



Density = 0.01 grams per cubic millimeter

Mass = 126352.60 grams

Volume = 16095873.13 cubic millimeters

Surface area = 16724159.07 square millimeters

Center of mass: (millimeters)

X = 0.00

Y = -45.64

Z = -28.16

Changes to be made for next iteration -

Run Ansys sim

Angle front roll hoop back

Significantly narrow front section

Moderately narrow rear section

Tighten roll hoops closer to driver head

Potentially reduce tube thickness for both main members and brace members

Analyze effectiveness, position, and quantity of bracing members

+ Whatever information simulation gives

From Connor:

-I think the front section should be narrowed like said above, but additionally the entire bottom of the car can be shrunk so the entire chassis looks like an upside-down trapezoid. Saves weight and is better aerodynamically. Also, I think for rigidity in egress directions, I think a small metal support triangle on either side by the drivers cockpit could be implemented so drivers can take a small step before jumping out.

-Perhaps we could use a lighter steel? Is there anything lighter with similar strength properties? I suppose cheaper is also important too.

-The driver cockpit doesn't need to be too big since the legs and such will be under the "hood" of the car. I believe we can greatly reduce the overall area that the cockpit takes up to minimize weight.

From Vic

From the top I say from left to right we make 2 cubes where the first is where the pedals will be then the seat then just shrink enough for the battery.