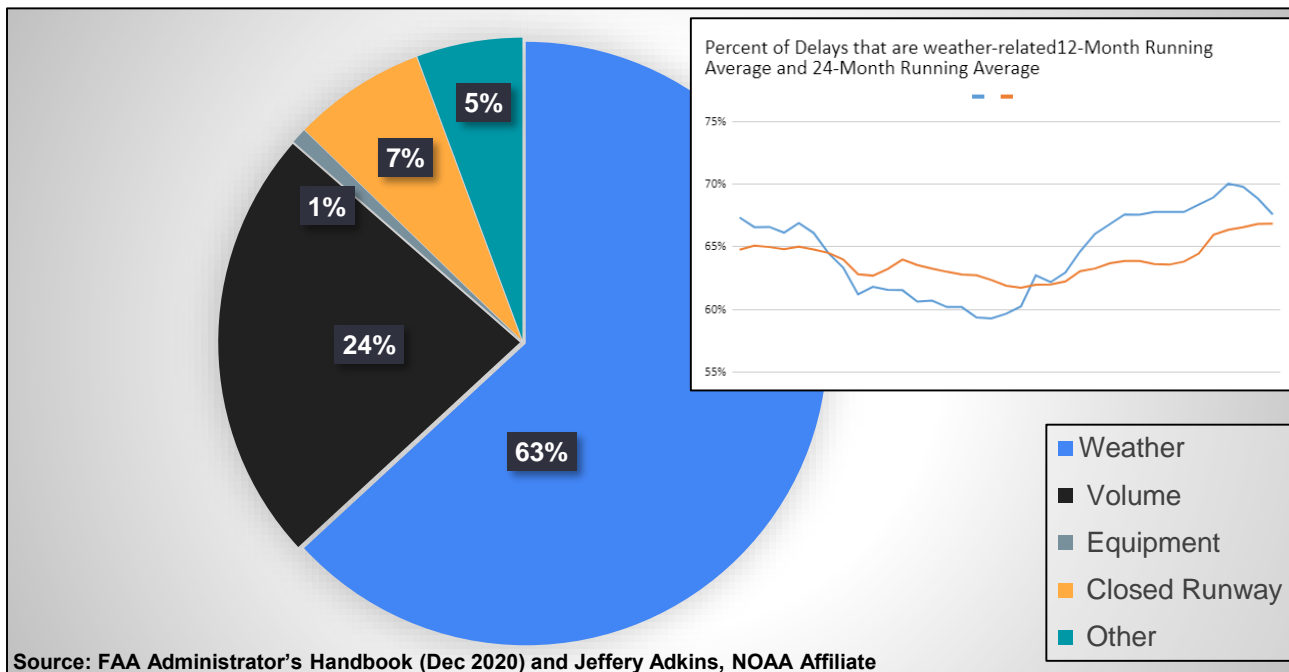


# The Value of Your Aviation Weather Program

Jennifer Stroozas  
Warning Coordination Meteorologist  
Aviation Weather Center



# Causes of National Airspace System Delays



As much as 67% of the delay in the NAS can be attributed to weather, resulting in US economic losses of roughly **23,000,000,000 USD** annually.

# Multi-Million Dollar Losses to Aviation

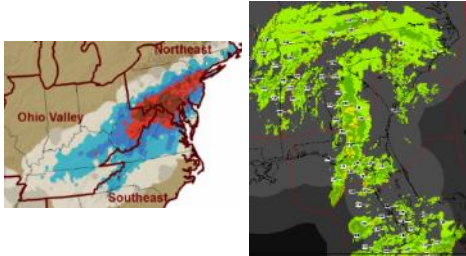
## 18,411 Cancellations

1/22-1/25 2016 – Winter Storm/Thunderstorms

~\$8K Loss / Flight  
(variable per flight/aircraft type)



~\$150M Losses



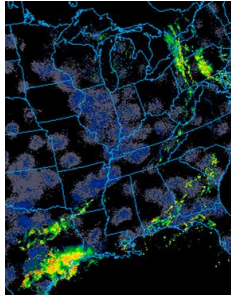
Cancellations → Mostly due to Snow/Ice  
Divers → Mostly due to TS/CIGs/VSBY  
Delays → Mostly due to TS/CIGs/VSBY

Cancel/Divert/Delay Data Provided by: **MITRE**

## 211,226 Min of Delay

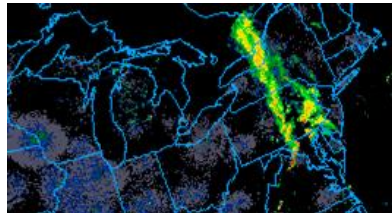
8/20/15 - Thunderstorms

~\$74 Loss / Minute



AM & PM TS  
EWR, LGA,  
JFK & PHL  
(Routes  
Blocked)

