# In the United States, our focus was set by the White House Commission on Aviation Safety, and The National Civil Aviation Review Commission (NCARC)
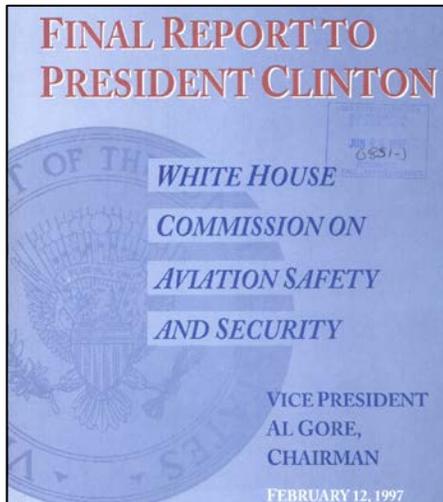
1.1 . . . Reduce Fatal Accident Rate . . .
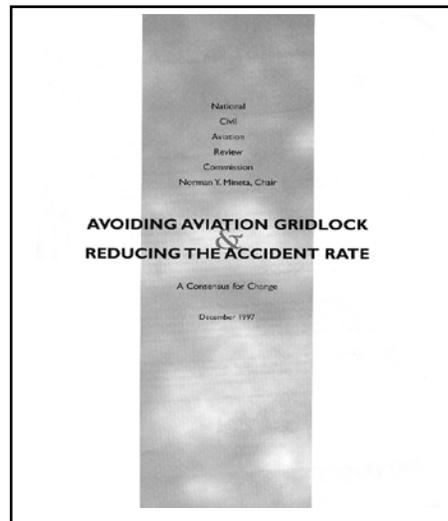
- . . . Strategic Plan to Improve Safety . . .
- . . . Improve Safety Worldwide . . .

CAST brings together key stakeholders to cooperatively develop and implement a prioritized safety agenda.

Industry

Government

A4A
AIA
Airbus
ALPA
ACI-NA
CAPA
IATA**
NACA
Boeing
GE*
RAA
FSF

Commercial Aviation Safety Team

DOD
FAA
NASA
ICAO**
TCCA
NATCA
NTSB**
EASA**
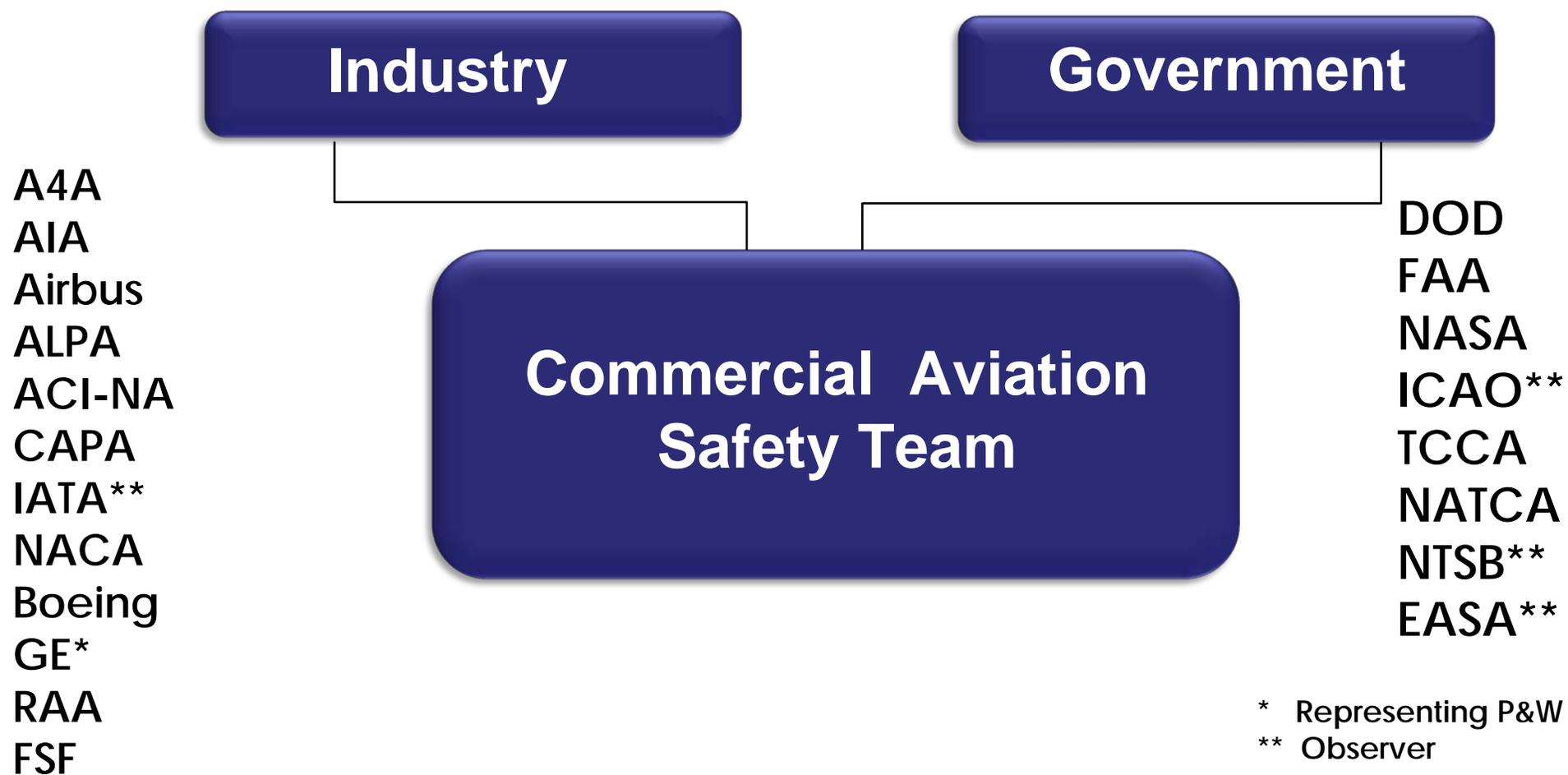
* Representing P&W and RR
** Observer

