

2018

Lapeer, MI

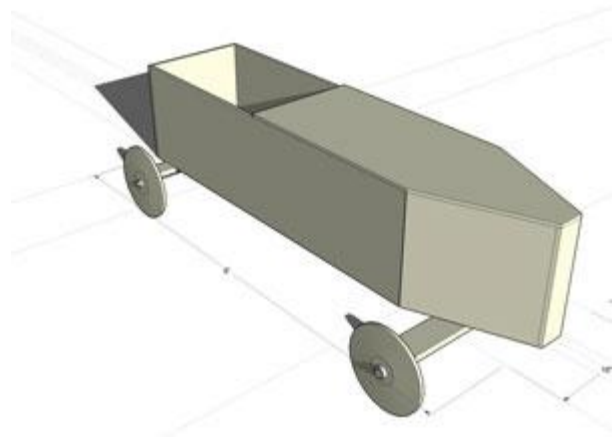
Our 13th annual Rotary Rollin' Derby will be held during Lapeer Days on **Sunday August 19 at 1pm. Entries** will be limited to 20 cars. So be sure to register early and secure a spot as many drivers will be returning.. Here are the details so far...

Race Day

- Sunday, August 19 1pm to 3pm
- The Hill on Oregon Street
- Drivers are ~7 years or older (parent's discretion)

Rotary Class

- Weight of car and driver less than 200 pounds
- Length of car less than 78 inches
- 8 - 18 inch ball-bearing wheels



Stock Class

- Weight of car and driver less than 200 pounds
- Length of car less than 78 inches
- Official Soap Box Derby Z-Glas (or vintage) Wheels

Super Stock Class

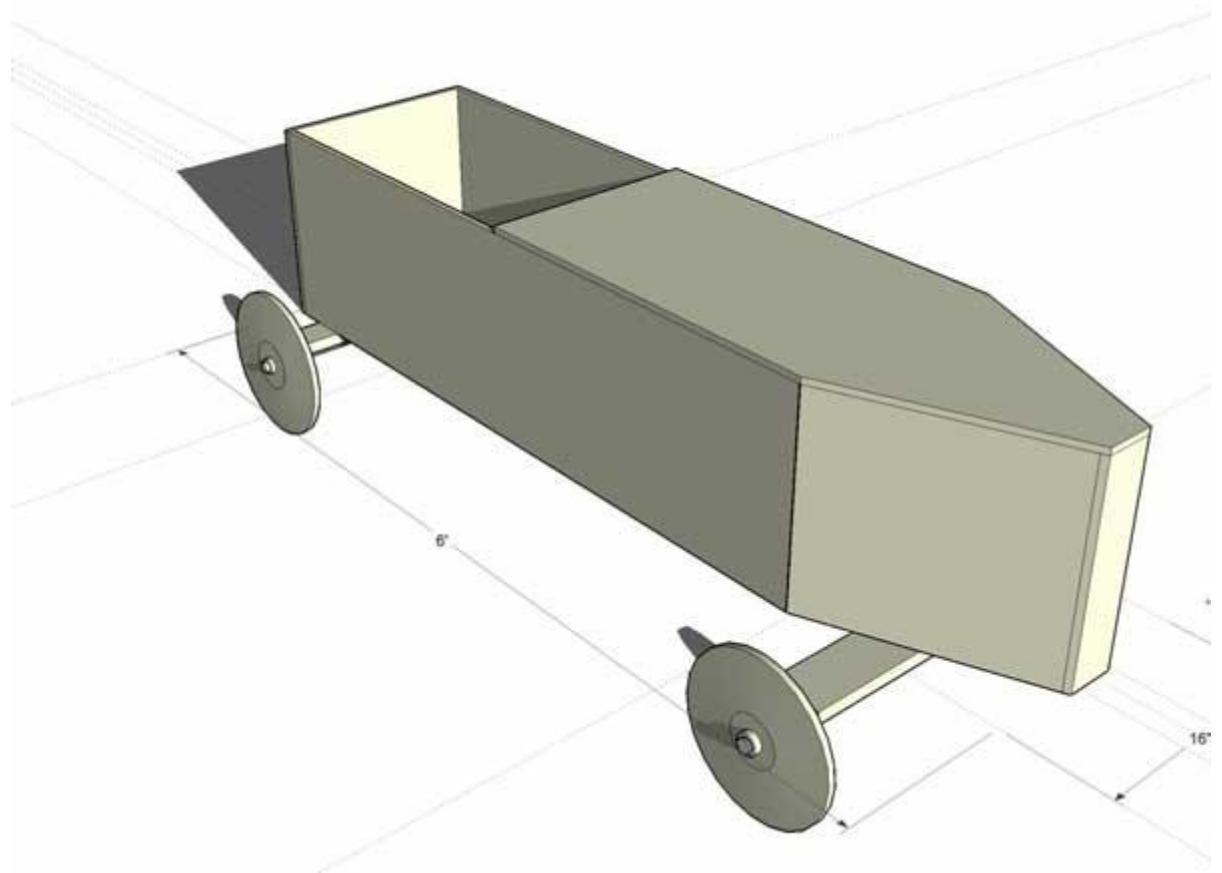
- AASB Kit Cars (or equivalent)
- Weight of car and driver less than 230 pounds
- Length of car less

