

## Darting into future: "MotorWeek" host discusses vehicle trends at Carroll Tech Council meeting

By Brandon Oland Times Staff Writer |  
Posted: Saturday, September 15, 2012 11:30 pm

The Carroll Technology Council event would be different.

The sleek vehicles on display gave it away.



John Davis, right, shows Doug Miller the interior of a Dodge Dart during a gathering of the Carroll Technology Council outside the Carroll Non-profit Center in Westminster Thursday. Davis, the host of the PBS program "MotorWeek" led a discussion of vehicle technology.

A Toyota Prius, a Nissan Leaf, a Dodge Dart and a Ford Shelby were parked outside the Carroll Nonprofit Center, where the council gathers monthly.

John Davis, the founder and host of the nation's longest-running automotive series "MotorWeek," was the featured speaker at the Carroll Technology Council's September meeting Thursday in Westminster.

Just like he does on his PBS program, Davis discussed the latest in vehicle technology. He explained how he expects hybrid cars will influence vehicle fleets in the future for the gathering of the Carroll Tech Council, a nonprofit working to provide leadership, information and resources to influence technology in the county.

From model year to model year, vehicles change as technology improves, Davis said. But the industry is at the cusp of a revolution, he said, one prompted by an Environmental Protection Agency mandate that the corporate average fuel economy of the nation's fleet must average 35 miles per gallon by 2017. That's 7.5 more miles per gallon than today.

"We are in the midst of the most significant automotive revolution since, basically, internal combustion engines," Davis said. "For the first time in over 100 years, we're seeing a real transformation to new types of power trains."

Automakers are planning to meet the mandate by making several swift changes in vehicle designs and engines. Some of those are already popping up in 2013 model year vehicles, Davis said.

### Vehicles that weigh less

**What's happening:** The lighter the car, the more fuel efficient the vehicle can be. Automakers are utilizing lighter-weight products wherever they can be both cost efficient and not detract from vehicle safety.

**Drawbacks:** Automakers can only go so far, Davis said. The National Highway Traffic Safety Administration is always looking out for safety in vehicles. Whatever vehicles lose in overall weight, they could gain in advanced safety feature mandates.

**Quotable:** “The automakers are in the middle and saying, ‘you’re taking away my options to make the cars more efficient,’” Davis said. “But that’s not going to change.”

### **Power train innovations**

**What’s happening:** Basic combustion gasoline engines are getting smaller and more efficient. Six-cylinder engines are able to generate 300 horsepower, numbers that a V-8 engine couldn’t provide 20 years ago.

Water-cooled turbo chargers are starting to become more prevalent. Those will provide the boost in passing that smaller engines may not provide.

**Drawbacks:** The driving experience will be different, Davis said. And it will take motorists a while to get used to the engine changes.

**Quotable:** “Not everyone is going to like [the changes],” Davis said. “The driving experience is going to be a little different, but it meets the median family sedan performance.”

### **Electrification of the fleet**

**What’s happening:** The all-electric Nissan Leaf, the Chevrolet Volt and the hybrid Toyota Prius have generated lots of attention for improving vehicle efficiency. But electrification of the fleet is starting to take place in vehicles with traditional combustion engines as well.

For example, regenerative braking systems allow brakes to actually provide power to the vehicle, Davis said. It can be used for a variety of functions or used to augment a stop/start system at stop lights or when a vehicle comes to a stop, Davis said.

**The drawbacks:** Even with rebates, electric and hybrid vehicles are more expensive than traditional combustion engines. The 2013 Chevy Volt on display outside the Carroll Tech Council meeting had a list price of \$41,385 on a sticker placed in the window.

**Quotable:** “Cars are going to become very complex, even more complex than they already are,” Davis said. “And it’s probably going to take a shake out period.”

Reach staff writer Brandon Oland at 410-857-7862 or [brandon.oland@carrollcountytimes.com](mailto:brandon.oland@carrollcountytimes.com).