CAST Goal

▶ CAST came together in 1997 to form an unprecedented Industry-Government partnership…

   ▶ Voluntary commitments, Consensus decision-making, Data-driven risk management, Implementation-focused.

   ▶ Goal:

✅ **Original** *Reduce the US commercial aviation fatal accident rate* **83%** *by 2007.*

New *Reduce the U.S. commercial aviation fatality risk by at least 50 percent from 2010 to 2025.*

CAST Safety Strategy
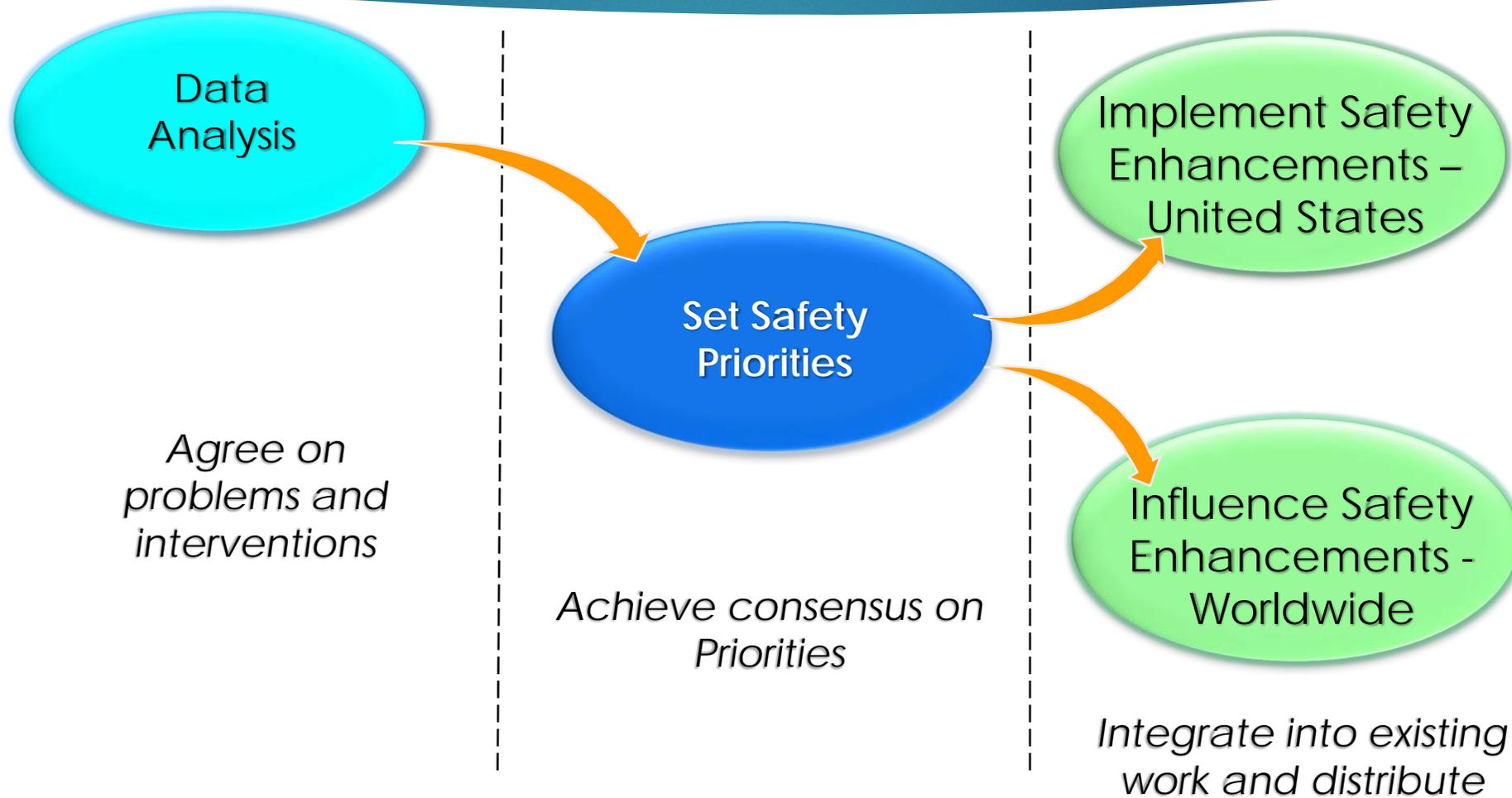
2001 CAST Plan Resource Cost vs. Risk Reduction