- than 84 inches
• Official Soap Box Derby Z-Glas Wheels

Due to the unique nature of the hill on Oregon Street (it is not very steep), official Soap Box Derby Z-Glas Wheels should be used. Ball-bearing wheels 12 inches or larger in diameter can be used for the Rotary Class but will not be able to keep up with the other 2 classes. The Z-Glas wheels and car plans can be purchased online at the [AASBD store](#) and frequently appear on [eBay](#).

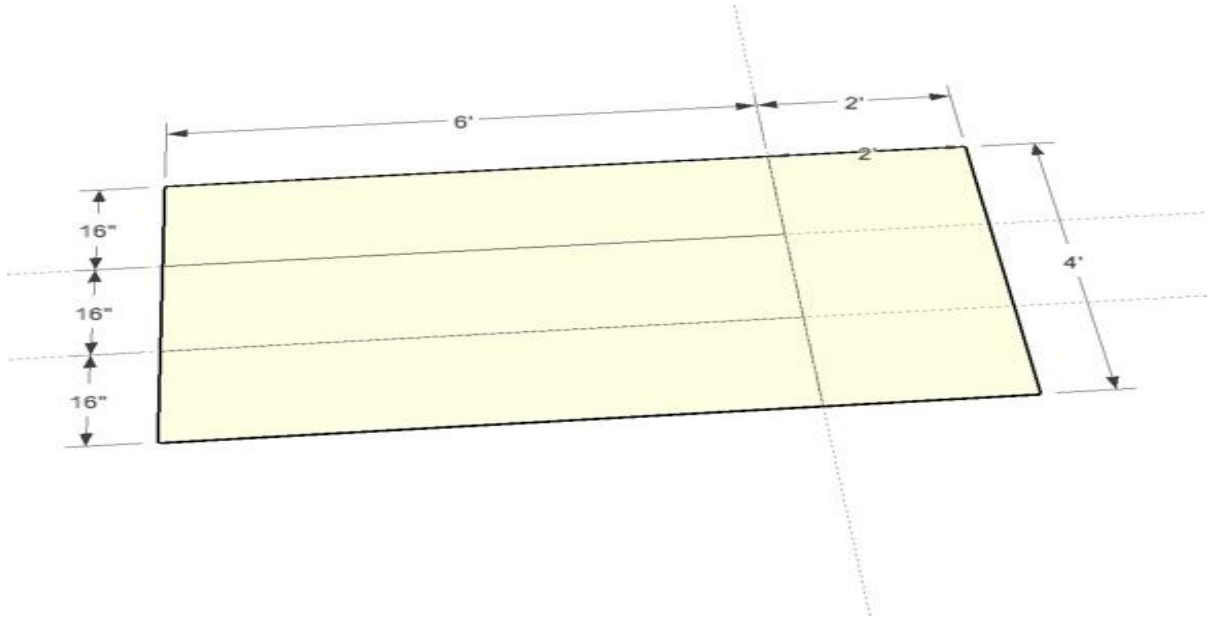
Soap Box Derby Car Construction

In general, any construction technique can be used and as long as it meets the overall length and weight restrictions. However, due to the unique nature of our hill (it is not very steep), the cars need to have very good wheels. Ball-bearing axels are necessary in order to make it down the hill. Lawnmower wheels are definitely not good enough. 8" to 16" diameter, spoked wheels have been used successfully but cannot compete with the Z-Glas type racing wheels typically used. Drag brakes seem to be the best for stopping since we have a short runoff area at the bottom of the hill. Steering should be cable driven using "T" handles. Drivers must bring their own safety helmets.