AM TS  
IAH ↔ DFW  
(Routes Blocked  
& TS at  
Terminal)



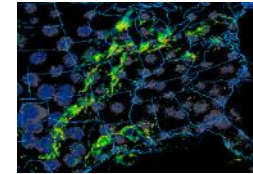
~\$16M Losses

Cost Data provided by: **Airlines for America**  
We Connect the World

## 322 Diversions

6/15/15 Thunderstorms

~\$8K Loss / Flight  
(variable per flight/aircraft type)



TS Impacting:  
ORD – NY/PHL/DC  
ORD – DFW  
DFW – IAH

~\$2.6M Losses

### Types of Losses

Airline Crew (timeout)  
Missed connection  
Missed meeting/vacation  
Hotel (airline/passengers)  
Reimbursing Tickets  
Food  
Taxis  
Rental Cars  
Fuel (airlines & passengers)  
Maintenance (airlines)  
Lost demand (passenger uses other means)  
GDP reduced  
Tarmac rule (> 3 hours)  
\$27,500 per passenger (paid to Trans Dept)

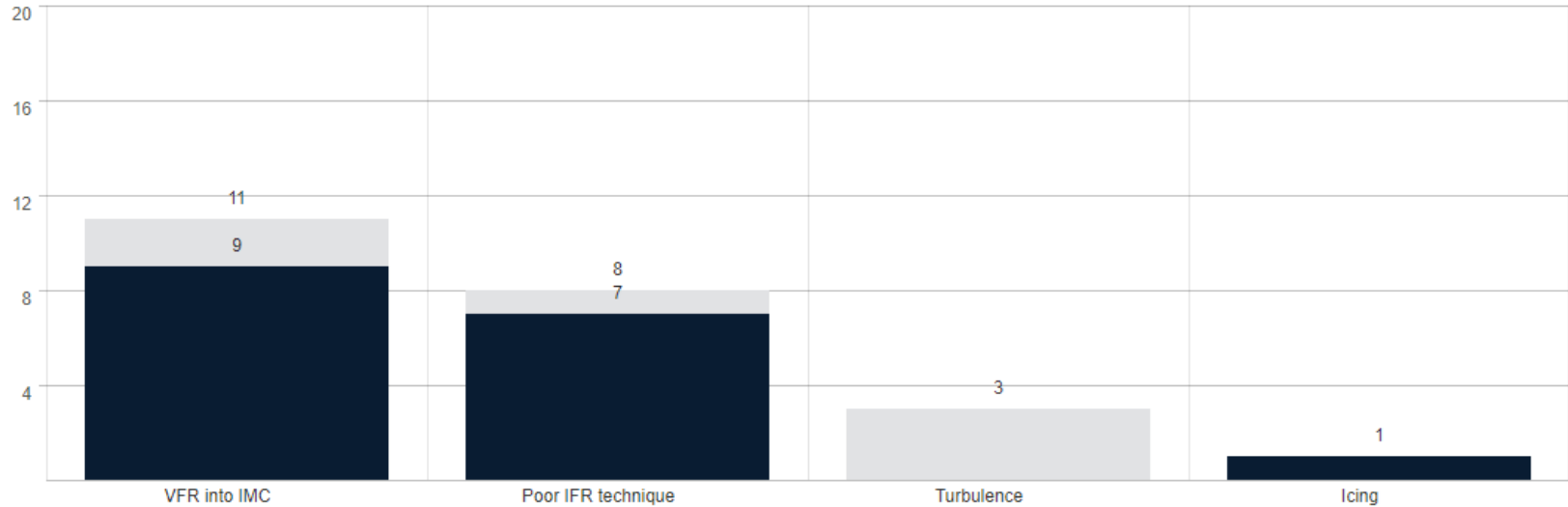
*\*Some airlines  
build divert  
costs into  
budgets*

Source: Eckert, 2017

# General Aviation Fatalities

Figure 1.7.2: Types of weather accidents

2020 Non-commercial fixed-wing



■ Total Accidents ■ Fatal Accidents

# NOAA/NWS Aviation Program



**122** Weather Forecast Offices



**21** Center Weather Service Units



**3** Meteorological Watch Offices



**2** Volcanic Ash Advisory Centers

**Aviation weather is scattered throughout the NWS!**

# Key Aviation Stakeholders



Federal Aviation  
Administration  
(FAA)



National  
Transportation  
Safety Board (NTSB)