CAST-050
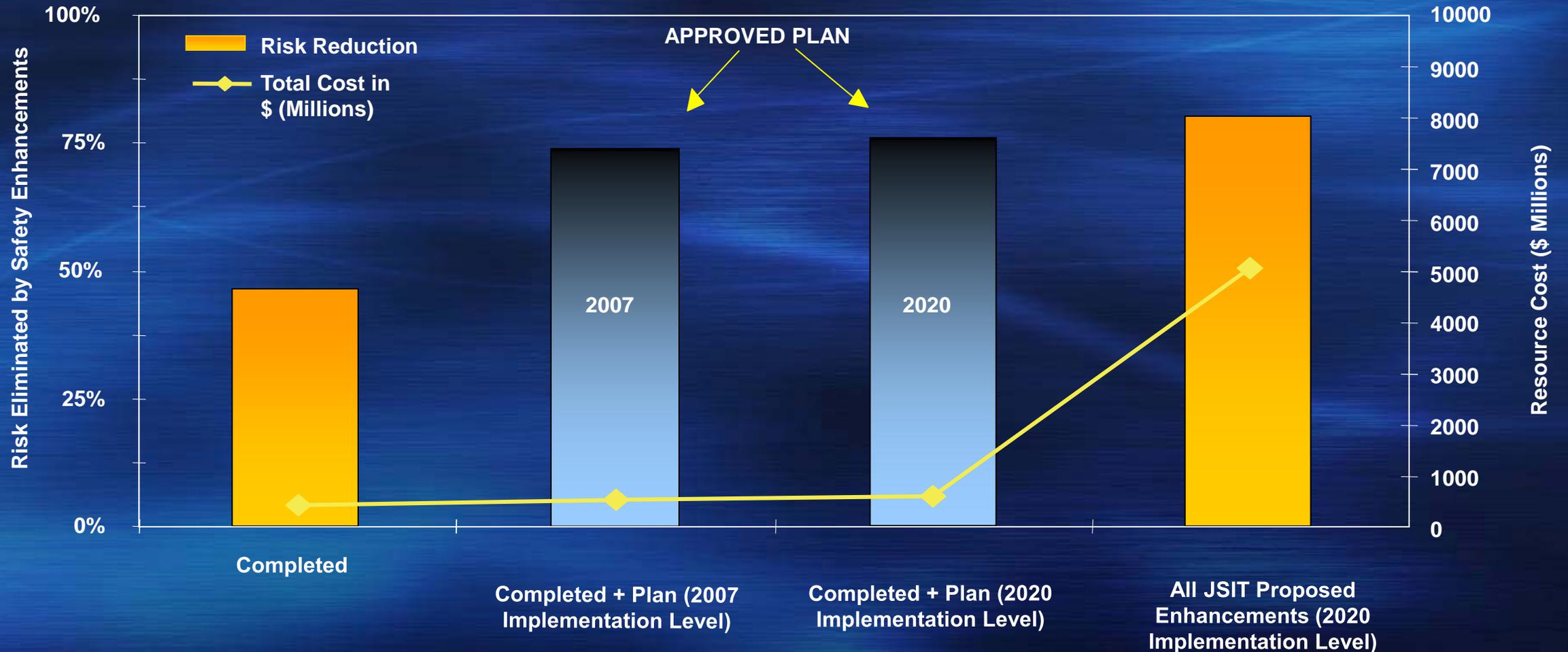
Projected Savings (2001 – 2007)

