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FAA Response to  
RTCA 03-05 Working Group

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Steve Zaidman  
ARA-1

December 2, 1999

## RTCA Request Background

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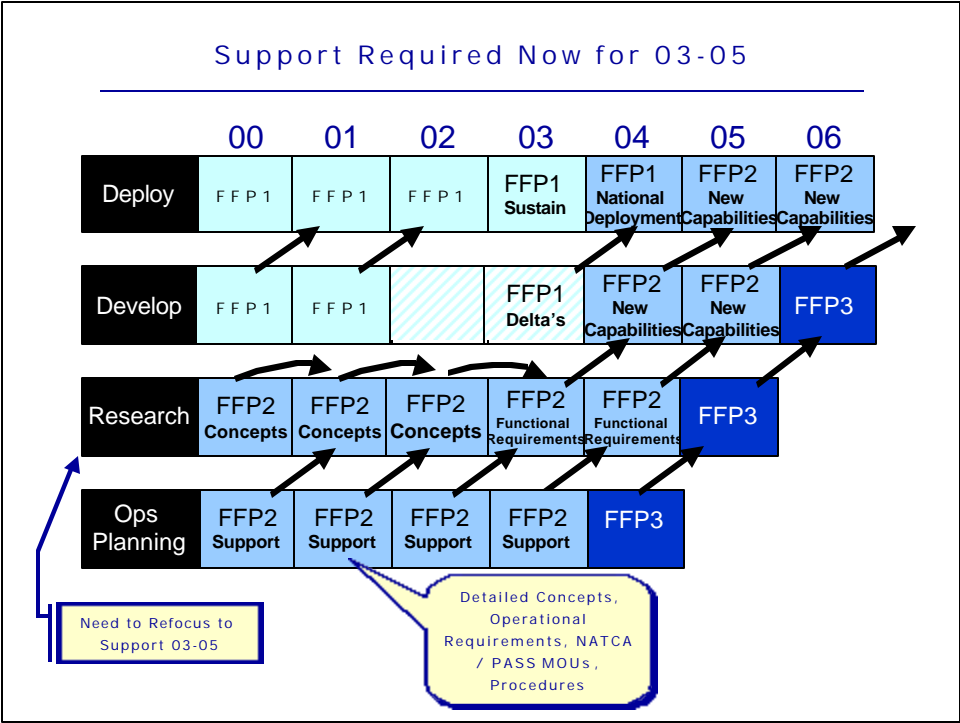
- RTCA Free Flight Select Committee formed a working group to identify the next set of low-risk capabilities to deliver benefits to NAS users for the 2003 through 2005 period
  
- Results of Working Group Briefed to RTCA Free Flight Steering Committee - 8/12/99
  - Identified and prioritized major NAS problem areas
  - Identified set of potential capabilities to solve problems
  - Requested FAA response on recommendations
    - Describe implementation plan with no funding constraints
    - Describe implementation plan within current funding profile
    - Identify FAA Advocate for FFP1 follow on activities
  
- FAA agreed to provide response by Dec 2, 1999

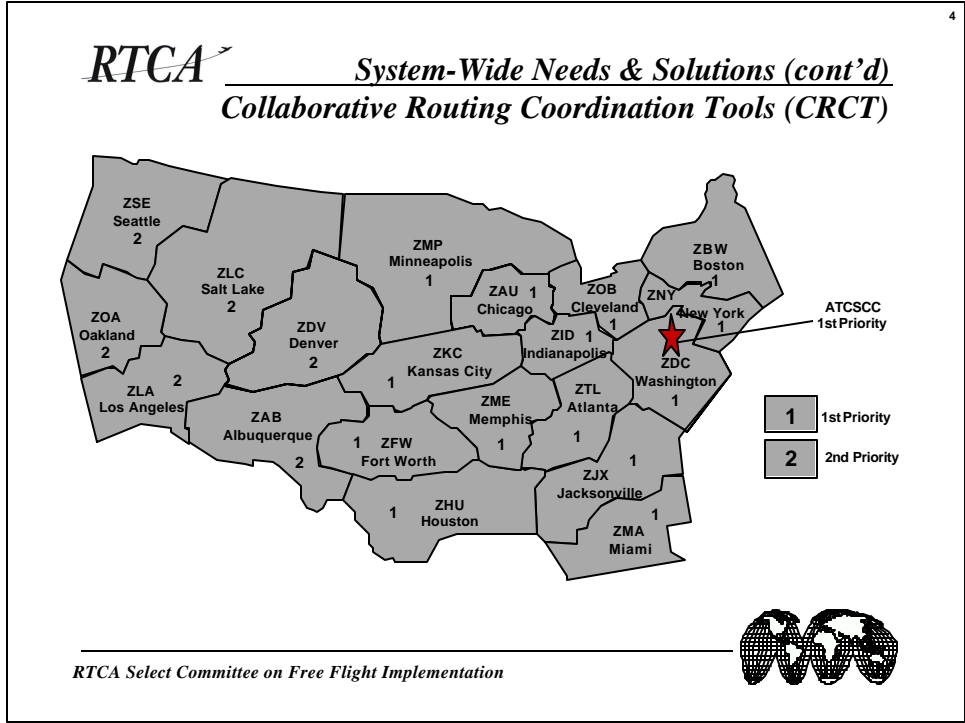
Acknowledge the work done by the RTCA Working Group and note that there was a good cross section of the Aviation Community Represented.

