Air travel in the U.S. is one of the safest ways to get around. NCEI’s Next Generation Radar Data (NEXRAD) is helping to keep it that way.

Each year aviation in the U.S. contributes

- $1.5 trillion to the U.S. economy
- $1 billion to the U.S. economy

U.S. airlines carried 16 million tons of freight in 2015. That’s about the same weight as 68,000 Jumbo Jets.

NCEI’s NEXRAD provides airlines and the National Transportation Safety Board (NTSB) with weather information to retrospectively analyze aviation incidents / accidents.

1. An aviation incident / accident occurs
2. NTSB and airlines access NCEI’s NEXRAD
3. NEXRAD helps recreate weather at the time of the incident / accident
4. Lessons learned inform airline safety procedures and policies

NCEI’s NEXRAD refines aviation procedures to save lives and billions of dollars in avoided accidents.

- 313: the average number of fatal accidents per year between 1995 - 2014
- 160: NEXRAD stations across the U.S.
- 400: Terabytes of radar data from 1991 - present

Since 1967 the NTSB has investigated 140,000 aviation accidents. The NTSB uses NCEI’s NEXRAD in over three quarters of aviation investigations.

- 160: NEXRAD stations across the U.S.
- 400: Terabytes of radar data from 1991 - present

- $1.6 Billion: The average annual accident costs attributed to general aviation in the U.S.

NCEI contains 400 Terabytes of radar data from 1991 - present, which is equivalent to 27 Million copies of the complete works of William Shakespeare.

The number of passenger miles travelled in the U.S. in 2013 is 590 billion.

That is equivalent to 63 round trips to Pluto.