Part 121 Aviation Industry Cost Due to Fatal/Hull Loss Accidents

Historic cost of accidents/flt. cyc

73 % Risk reduction

Savings ~ $58/Flt. Cyc

Or

~ $540 Million Dollars/Yr

Cost of Accident fatalities following implementation of the CAST plan @ 2007 levels

Dollars/Flt. Cyc

100
80
60
40
20
0

2002

2007
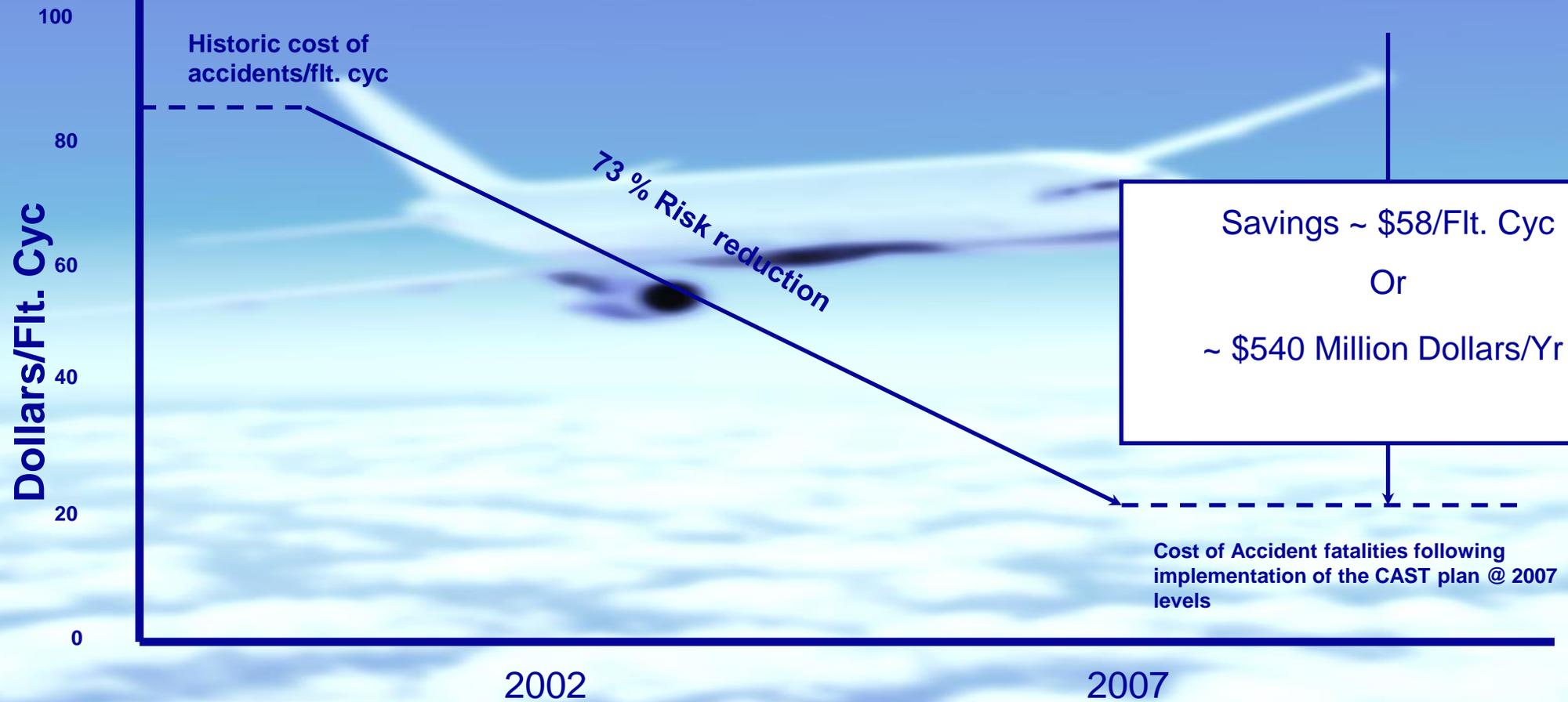
Predicted vs. Actual Part 121 Onboard Fatalities

International Aviation Safety Collaboration
World Regional Accident Rates* / Million Landings (10-year rolling average)