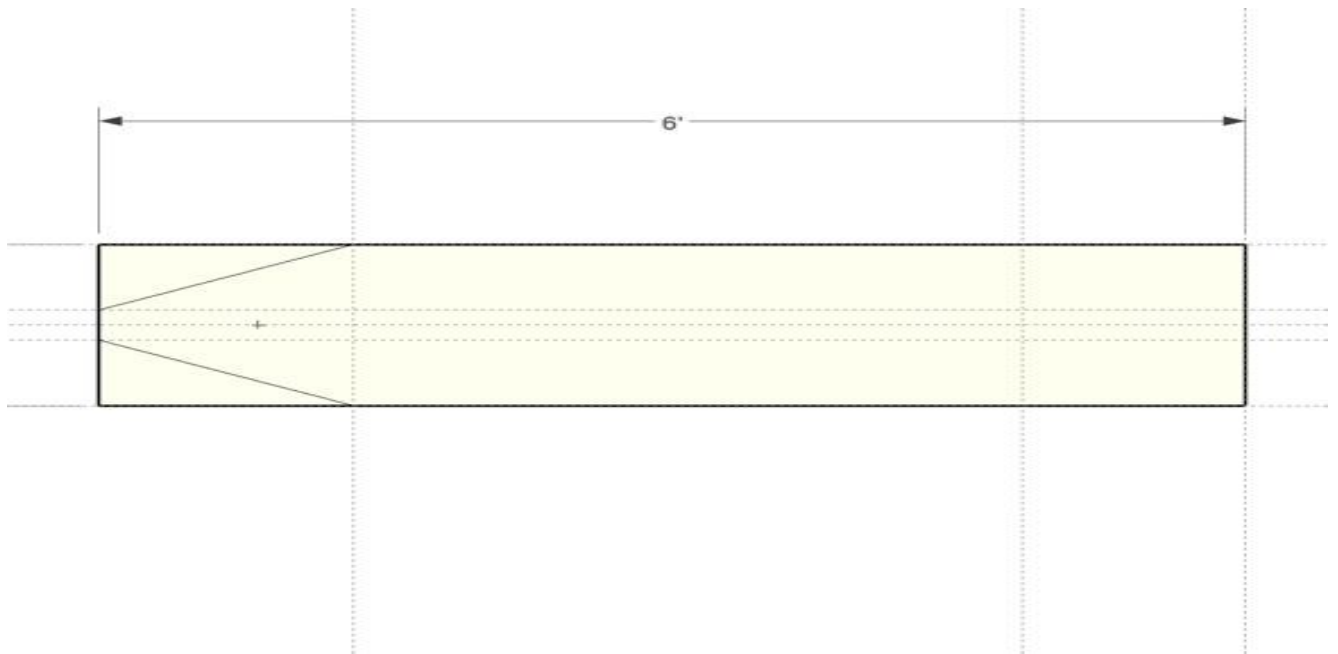
Soap Box Derby Car Construction - Step 1

Starting with a 4 foot x 8 foot piece of plywood, I usually get the supplier to make 3 cuts for me.



