

## CDM Road Show Friends & Partners in Aviation Weather / Washington, D.C.

Welcome:
NBAA/NCAR







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**Collaborative Decision Making** 

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#### **CDM Road Show**

TFM Briefing
CDM "The Movie"
CDM Overview
CDM Sub Team Briefings







### **CDM Road Show**

## **TFM Briefing**







## CDM "The Movie"



CDM "The Movie"





## State of the Aviation Community









## How Have Commercial Airlines Fared in the 2009 Economic Downturn?

Jet A Fuel Price Industry Revenue Industry Profit Down 40% UP 3 – 4% A Glimmer of Hope!

\* 30,000 jobs lost in the airline business





#### **How Did Business Aviation Do In 2009?**

Total Ops 2008 Total Ops 2009 % Change 4,300,000 3,600,000 -11%

- Inventory of used A/C for sale at an all-time high (20%+)
- Used A/C prices dropped 30% to 50% depending on model
- Jobs losses at GA manufacturing companies climbed over 19,000 as companies like Cessna, Hawker Beechcraft and Gulfstream companies laid off 25% - 50% of their workforce
- Job losses in flight departments, fractional companies, charter companies, and FBO's numbered in the tens of thousands

The downturn had a significant economic impact on our national air transportation industry, but we "appear" to have at a minimum bottomed out, maybe started a slow climb back

Total Ops Feb 09 Total Ops Feb 10 % Change 535,985 571,016 +6.5%





### What is CDM?

- Hosted by the Airline Transport Association (ATA)
- Guidance: Collaborative Decision Making Stakeholders Group (CSG)
- Collaborative Decision Making (CDM) is a joint government/industry initiative to improve the Air Traffic Management (ATM) system through increased information exchange among all National Airspace System (NAS) stakeholders
- The success of CDM is directly related to the participation and commitment of all participating NAS stakeholders, including the FAA





## Why was CDM Created?

- To facilitate increased information exchange between all ATM stakeholders for more effective decision making
- To establish a goal-oriented forum between government and industry for the development of solutions to problems within Air Traffic Management (ATM)
- To establish an effective communications path among all ATM stakeholders for increased system safety and efficiency





## **CDM Membership Requirements**

- Must sign a Memorandum of Understanding (MOU)
- Must be able to provide flight plan data
- Must pass a data quality check

All flight plan data is unfiltered and available for all to members to see since 2008





## CDM MOU (Membership) Benefits

- Access to the CDM "network" (Sub Teams)
  - Flight Schedule Monitor (FSM)
  - Flight Schedule Analyzer (FSA)
  - Operational Post Evaluation Tools (IRIS)
  - Route Management Tool (RMT and ROG)
  - Access to the Reroute Monitor
  - Common Constraint Situation Display (CCSD)
  - Collaborative Convective Forecast Product (CCFP)
  - Access to the Diversion Recovery Tool
  - Access to the TCA Webpage





### **CDM Recent Achievements**

- Integrated Collaborative Rerouting (ICR)
- FSM flight plan data is unfiltered
- CCFP/LAMP Prototype
- CDM Roadshow Training
- Integrated Program Modeling (IPM)
- •Re Route Impact Assessment Tool (RRIA)
- Improvements to the Data Report Card
- •FAA CDM Office Business Plan





#### **CDM General Session**

Held bi-annually; Next session September 22-23, 2010 Hosted by Mitre, Mclean, VA







## **CDM Around The World**







#### **FAA Business Plan; CDM Activities**

Develop a process to share airport surface data with stakeholders.

Target 1: Select a model Airport to share surface data-Completed

Target 2: Identify additional airports for data sharing - Ongoing

Utilize the Integrated Collaborative Rerouting (ICR) process during weather events.

