



Marin County has a higher ecological footprint than the national average.

62% of Marin's greenhouse gases result from transportation.



Environmental Facts

AUTOMOBILE USE

- The United States moved into the 21st century with less than 30% of its original oil supply remaining.¹
- The number of motor vehicles per person in California has doubled since 1940.²
- Americans drive more than 2 trillion vehicle miles per year.³
- Short motor-vehicle trips contribute significant amounts of air pollution because they typically occur while an engine's pollution control system is cold and ineffective. Thus, shifting 1% of short automobile trips to walking or biking decreases emissions by 2 to 4%.⁴
- There is more pollution inside a stationary car on a congested road than outside on the pavement.⁵
- From 30% to 60% of urban America is given over to the car; two-thirds in Los Angeles.⁶
- 1.5 million acres of arable land in the US is lost each year to roads and sprawl.⁷

GLOBAL WARMING

- The United States experienced its 23rd warmest year in 2011, with an average of 53.8 degrees Fahrenheit; that was about one degree above the 20th century average. NOAA said the high global temperatures are mainly due to increased concentrations of greenhouse gases, principally carbon dioxide, in the atmosphere.⁸
- The global average temperature 2011 was the ninth warmest on record and continued the trend in which nine of the 10 hottest years on record have occurred since 2000. 2011 also saw record-breaking weather extremes, and disasters, in the United States and in various other locations around the world.⁹
- The incidence of extreme weather events has gone up 28% since 1975 and it is now confirmed that the Arctic ice caps are melting, threatening coastal regions with flooding; the rise in water levels has already resulted in the loss of some small islets.¹⁰
- All of the islands of the Maldives are extremely sensitive to rising ocean levels with the highest only two meters above sea level. If ocean levels rose enough, the entire country could disappear under water.¹¹
- Global warming is approaching the point of no return after which widespread drought, crop failure and rising sea levels will be irreversible.¹²
- The transportation sector is the second largest source of CO₂ emissions in the U.S. Automobiles and light-duty trucks account for almost two-thirds of emissions from the transportation sector. Emissions have steadily grown since 1990.¹³
- In a year, a typical North American car will add close to five tons of CO₂ into the atmosphere. Cars account for an estimated 15% to 25% of U.S. CO₂ emissions.¹⁴

FOOTNOTES

1. *(Global 200 Revisited Gerald O. Barney)*
2. *(Metropolitan Transportation Commission)*
3. *(Going Place, Making Choices, 4H)*
4. *(Way to Go Manual, British Columbia)*
5. *(Sustrans Routes to Action Winter 2004)*
6. *(Asphalt Nation Jane Holtz Kay 1997)*
7. *(Asphalt Nation Jane Holtz Kay 1997)*
8. *(The National Oceanic and Atmospheric Administration 2011 <http://www.noaa.gov/>)*
9. *(The National Oceanic and Atmospheric Administration 2011 <http://www.noaa.gov/>)*
10. *(U.S. E.P.A.)*
11. <http://www1.american.edu/ted/ice/maldives.htm>
12. *(Institute for Public Policy Research in Britain, the Center for American Progress in the U.S. and the Australia Institute)*
13. *(EPA. "Human-Related Sources and Sinks of Carbon Dioxide", 2011. http://www.epa.gov/climatechange/emissions/co2_human.html)*
14. *(Internal Council for Local Environment, 1995)*
15. *(Environmental Protection Agency. 2006. National Emissions Inventory (NEI) Trends Report: Average annual emissions, all criteria pollutants. Accessed at <http://www.epa.gov/ttn/chief/trends/>)*
16. *(2001 California Health interview survey)*
17. *(U.S. EPA)*
18. *(Divorce your Car, Katie Alvord, 2000)*
19. *(John Butcher, Founder Walk21, 1999 http://en.wikipedia.org/wiki/Walking#As_transportation)*
20. *(Green Commutes, Makower)*
21. *(Divorce your Car, Katie Alvord, 2000)*
22. *(Divorce your Car, Katie Alvord, 2000)*
23. *Asphalt Nation by Jane Holtz Kay 1997 <http://www.nytimes.com/books/first/k/kay-asphalt.html>*
24. *(Saving Cities Saving Money – by John Hart –1992)*

Environmental Facts

POLLUTION

- Transportation is the largest single source of air pollution in the United States. In 2006 it created over half of the carbon monoxide, over a third of the nitrogen oxides, and almost a quarter of the hydrocarbons in our atmosphere. ¹⁵
- Of all the Bay Area counties, Marin County measured the second highest rate of asthma in children age 0 to 17. ¹⁶
- Disposal of used motor oil sends more oil into the water each year than even the largest tanker spill. ¹⁷
- Going by bus instead of car cuts nitrogen oxide pollution by 25%, carbon monoxide by 80% and hydrocarbons by 90% per passenger mile. ¹⁸

ALTERNATIVES TO DRIVING ALONE

- Walking is convenient, it needs no special equipment, is self-regulating and inherently low impact. Walking is as natural as breathing. ¹⁹
- If just one out of every 10 commuters who now drive to work switched to walking, we'd save 2 billion gallons of gas a year and reduce carbon dioxide emissions by 25.4 million tons. ²⁰
- Every car commuter who switches to biking and transit can save 400 gallons of gas a year. ²¹
- Eight bicycles can be parked in the space required for just one car. ²²
- A one-mile trip for a carload of rail passengers equals six to ten miles avoided by car. ²³

GREEN TRANSPORTATION PLANNING

Traffic calming in Freiburg, Germany: In 1973, the entire old city core was closed to motor vehicles. When a major new public bridge was built across a swath of railroad tracks in 1978, no automobile lanes at all were provided. The streetcar system was expanded by 43%. Suburban parking lots were built for transit riders. In 1984, the city introduced an inexpensive monthly transit pass called the Ecoticket. The number of transit riders rose by 21%, with 4000 fewer cars driving into the city. Only about half of all travel within the city is by car. ²⁴