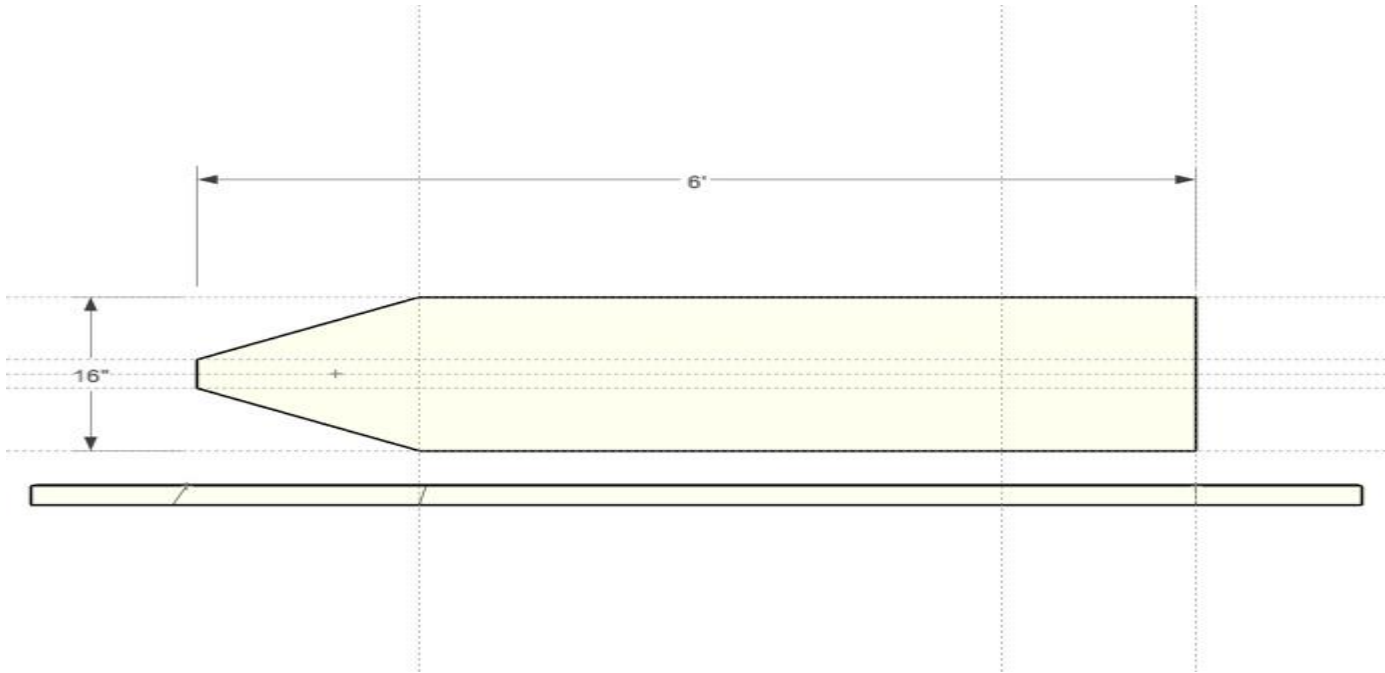
Soap Box Derby Car Construction - Step 2

Taking one of the 2 foot x 6 foot sections, create a "nose" by cutting each side on an angle as shown. You can choose any angle or multiple angles.

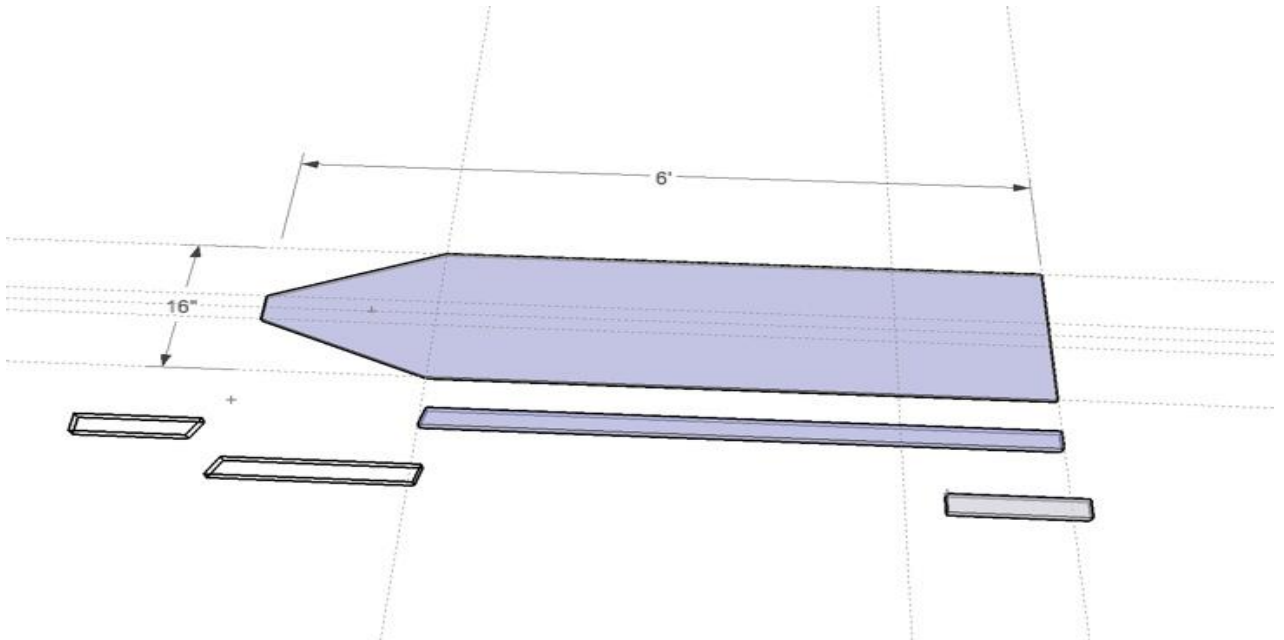


Soap Box Derby Car Construction - Step 3

Cut a 1" x 2" trim piece as shown. You can cut the angles with a mitre saw or leave a gap since the plywood sides will cover the seam.

