

## Introduction

Welcome to Week #20 of the Certified Green Lab Program! This week we'll be finishing up with Transportation, with Elective Action #27. Don't forget to refresh yourself on our past newsletters [here!](#)

27. If you are going to a research symposium, conference, etc., pledge to take the train, bus, or carpool with other lab members (especially if you would normally take an airplane if out of state).

As a reminder, completion of five Elective Actions beyond the Required Actions will earn you Bronze level certification, completion of ten will earn Silver level certification, and fifteen Elective Actions will earn Gold level certification.

## Instructions

***Elective Action #27: If you are going to a research symposium, conference, etc., pledge to take the train, bus, or carpool with other lab members (especially if you would normally take an airplane if out of state).***

An unfortunate truth is that air travel is a far more convenient method of travel for long distances than pretty much any other method. However, an even more unfortunate truth is that this convenience costs us an awful lot -- mostly in damage to the planet, though also to our wallets as well.

[It's estimated](#) that 2-3% of annual carbon emissions come from planes. Furthermore, while the carbon emissions from a gallon of jet fuel versus gasoline aren't all that much greater, a jet requires a vast amount more fuel to fly than a car does to drive. Because of this, the climate impact of per passenger of flying is 6-47 times greater than it is for traveling in cars. To put in another perspective -- [the New York Times reports](#) that taking one round trip flight from New York to California generates 20% of the carbon your car emits annually.

With the way things are now, the aviation industry, and the frequency of global travel, are only going to grow. And as the global middle class grows and can newly afford to fly, more and more carbon will be flushed into the atmosphere. The NYT also estimates that not only will the planet's current 20,000 commercial aircraft increase to 50,000 by 2040, they will fly more frequently. Though there are certainly many issues that must be addressed if any attempt to rectify the environmental impacts of air travel is to be made, one immediate difference we can all make is to fly less often.

There was once a time when the majority of everyday people who needed to travel a great distance in North America couldn't take an airplane to do so. Though we've grown accustomed to the convenience and speed of air travel, we do have other options, and it's important that we take them when we can.

Calculate the amount of carbon your flights emit using this [carbon footprint calculator](#) to get a sense of the impact they have. If you have some time on your hands, use the full calculator to get an estimate of the footprint of your entire lifestyle!

Here is a list of resources for trains and buses to check out for your next business or academic trip!

- [Amtrak](#) (cross-country train service)
- [Metra](#) (regional train service within Chicago metropolitan area)
- [Greyhound](#) (cross-country bus service)
  - [Tips for first time Greyhound riders](#)
- [Trailways](#) (cross-country bus service)
- [Peoria Charter](#) (bus service from Champaign to Chicago & suburbs)

Remember, though taking the train or bus might be take more time depending on your destination, it will also be substantially cheaper. Be sure to weigh the costs and benefits of each transportation option carefully before deciding! And lastly, don't rule out the possibility of carpooling with your colleagues, if the train or bus are infeasible options. Road trips are fun with lab friends, or can be a great way to get to know each other better. Car rides go by quicker with people to talk to, and you can always stop for food anywhere you want rather being stuck with airplane peanuts!