

# Aviation Weather Services (AJW-94)

## NextGen Weather Processor (NWP) Briefing

Presented to: Friends & Partners of Aviation Weather (FPAW)

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Date: July 14, 2011



Federal Aviation  
Administration

# NWP Problem Statement

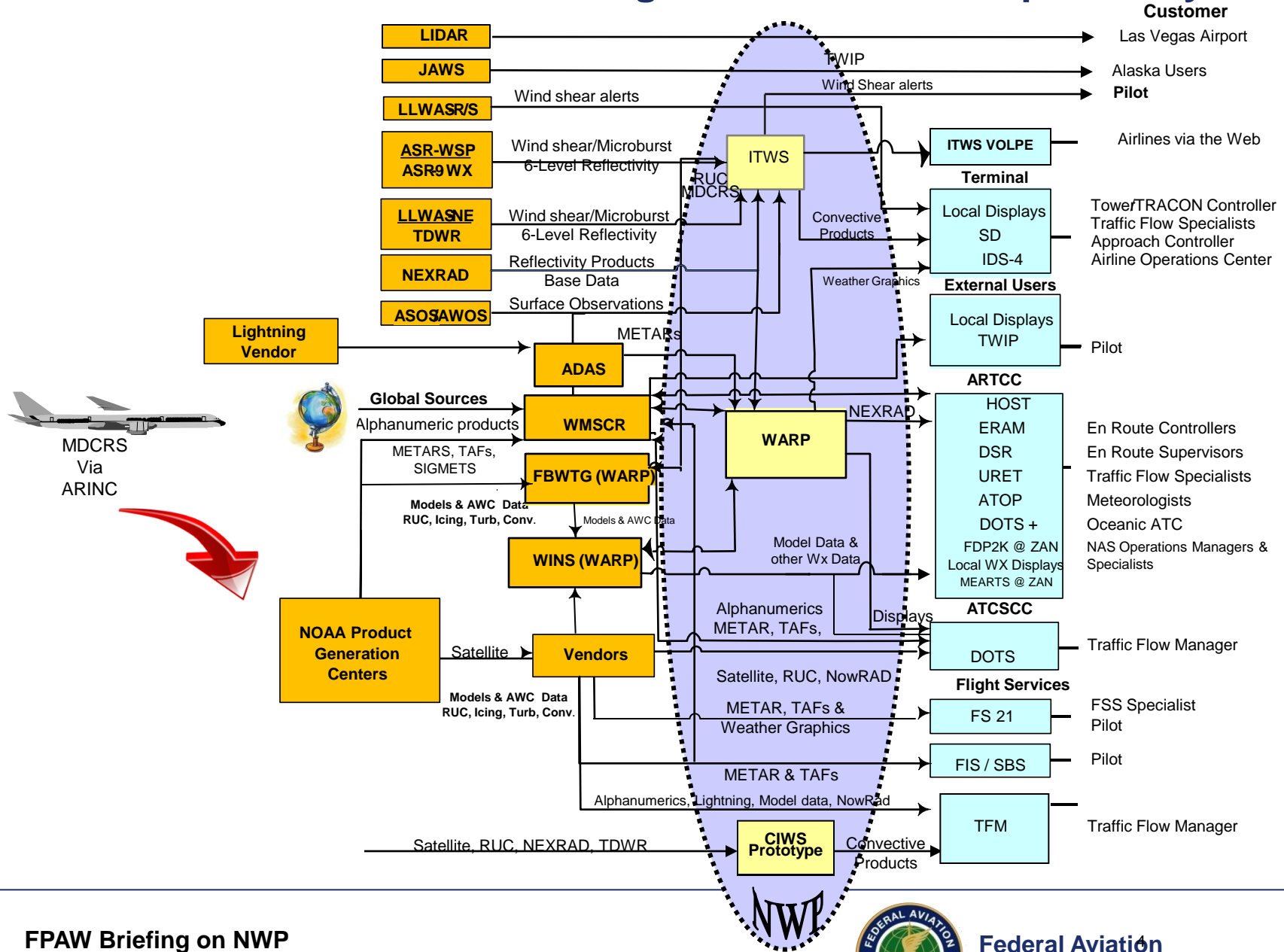
- Weather is responsible for 70% of delays over 15 minutes and contributes to 24% of accidents
  - Up to 2/3 of weather delays are potentially avoidable, based on NAS Operations Subcommittee Research, Engineering and Development Advisory Committee (REDAC) study
- Traffic managers and users must mentally interpret weather conditions, future traffic, and airspace information and their potential impact on decisions
- Inconsistencies exist in the presentation of weather information among the various weather processor programs via displays