Russia / C.I.S.
1.4
2.3

Europe
0.7
0.5

United States & Canada
0.6
0.4

Asia
1.7
1.2

2001–2010
2007–2016

Middle East
2.1
1.4

Africa
7.7
6.3

Latin America and Caribbean
3.4
2.0

World
1.4
1.0

Commercial Aviation Safety Team

Regional Aviation Safety Groups

Regional Aviation Safety Teams

Regional Expert Safety Team

Information Analysis Team

Safety Enhancement Working Group

Planning and Implementation Regional Group

Regional Coordination Group

Accident Investigation Group

Annual Safety Training Team

Annual Safety Report Team

*Western-built transports, hull loss accidents, by airline domicile

Study Prioritization
(Fleet Risk)

Yrs to 1 or more expected accidents (y-axis)

Fatality Risk - (Severity) (x-axis)

Risk Level Appropriate for Monitoring

1 accident in 20 yrs

Risk Level Appropriate for Study

RR SEs Risk Levels

Risk Level – Rapid Response

Fatality Accident Expectation @ Current Accident Rate
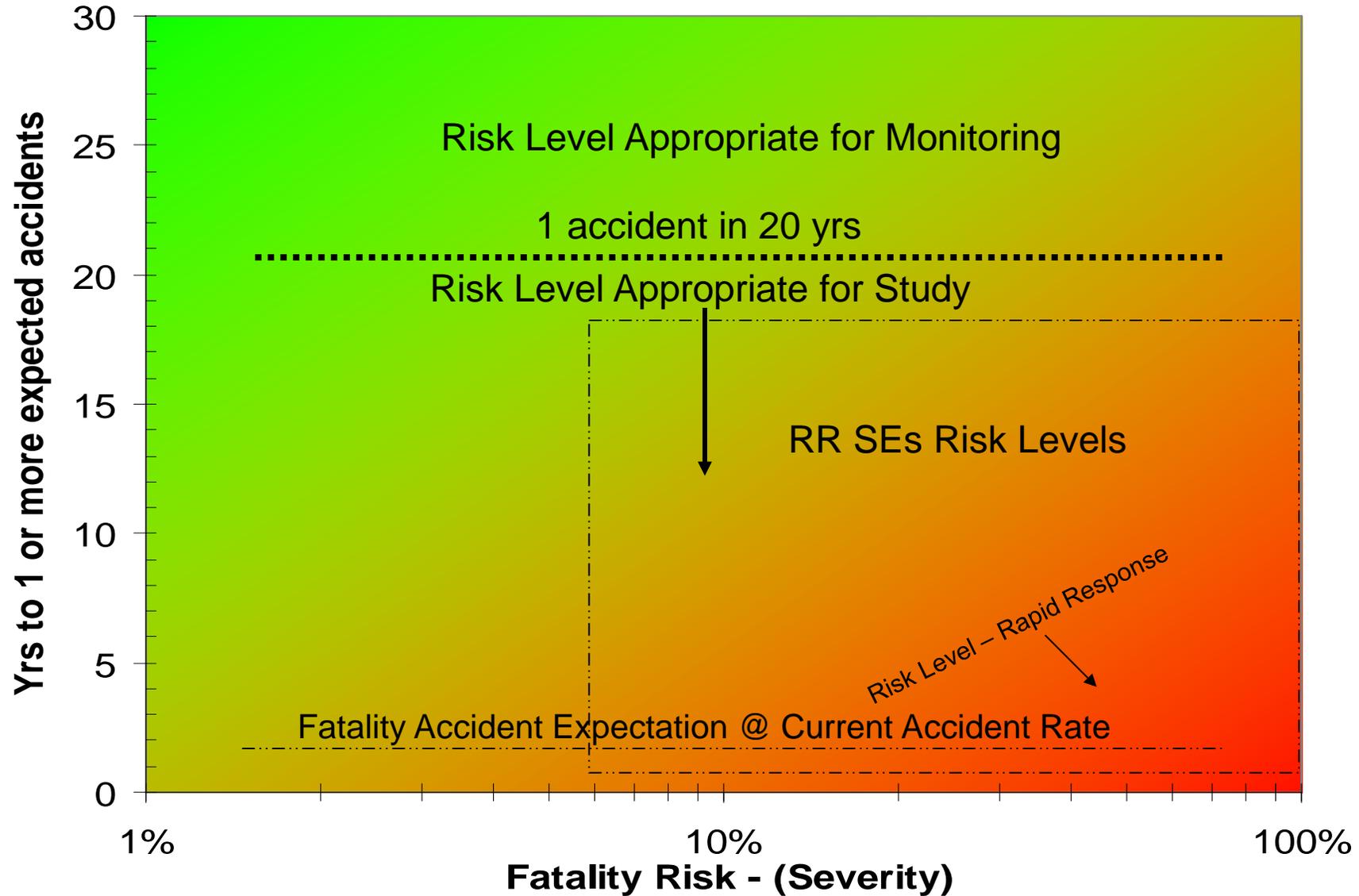
Safety Plan Development
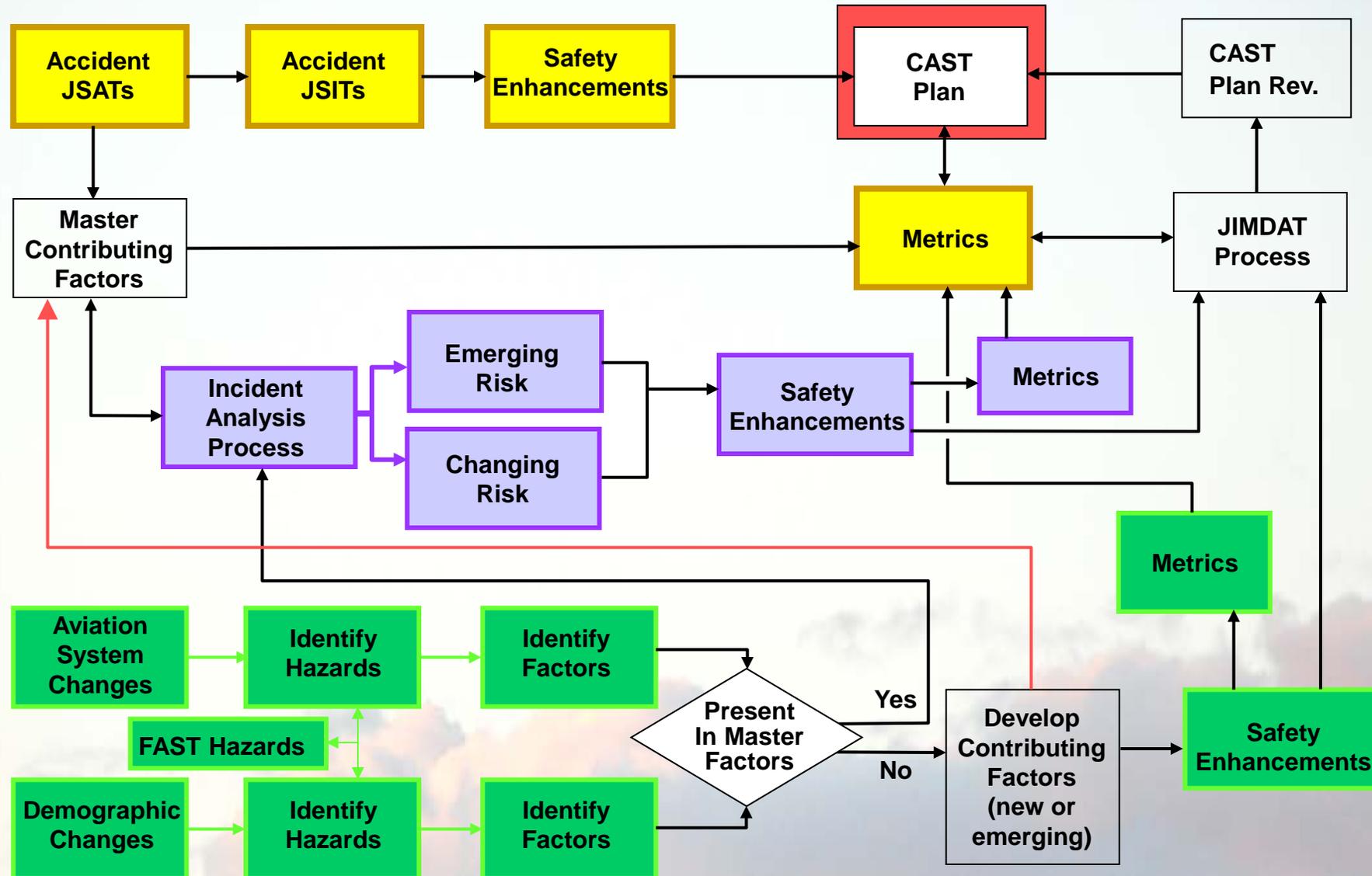
CAST Process Flow

