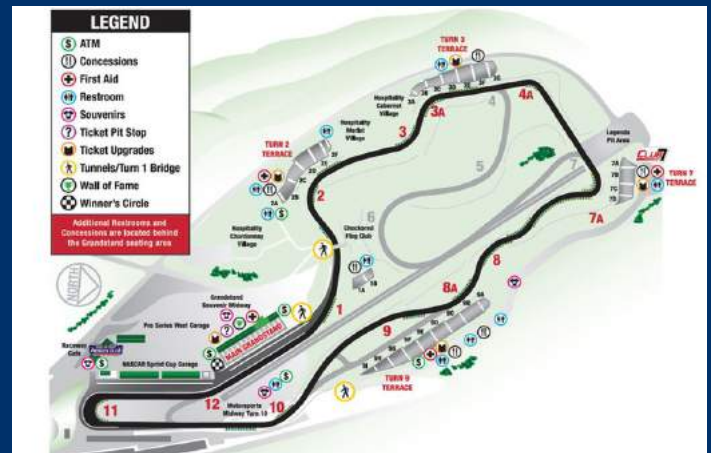




California Bound: Sonoma Raceway

This year, Shell Eco-marathon Americas competition has moved from Detroit, MI to Sonoma, CA. Due to course limitations, only a limited number of teams are allowed to compete at this year's competition. However, both our battery-electric vehicle and internal combustion engine vehicle were accepted to compete. Yay! Our Race Strategy and Project Management Teams are currently working hard to figure out how to transport our vehicles, tools, and equipment to California.

Aerial view of Sonoma Raceway (bottom-left), map of the track (top-right), construction being done to repave the track in preparation for Shell Eco-Marathon Americas (bottom-right). Photos courtesy of Sonoma Raceway.



One Team's Trash is Another Team's Treasure: On Being Resourceful

As a small, undergraduate student design team, Supermileage has to be resourceful when it comes to finding parts and equipment to engineer our vehicles. We do have very generous sponsors, but our budget is still small compared to what we need to create a competitive vehicle.

So what does the Supermileage team do? We get resourceful. We ask for donations and find scraps from other teams or previous projects and make do with what we have. This pushes us to be innovative and creative and ultimately helps us grow as engineers.

Sic Transit Cycles gave us a free bicycle wheel off which we are removing the free hub to use on one of Magnolia's wheels. We are also saving money by reusing plywood from our old brake test ramp to reinforce the fiberglass mold for the windshield of Magnolia's front canopy. These are just a few of the ways in which we are cutting costs and being efficient.

Project Manager Elect Luis Rangel DaCosta inspects the wheel donated by Sic Transit Cycles (right).



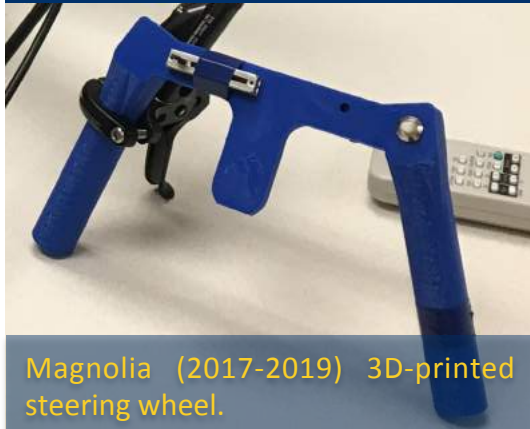
Team Updates

Full Speed Ahead: How the Team is Continuously Improving

Oh, what a ways we have come since 2015! One of the main goals of our Driver Interface & Integration and Electric Motor subteams has been to improve our vehicles' steering wheels. We want to make it easier for our drivers to power and steer the cars during competition. Both subteams have been working together to make the steering wheel more ergonomic.



Acacia (2015-2017) steering wheel



Magnolia (2017-2019) 3D-printed steering wheel.

The Body



Body Team member Taylor Larsen prepares carbon fiber to make Magnolia's driver canopy, the top piece of the body that sits above the driver's head.

The Body Team has been making the top canopies of Magnolia, the new battery-electric vehicle, using a vacuum resin infusion method. This is the first year the Body Team is doing vacuum resin infusion as opposed to wet lay-ups, and so far the new method has been successful!

Race Strategy: Technical Inspection

At Shell Eco-Marathon, all vehicles must undergo several rounds of technical inspection before they are allowed to race on the track. Some teams don't even make it past inspections because their vehicles are not deemed safe enough to run. Safety is very important, especially because our team has a history of rolling our vehicles during competition.

Our Race Strategy Team has been engineering a brake test ramp so that we can test our vehicles' front and rear brakes in-house. This way we can ensure our vehicles are safe to use and we can be prepared for technical inspection at competition.



The team testing Acacia's brakes right before the vehicle enters the track, Shell Eco-marathon Americas 2017.

Thank you to our Gold and Platinum Sponsors!



SUPERMILEAGE

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Edited by Aditi Rajadhyaksha

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