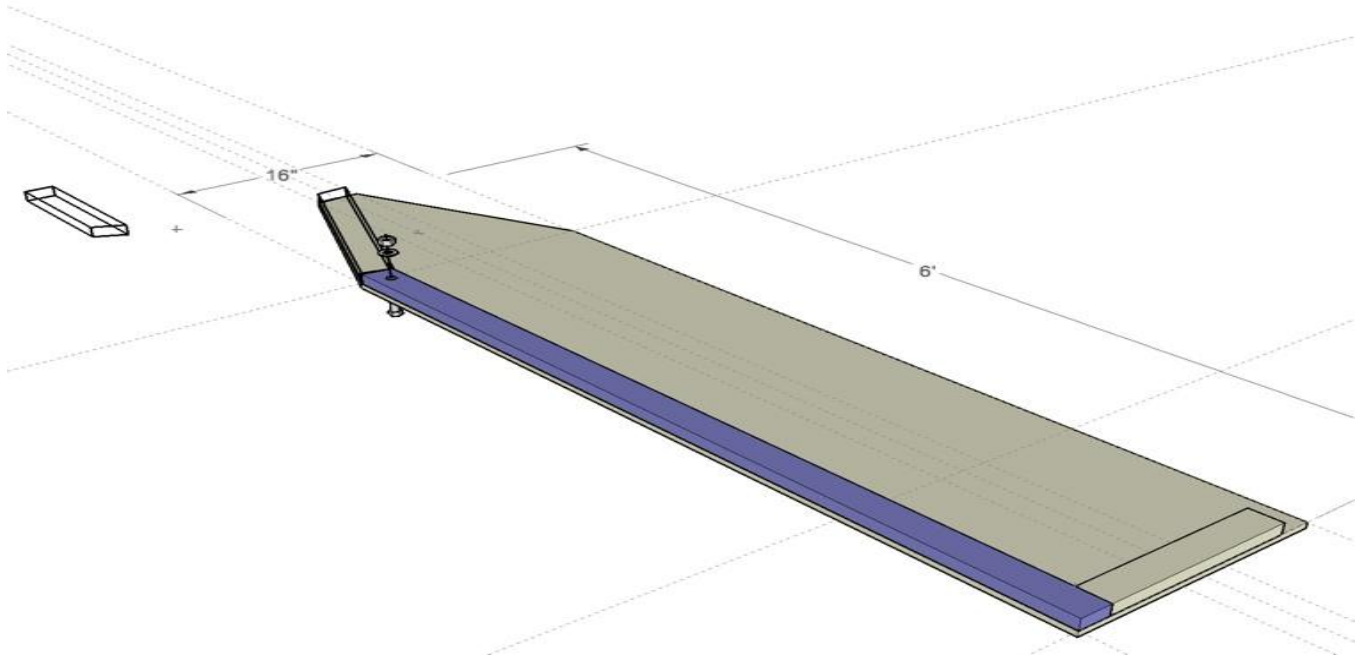


Do the same for the other side.



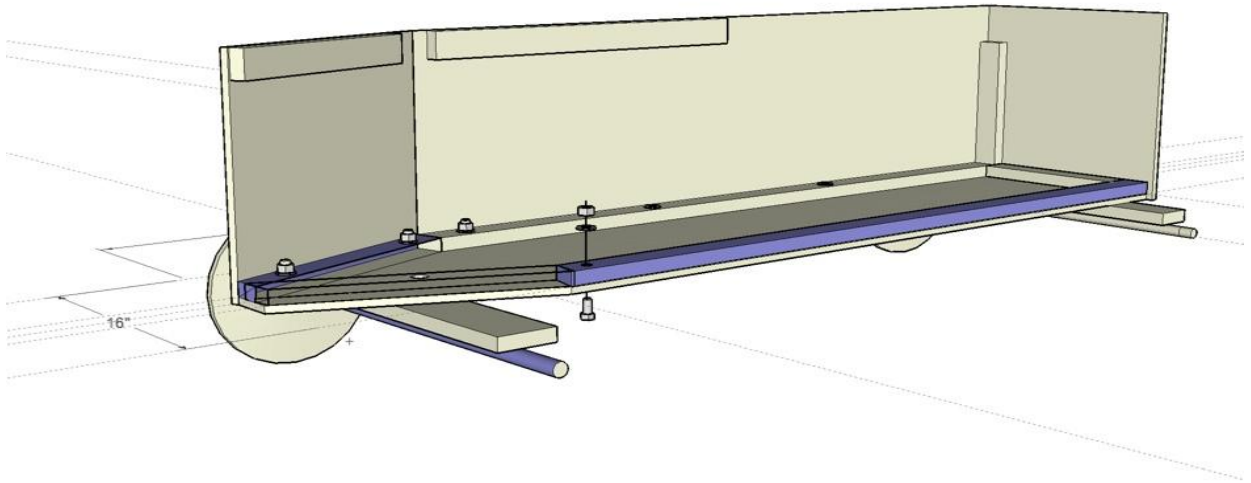
Soap Box Derby Car Construction - Step 4