# NWP Program Scope

- NextGen Weather Processor (NWP) establishes a common weather processing infrastructure that will functionally replace the legacy FAA weather processor systems and host new capabilities:
  - NWP will consolidate weather product generation by weather processor systems such as:
    - Weather and Radar Processor (WARP)
    - Corridor Integrated Weather System (CIWS)
    - Integrated Terminal Weather System (ITWS)
  - NWP will provide advanced aviation specific weather information through the [assimilation](#) of extended National Weather Service (NWS) forecast models with real time radar extrapolation
  - NWP will perform [Weather Translation](#) which will enable the use of weather information by automated decision support tools (DSTs)
  - NWP will address consolidation solutions for weather displays



# FAA Weather Processor Programs that will be replaced by NWP



# Various Weather Displays....



## Tower

### Supervisor



ITWS SD  
(1)



WARP (via  
IDS-4)



## ATCSCC

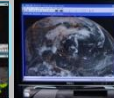
### Sector Mgmt



ITWS SD  
(2)



CIWS  
(14)

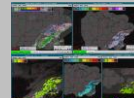


WARP  
(23)

### Weather Unit



ITWS SD  
(2)



CIWS  
(14)



WARP  
(23)

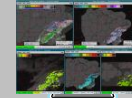
These are just  
a few!!

## ARTCC

### TMU



ITWS SD  
(1-2)



CIWS  
(1-4)

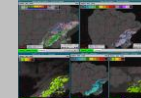


WARP  
(1-2)

### CWSU



ITWS SD (1)



CIWS  
(1)

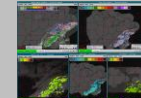


WARP  
(1-2)



WARP  
MWS

### AT Supervisors



CIWS  
(0-12)



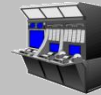
WARP  
(6-12)

### SOC



WARP (1)

### ATC



WARP (via DSR,  
ERAM, URET,  
ATOP)

## TRACON

### TMU



ITWS SD  
(3-11)



CIWS  
(1-2)



WARP via  
IDS-4

### AT Supervisor



ITWS SD



WARP via  
IDS-4



ITWS  
Web

External Users:  
Airlines, Airports,  
Universities,  
Government, etc..