CAST – Safety Enhancements

Underway (R&D), 11

Underway, 25

[CATEGORY NAME] [VALUE]

[CATEGORY NAME] [VALUE]
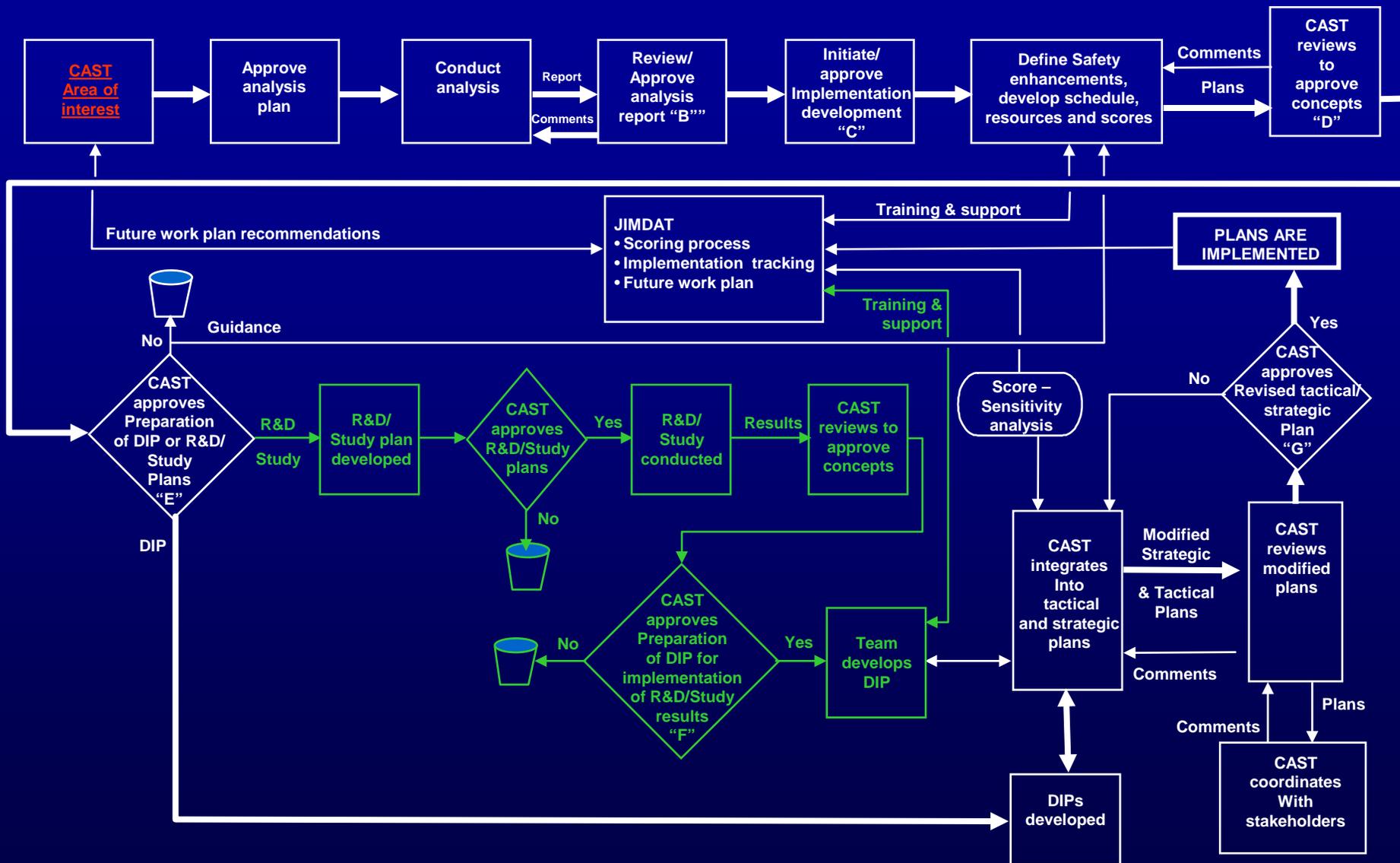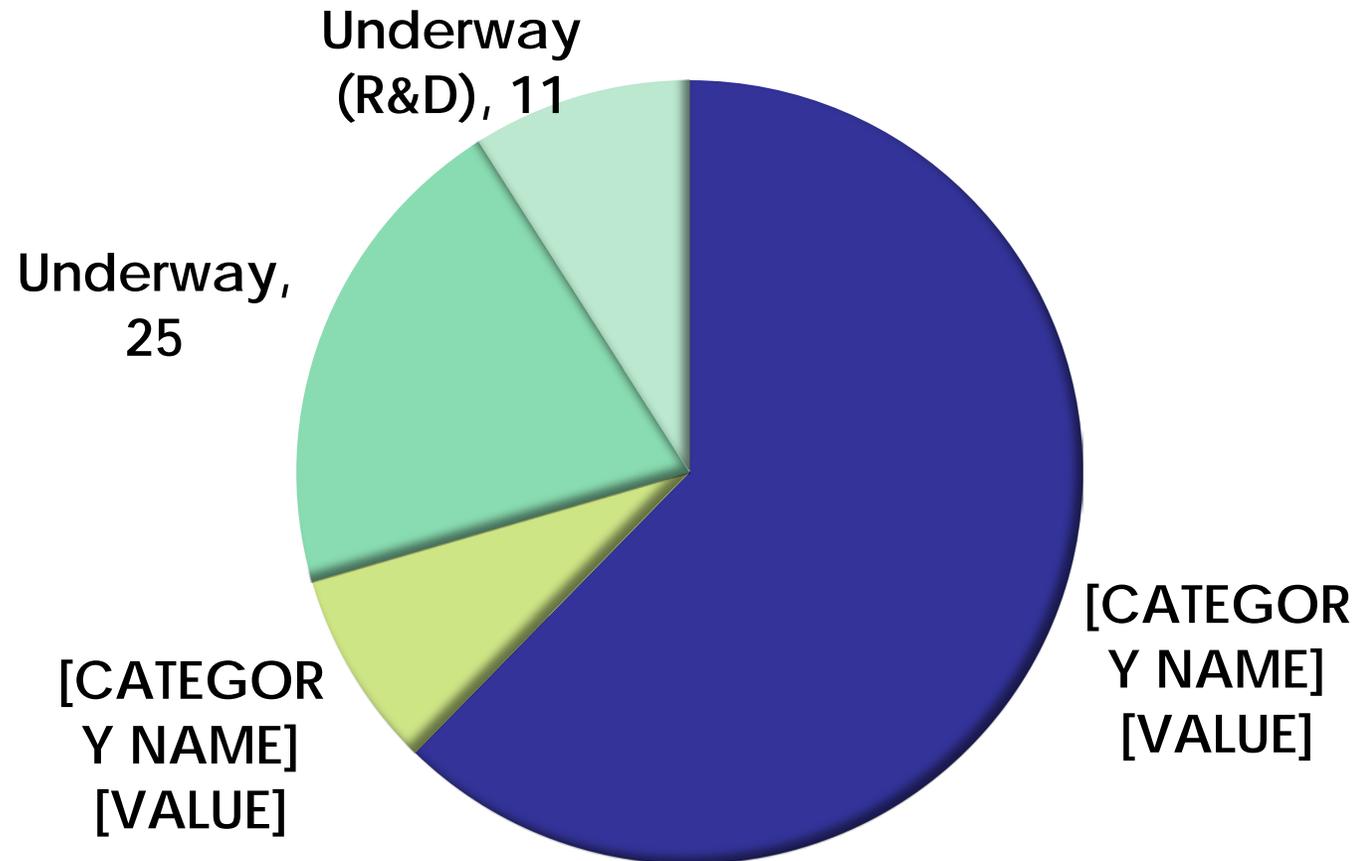
Safety Portfolio Monitoring