Attach the trim pieces as shown with carriage bolts, nuts, and washers. 5/16" x 1-1/2" will work if using 1/4" plywood. Adjust accordingly for the thickness of the trim pieces and deck. At least 4 bolts on the long piece and 1 or 2 on the smaller pieces.



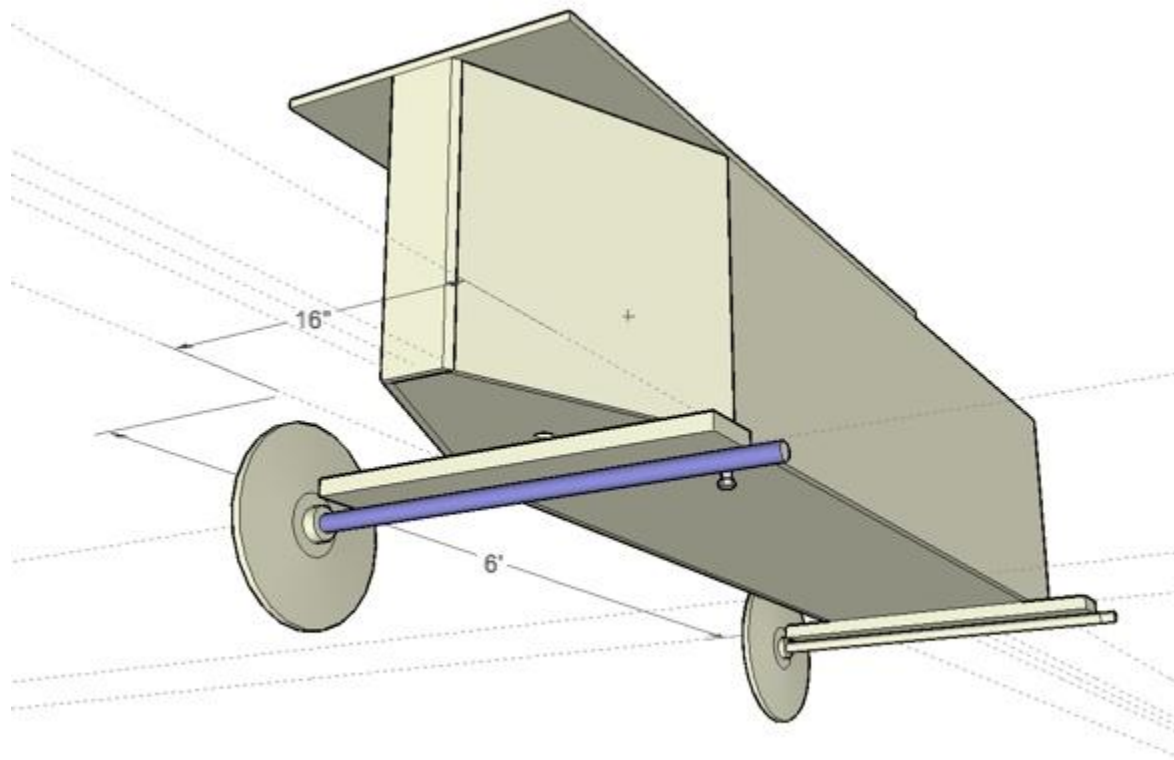
Soap Box Derby Car Construction - Step 5

Attach the sides with wood screws as shown. 1" to 1-1/2" #8 or #6 screws are fine every 2 inches or so. Attach 1"x2" trim pieces to the inside top edge of the plywood side (to attach the top deck)



Soap Box Derby Car Construction - Step 6

Cut the top deck to match the contour of the front nose. Also leave room for the driver. Don't attach the top until the steering mechanism is installed.



Soap Box Derby Car Construction - Step 7

Your racer should look something like this. All that's left is the steering, brakes, and paint.