Airlines For America  
(A4A)



International Air  
Transportation  
Association (IATA)



National Business  
Aviation Association  
(NBAA)



General Aviation  
Community



Aircraft Owner and  
Pilot Association  
(AOPA)

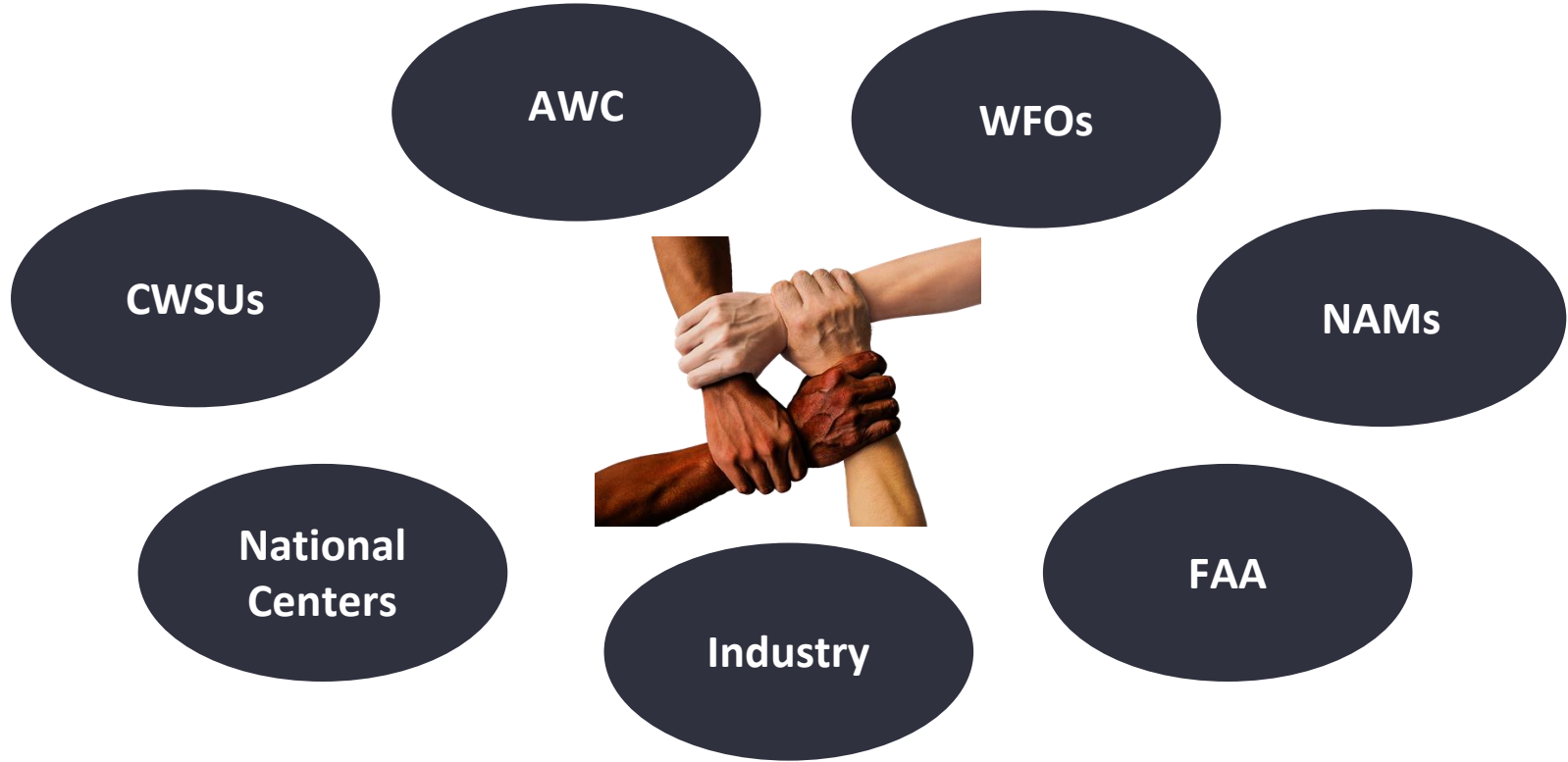


International  
Meteorological  
Service Providers



International Civil  
Aviation Organization  
(ICAO)

# Coordination and Collaboration



# Your aviation program matters!

- General aviation impact
- Economy
- NWS collaboration
- [aviationweather.gov](http://aviationweather.gov)





# Southwest Aviation Weather Safety Workshop



[weather.gov/zla/saws10](https://weather.gov/zla/saws10)



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