occupancy is up 12 percent over the same time last year, and North Carolina's gross state product has been increasing modestly, after a 2.7 percent decline in 2009.

Financing the Hall was "radically complex," according to City of Charlotte Treasurer Scott Greer. Totalling more than \$200 million, the package is a mix of public and private debt that also helped fund a 102,000 square-foot expansion and other upgrades to Charlotte's convention center. The site also includes a privately developed 19-story office tower.

The majority of the financing is "Certificates of Participation" (COPs), a type of municipal bond that is



*A race fan tries his hand at the "Pit Challenge" exhibit at Charlotte's NASCAR Hall of Fame.*

backed by the lease payments from a particular project. In Charlotte's case, the city is making those payments via the revenues from a 2 percent increase in the hotel/motel tax. The city also borrowed \$41.5 million in bank loans. Sponsorship revenue and commemorative brick sales are dedicated to paying back \$20 million of those loans, with the remainder to be repaid from the sale of a parcel of land donated by the state. To date, the Hall is about 20 percent of the way to its sponsorship goal, but these are non-recourse loans without a fixed repayment date. "I don't want to say that they're indefinite. We'll probably pay them off in 10 to 12 years," Meesters says.

The financing structure is designed to limit taxpayer support. With COPs, bondholders may only repossess the asset — that is, the Hall of Fame — in the case of default. If the hotel tax increase can't cover the debt service, the Hall could end up being owned by the bondholders. The attendance revenues are used only for operating expenses, not debt service. "Cutting expenses is always an option," Meesters says.

The people predicting hard times for the Hall, she says, should withhold judgment. "It's such a complex business model to explain in the first year," says Meesters. "Ask us five years from now, and we'll be able to say these are our peaks, these are our valleys, and this is who we market to."

— JESSIE SACKETT

**Editor's Note:** *At press time, the CRVA announced that the Hall of Fame had a \$190,000 deficit as of August 2010, and was considering \$3 million in annual budget cuts.*