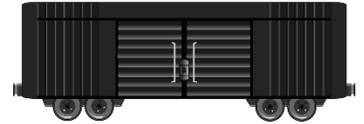


2018 Great Northern Railcar Competition



“Make your Mark on the Great Northern Railroad”

We are looking for inventive, creative, and outstanding railcars to travel to the Great Northern Railyard in Grand Forks at the Alerus Center. We invite each team to create their own railcar that tells their team story while representing *FIRST* Robotics.



Examples of possible railcars to choose from would be *cattle cars, tanks, boxcars, “Piggy Backs” (semi on a flat-bed), side-dump, and “Snow Plows” (Jordan spreaders)*. But don’t limit yourself by this list!

GNR Specifications: (Basis for judging)

1. **Assign two Railcar representatives** responsible for check-in, transport to assigned post, award presentation, and retrieval at the end of the event.
2. Each railcar should be iconic/recognizable.
3. Use only on-hand, scrounged, and preferably recyclable materials.
4. **No purchases** allowable for the railcar excluding two eyebolts that will be used to joint the railcars together in the yard.
5. Each railcar should be within 4’ long x 2’ wide x 3’ high.
6. Each railcar must be equipped with an eyebolt at each end of their railcar, one the “drawbar” and one the “knuckle”. The eyebolts should be centered on the railcar and 1 foot from the floor. Pins for jointing will be provided at the event.
7. Railcar parts cannot be easily removable and cannot pose danger to anyone.
8. Have your team name and number visible.
9. Robots should be easily mobile, light enough for two people to move it in and out of the venue.
10. Robots should be stable (very hard to tip), and well built.
11. Should have curb-appeal (you want it to draw a crowd).
12. Any railcar deemed inappropriate will need to be removed from the competition at check-in.
13. Railcars will be checked in at the designated train station by 10:00 am Thursday morning, March 1st. Judging will be at 10am and the two team representatives must be available for judging.
14. The railcar needs to be registered by ***Friday, February 16th***, work can start anytime and continue until check-in.
15. Register by ***Friday, February 16th*** to mary@pelanco.com.
Subject line: **“Register”**
Give your Team #, team name & school, team representative names, contact information including cell number.

When creating your railcar, remember these:

- > **The railcar will be representing your team and FIRST Robotics to the public**
Presentation is important.
- > **The railcar will be used for advertising purposes, drawing in the public with curiosity.**
Is your railcar attention getting?
- > **The railcar is made from resources on hand.**
Are you using your resources?
- > **This task presents challenges on several levels.**
Are you being creative and thoughtful?