Citizens for a Greener Evanston
Reduce GHG Emissions 13% by 2012
www.greenerevanston.org

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How Can Air Travel Fit Into a Green Lifestyle?

BY ELEANOR REVELLE

For many Evanstonians, air travel is the biggest source of personal carbon emissions. A couple of business trips to New York, two visits with the grandchildren in Los Angeles, and a vacation in Florida will add the equivalent of six-and-a-half tons of carbon dioxide (CO_2) to an Evanston traveler's carbon footprint. And for some, this itinerary would be just a warm-up.

Serious frequent flyers who measure their carbon footprint will find that emissions from their air travel easily dwarf emissions from their home energy use and driving. Annual U.S. average per capita emissions are about 4.0 tons CO_2 from residential energy use and 3.8 tons CO_2 from driving.

Climate impact of air travel

Although air travel currently contributes only three percent of total U.S. carbon emissions, its climate impact is considerably greater than that of the emissions alone. In addition to emitting CO_2, airplanes (1) release nitrous oxide, which produces the powerful greenhouse gas ozone, (2) trigger the formation of contrails, and (3) cause increased cirrus cloud cover—all of which contribute to climate change.

Although more research is needed to fully understand the effect of aircraft emissions at high altitudes, the Nobel-prize-winning Intergovernmental Panel on Climate Change estimates that the climate impacts of flying are about 2.7 times greater than that of the CO_2 emissions alone. This additional warming effect is referred to as "radiative forcing," and many carbon calculators apply a radiative forcing multiplier in calculating the carbon footprint of air travel.

Lower-carbon options

When it comes time to travel then, what are the greener options? According to a recent report from the Union of Concerned Scientists—*Getting There Greener: The Guide to Your Lower-Carbon Vacation*—the "carbon bargain" is the motor coach. This holds true for short trips and cross-country trips, for solo travelers, couples, and families of four.

The next best option? For trips of up to 500 miles, the train is a good low-emission choice—except for a family of four, who are better off driving. For longer trips, flying economy is the greener alternative for solo travelers and couples, but driving still yields a smaller carbon footprint for a family of four.

Air travelers can reduce the carbon footprint of their trip by following these tips.

• **Fly economy**. Business and first-class seats take up more room than economy seats, thereby reducing the number of people the flight can carry. This makes a passenger traveling in business or first class responsible for more emissions than a traveler in coach—twice as much, for example, for a first-class passenger on a domestic flight.

• **Fly non-stop**. Take-off, landing, and taxiing use a lot of fuel. Shorter flights therefore use more fuel per mile traveled than long-distance flights, and multi-leg flights require two (or more) carbon-intensive take-off and landing cycles.

• **Choose airlines with all-economy seating**. The more seats a plane has, the smaller the per-passenger carbon footprint.

• **Offset your emissions**. To compensate for emissions that can't otherwise be avoided, air travelers can purchase carbon offsets and thereby help finance projects that keep greenhouse gases (GHGs) out of the atmosphere.

Evanston's own offset-style program

While there are numerous offset providers in the marketplace today, Evanstonians can choose to compensate for their emissions by contributing to a fund right here in town. The Evanston Climate Action Fund invests in GHG emissions-reduction projects in Evanston, with a special emphasis on projects benefiting nonprofit organizations and lower-income households.

Current contributions will help support a first set of grants to local childcare centers for energy-efficient lighting upgrades. In addition, the families of the children served by the centers will be given information about energy-saving steps they can take and will also receive compact fluorescent lights to install in their homes.

Maintained by the Evanston Community Foundation, the Fund is part of a community-wide campaign to reduce Evanston's collective carbon footprint—**13% by 2012**.

To make a contribution . . .

This simplified "calculator" shows suggested contribution amounts for plane trips of various lengths and duration.

Flight length	Duration	One-way	Round trip
Short (< 300 miles)	< 1.5 hours	$5.00	$10.00
Medium (300-800 miles)	1.5-4 hours	$10.00	$20.00
Long (800-2,500 miles)	4-6 hours	$15.00	$30.00
Extended (2,500-5,000 miles)	6-12 hours	$20.00	$40.00
Super-extended (>5,000 miles)	> 12 hours	$25.00	$50.00

Travelers may want to "save up" their emissions and make a contribution once or twice a year (rather than after each trip). Contributions may be made online at www.evanstonforever.org. Or checks (designated for the Evanston Climate Action Fund) may be sent to

Evanston Community Foundation, 1007 Church Street, Suite 108, Evanston, IL 60201

Resources

• To learn more about the campaign to reduce Evanston's GHG emissions, visit the Citizens for a Greener Evanston (CGE) website at www.greenerevanston.org.

• To measure your carbon footprint, visit www.zerofootprint.net/calculators/evanston.

• Union of Concerned Scientists, *Getting There Greener: The Guide to Your Lower-Carbon Vacation* (December 2008). (www.ucsusa.org/assets/documents/clean_vehicles/greentravel_report.pdf)

• Intergovernmental Panel on Climate Change, *Aviation and the Global Atmosphere* (1999). (www.grida.no/publications/other/ipcc%5Fsr/?src=/climate/ipcc/aviation/index.htm).