Target 1: Develop and complete ICR Training – Completed

Target 2: Expand the use of ICR through the severe weather

season - Ongoing





#### **CDM Working Group Structure**

A CDM Stakeholder's Group ('CSG') composed of 7 members, 3 FAA and 3 industry plus an ATA designated leader, the CSG provides guidance, oversight, and tasking for the CDM work groups. Presently there are 6 work groups, each with an FAA and Industry co-lead.

- Weather Evaluation Team (WET) FAA/DAL
- Flow Evaluation Team (FET) FAA/NBAA
- Future Concept Team (FCT) FAA/DAL
- Release 7 Deployment Team (R7DT) FAA/UAL
- Surface CDM Team (SCT) FAA/FDX
- CDM Training Team (CTT) FAA/AWE





## **CDM Sub Teams**

- Flow Evaluation Team (FET) FAA/NBAA
- Surface CDM Team (SCT) FAA/FDX
- Future Concepts Team (FCT) FAA/DAL
- Weather Evaluation Team (WET) FAA/DAL
- CDM Training Team (CTT) FAA/AWE





#### Flow Evaluation Team

**Expand and Improve the Integrated Collaborative Rerouting (ICR) Process** 

Develop new Collaborative NAS Planning concepts

Develop new uses for AFPs; AFP Overlays

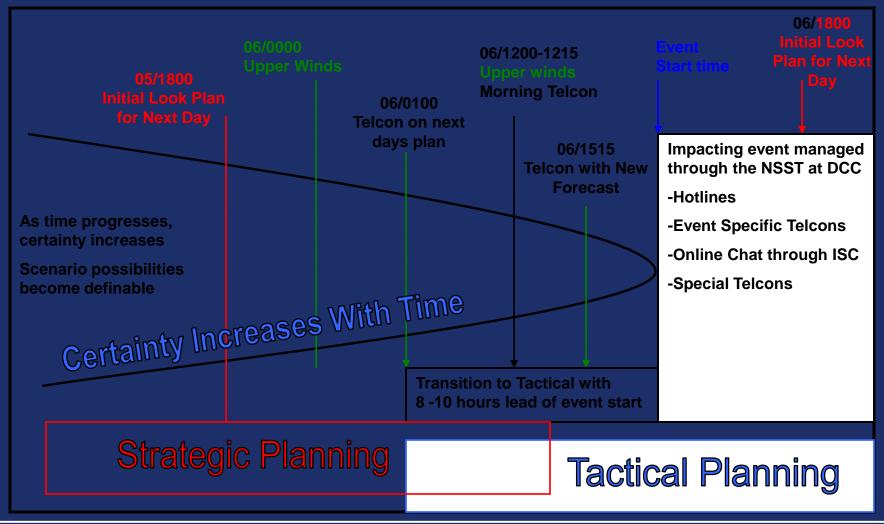
Development of Route Segment Coded Departure Routes (CDR)

