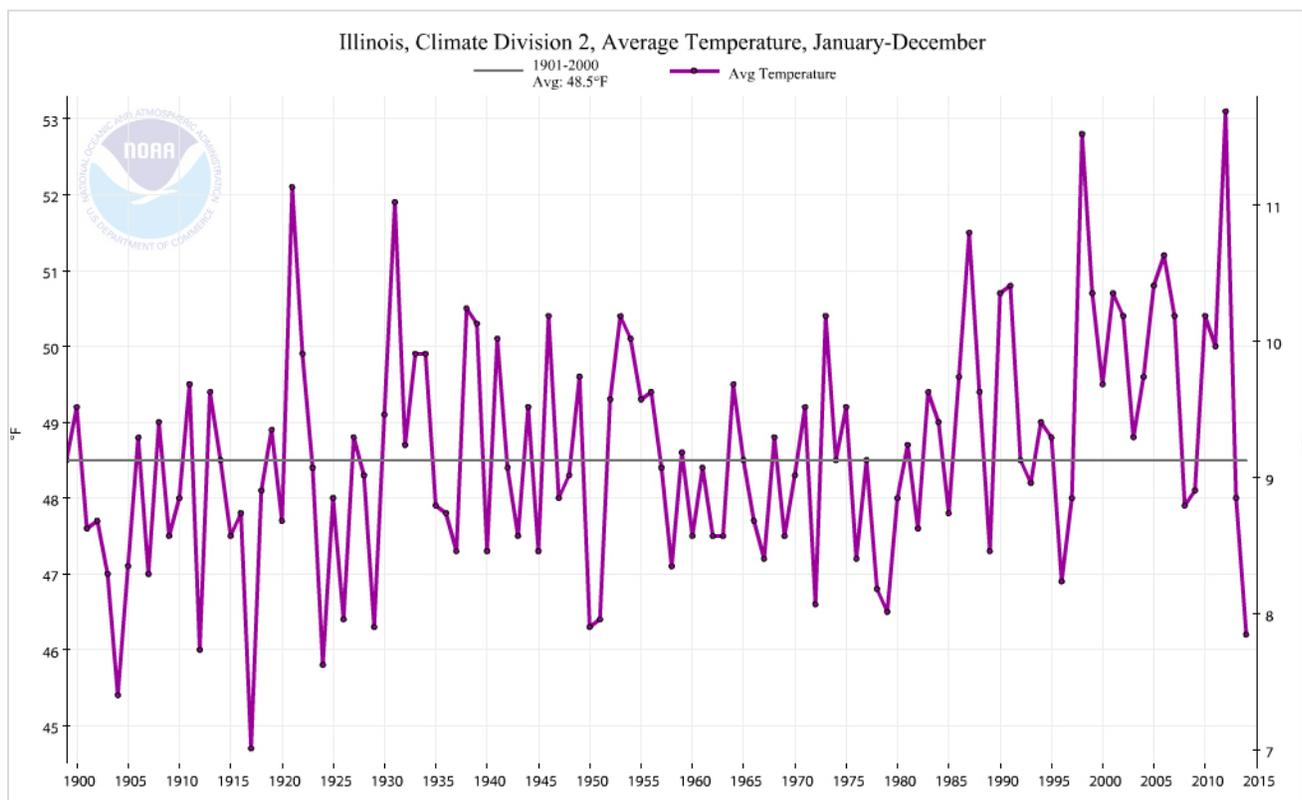


## Chicago's temperature trends

Temperature data for Chicago and Northeast Illinois shows an overall warming trend over the time period from 1900 to 2014, although there is a lot of year-to-year and decade-to-decade variability.

The Dust Bowl era of the 1930s appears as a decade with warmer than long-term average temperatures. The coldest decade in Chicago and across the U.S. was the 1960s. Many scientists attribute air pollution from manufacturing for cooling noted between 1940 and 1980, although global volcanic activity may also be a factor. The passage of the Clean Air Act in 1970 gradually reduced aerosols in the atmosphere and allowed more sunlight to hit the surface of the Earth, contributing to recent warming, along with increases in greenhouse gases like carbon dioxide and methane that trap warmth at the surface.

Chicago temperatures are also affected by the water temperatures of Lake Michigan and by heating due to urbanization. This "heat island" effect can be seen in even moderate-sized cities but is most noticeable in large cities like Chicago due to extensive concrete and pavement and lack of vegetation. And while the growth of cities is one factor in recent warming, careful examination of temperature data from rural observation stations show similar trends meaning increased urbanization is only one factor contributing to overall warming trends.



### Annual temperature trend for northeast Illinois from the National Climatic Data Center (NCDC) 1900-2014

Similar plots of temperature and precipitation for any climate division in the U.S. can be acquired using NOAA NCDC's "Climate at a Glance" tool at <http://www.ncdc.noaa.gov/cag>.