SE	Title	Output	Lead Organization	Due Date
SE 127	Cargo - Cargo Fire Management	Output 5	JIMDAT	8/31/2017
SE 186	TCAS - Sensitivity Level Command	Output 4	FAA AJI	12/31/2017
SE 199	ASA - Training - Enhanced Crew Resource Management Training	Output 2	A4A	8/31/2017
SE 213	RNAV - Safe Operating and Design Practices for STARs and RNAV Departures	Output 2	FAA AFS/A4A	8/31/2017
SE 213	RNAV - Safe Operating and Design Practices for STARs and RNAV Departures	Output 3	FAA ATO	8/31/2017
SE 213	RNAV - Safe Operating and Design Practices for STARs and RNAV Departures	Output 4	FAA ATO	8/31/2017
SE 217	RE - Airline Operations and Training - Takeoff Procedures and Training	Output 2	A4A	7/31/2017
SE 218	RE - Design - Overrun Awareness and Alerting Systems	Output 3	A4A	6/30/2017
SE 219	RE - Air Traffic Operations - Policies, Procedures, and Training to Prevent Runway Excursions	Output 1	FAA ATO	6/30/2017
SE 219	RE - Air Traffic Operations - Policies, Procedures, and Training to Prevent Runway Excursions	Output 2	FAA ATO	6/30/2017
SE 227	TOMC - Air Carrier Procedures for Takeoff Configuration	Output 1	A4A	4/30/2017
SE 227	TOMC - Air Carrier Procedures for Takeoff Configuration	Output 3	FAA AFS-200	8/1/2017
SE 227	TOMC - Air Carrier Procedures for Takeoff Configuration	Output 4	AIA	4/30/2017
SE 228	TOMC - Airplane Design Features to Facilitate Proper Takeoff Configuration	Output 1	AIA	10/31/2017
SE 229	TOMC - Takeoff Configuration Warning System Maintenance and Operational Assurance	Output 1	AIA	10/31/2017

Summary

► Unprecedented partnership and positive impact

► Long-term industry and government commitment

► Committed to continue to drive future safety improvements.