



Shell Eco-marathon®

Jack Rettig

Keystone ENGINEERING INC.

PRINTINGTECH

SOLIDWORKS

AUSTIN FIRE SYSTEMS



Background

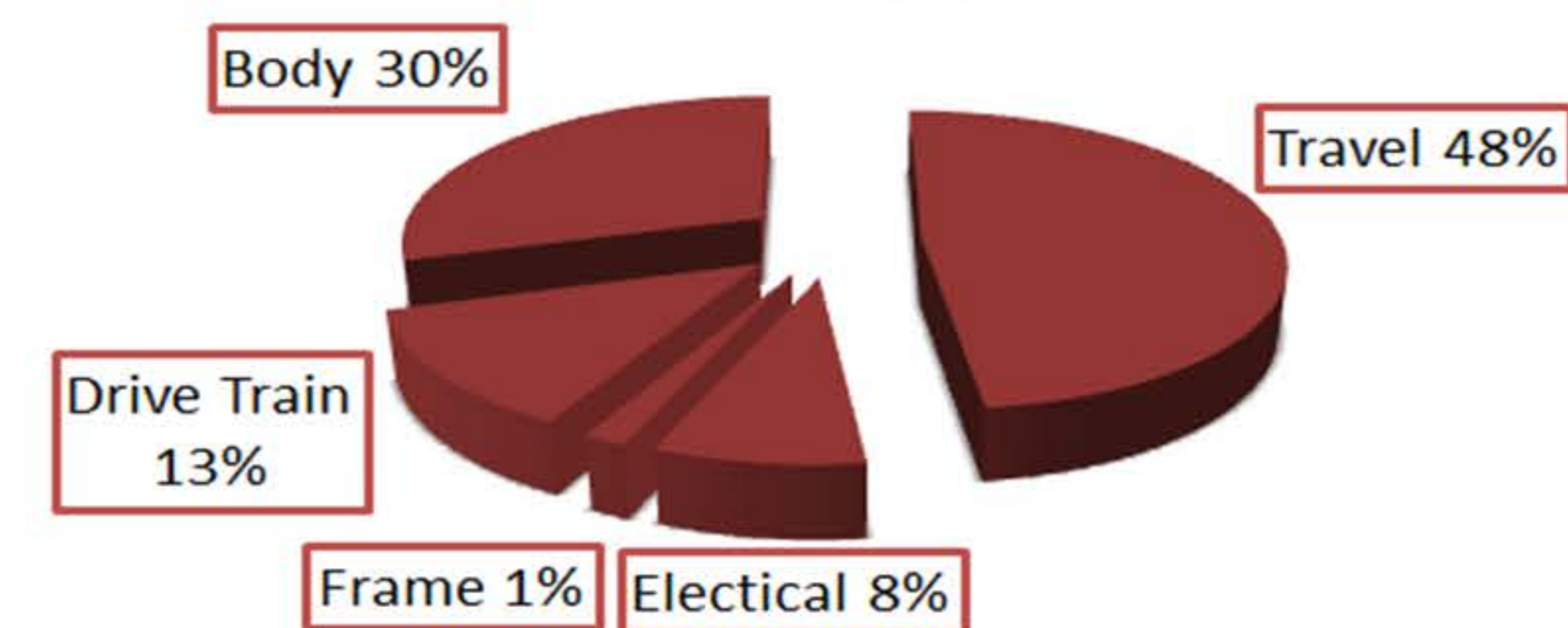
- Competition to get the highest mpg
- Held downtown in Detroit, Michigan
- Competition Date: April 22-24th, 2016
- Each lap has a distance of 0.6 miles
- Complete 10 laps under 24 minutes for each attempt
- Allowed 6 attempts only
- Last LSU team competed in 2009 achieving ~460 mpg

Objectives

- Achieve 800 mpg
- Roll bar resist deformation from 156 lbs application
- Battery will last a minimum of 0.96 hours
- Static Brake at 20% incline

Budget

Total Expenses \$9092.37



Travel \$4380	Electrical \$715.89
Frame \$146.74	DriveTrain \$1153.74
Body \$2696	

LSU Eceaux Team #33

David Anderson, Chris Brignac, Josh Joffrion, Philip Johnson, Josh Palmer, Jahin Parvez, Kyle Temple



Vehicle Specifications

Vehicle Weight: 131 lbs
Dimensions(L x W x H): 122 in x 37 in x 24.5 in
Engine: Robin Subaru 35cc; 1.6 Hp
Gear Reduction: 16:1 ratio

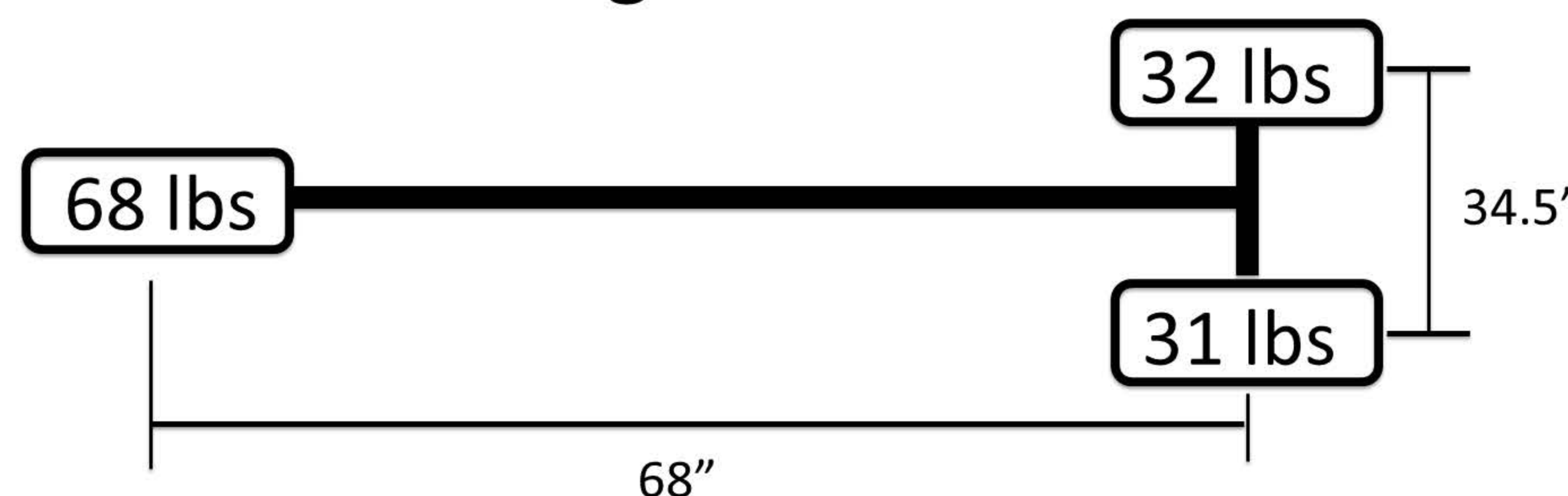
Materials:

Body: Carbon Fiber
Frame: Aluminum
Windshield: Lexan Polycarbonate

Miles Per Gallon Testing Results

Waiting on official results from Shell

Vehicle Weight Distribution



September

October

November

December

January

February

March

April

Research | Calculations | Component Selection | Schematics | Purchasing | Frame Manufacture | Body Manufacture | Testing/Competition