FCA Estimated Capacity Development

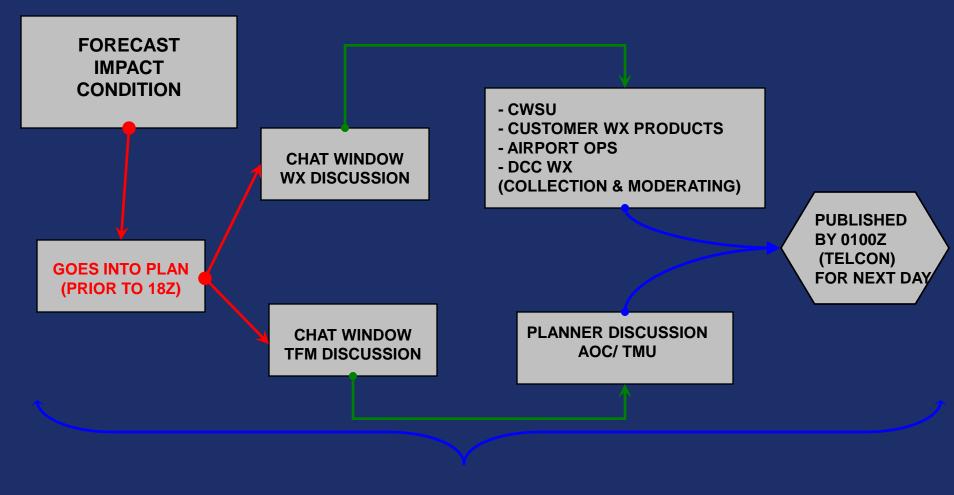
Future Applications of RTA/CTA in TFM



## Collaborative Planning Time Line



## Day Ahead Process Example

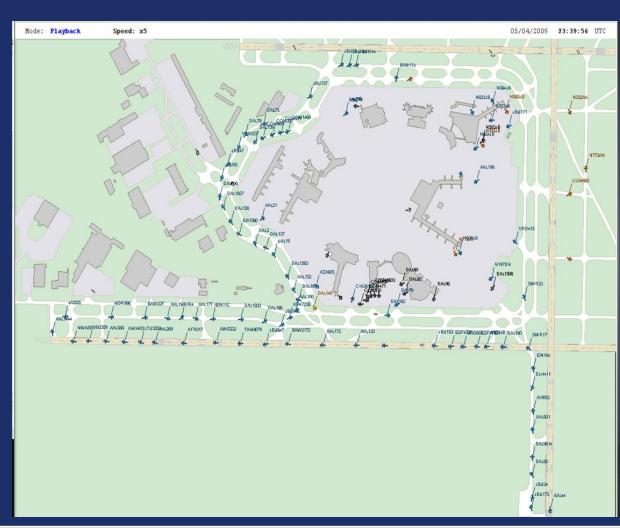


DAY +1 - 18Z-00Z



#### **Surface CDM Team**

- Developed Requirements
  Document for sharing airport
  surface data (Draft under
  review)
- Developing a Concept for use for a Surface CDM environment
- Collaborating with EuroControl Airport-CDM Team to harmonize (where possible) Surface CDM Procedures
- Other Surface Projects as assigned







#### **Future Concept Team**

- Developed System Enhancements for Versatile Electronic Negotiation (SEVEN, foundational step to CTOP)
- Phase I of Collaborative

  Airspace Constraint

  Resolution Subset (CACR) in

  Response to TF5

Future Mid-Term, NextGen Projects



#### **CDM Training Team**

- Joint Training for all new CDM Tools and Procedures
- The 2010 spring training is now available on TFM Learning Center:

http://TFMLEARNING.FLY.FAA.GOV

- CDM Websitewww.cdm.fly.faa.gov
- Developing Joint CDM Training for FAA field facilities and Industry AOCs/FOCs
- Plan and coordinate CDM Roadshows







#### **Weather Evaluation Team**

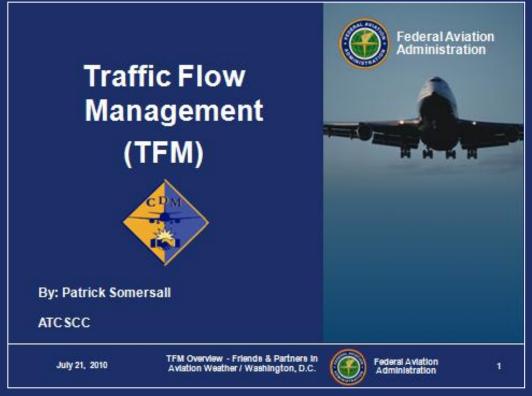
- Tactical use of the Weather Impacted Traffic Index (WITI)
- •WET/ ATO-W/ATO-P testing Collaborative Storm Prediction for Aviation (CoSPA)
- •Improvements to the current CCFP (LAMP/CCFP Hybrid)
- •Exploring ways to share Terminal upper level wind impacts (e.g. Compression)







## CDM Overview - Friends & Partners in Aviation Weather / Washington, D.C.



**Link to "Traffic Flow Management"** 