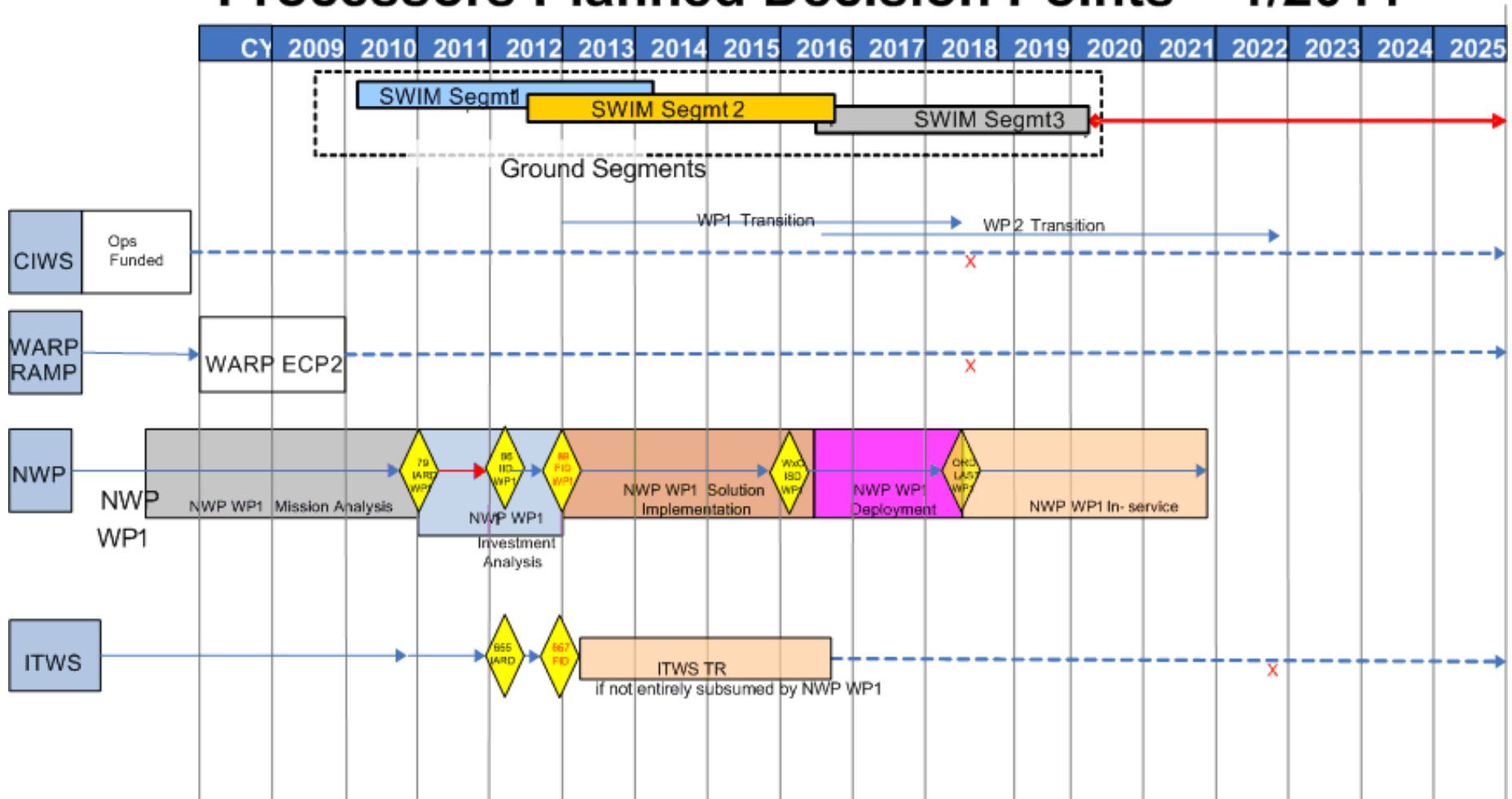


CIWS  
Web



# Weather Processor Segment 1 Roadmap

## Processors Planned Decision Points – 1/2011



# NWP Acquisition Activities

- A **Market Analysis** is being performed this year with Industry and it is comprised of a Market Survey and a Request for Information (RFI)
  - **Market Survey** (Qualification Information)
    - It was released on May 25 and responses were received in June
    - Purpose was to announce NWP solicitation and determine vendor capabilities
  - **Request for Information** (RFI) – Screening Information
    - It will be released in the next month
    - Purpose is to identify the appropriate acquisition strategy to use and satisfy the proposed technical solution/scheduling information objectives
  - A Request for Comment (RFC) of the draft System Specification and draft Screening Information Request (SIR) will be released this fall
- A SIR will be conducted in the form of a **Request for Offer** (RFO) in **2012**

