Approximately \$4 trillion of the U.S. Gross Domestic Product is reliant on accurate weather data!



TRANSPORTATION



Route planning for commercial goods to avoid weather delays

Planning for barge

traffic across nation's waterways

Planning highways to handle heavy precipitation events

HYDROLOGY



COOP data is used by Water Resource Management

Section 2 Flood maps and forecast models use rainfall data

Planning for development, growth and flood control

DROUGHT



National Integrated **Drought Information** System uses COOP data through Western Governor's Association

Drought losses average \$6-8 billion/year. COOP

data is used for National and North American Drought monitoring/mitigation

AGRICULTURE/AGRIBUSINESS

- COOP data is used to develop growing season zones
 - Plant research and adaptability
 - 🗹 Frost/freeze climatology
- COOP data is used to study effects of climate on crop yields

en nin temperature Precipitatio COOPERATIVE OBSERVER PROGRAM (COOP)

DECISION SUL DECISION SUL Prature • River Stages • Evaporation **WEATHER & CLIMATE DATA**

CONSTRUCTION & DESIGN

New air freezing index estimated to save \$300 million/year by home builders association

Planning for roof loading of snow/heavy rainfall

ENERGY

- Future demands for COOP data will increase with more energy needed
- Heating/Cooling **Degree Days derived** from COOP data



- determine your monthly power bill Billions of dollars in planning for forecast
- energy consumption and necessary resources to provide power to an area

OTHER USES OF COOP DATA

- COOP data is used in NWS forecast and warning process
- Health/Disease Mitigation

Snowfall

- Recreation/Tourism
- COOP data is used to help solve legal disputes

DISASTER MITIGATION

Federal Disaster Declaration funding in billions of dollars are determined with COOP data



planning to save millions of dollars

Insurance industry payouts in billions of dollars are determined with COOP information



COOPERATIVE OBSERVER PROGRAM

The Mission

Monitor and maintain the nation's local climate and weather data record to support weather and climate forecasts, watches, warnings, and the continuity and preservation of the climate record and signal.

Vision Statement

Provide official unbiased, high quality weather and climate observations and data stewardship for all data users. Collect and provide daily observations for input into decision support at all levels of government and private citizens.

Program Management

The National Weather Service manages all aspects of program operations, training, data acquisition, and station maintenance.

History

The program can be tracked back to 1797 when Thomas Jefferson envisioned a network of weather observers across the nation.

The COOP Program partners across numerous Federal, State and Local agencies.

Resources









Cooperative Observer Program

"Quality Observations Lighting the Way for Decision Makers of Tomorrow"