FAA is committed to working with the Aviation Community

This briefing will focus on addressing the 3 RTCA requests as follows

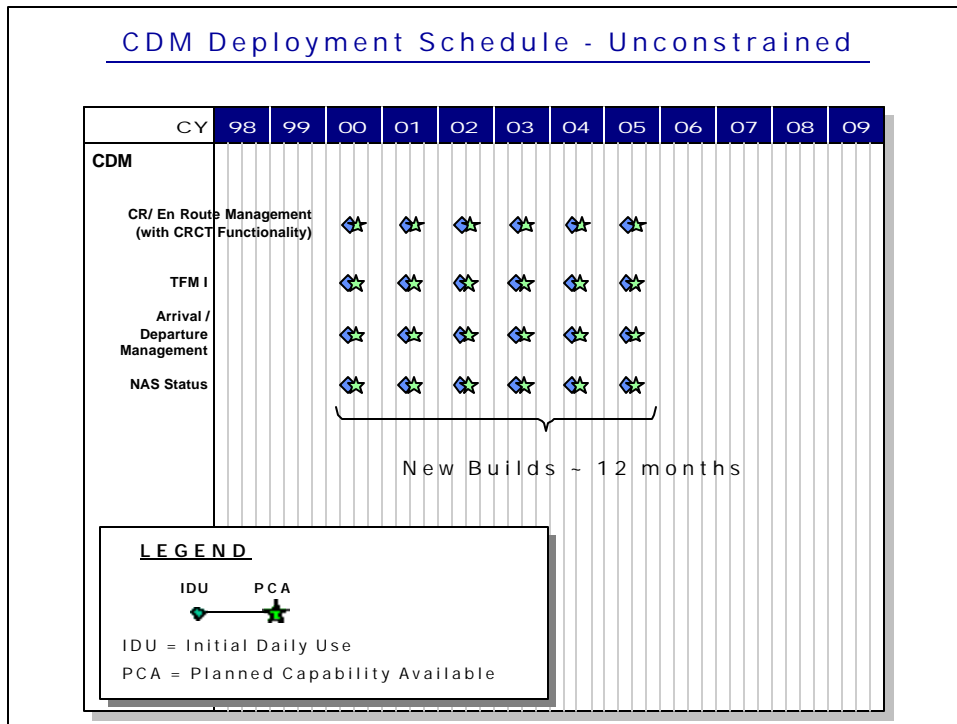
- Optimistic Profile - addresses implementation without funding constraints
- Current Plan - addresses implementation based on our current projection of funding
- FAA Team approach for FFP1 Follow-on activities





This is what RTCA has defined in their briefing as new capabilities required for CDM

## CDM Deployment Schedule - Unconstrained

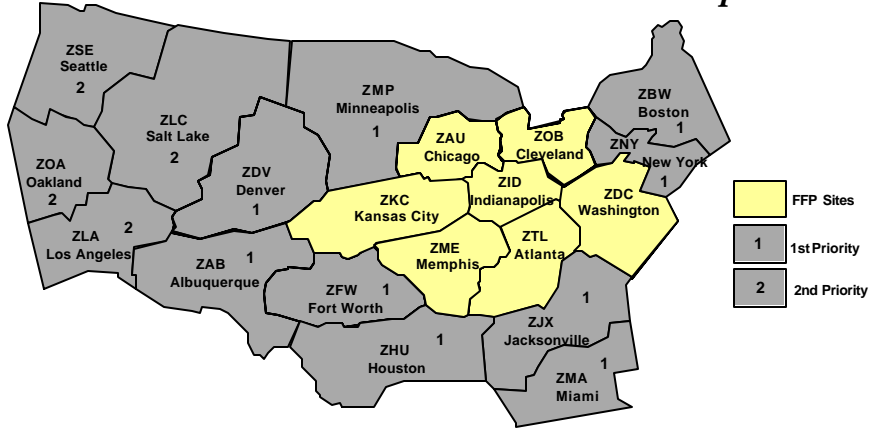


This is the FAA's response...

FAA will add new Collaborative Routing and En Route Congestion Management functionality that incorporates the RTCA identified CRCT functionality

Also, FAA will continue to evolve the existing CDM functionality with new builds approximately every 12 months

**RTCA** *System-Wide Needs & Solutions (cont'd)*  
**URET CCLD Expansion**

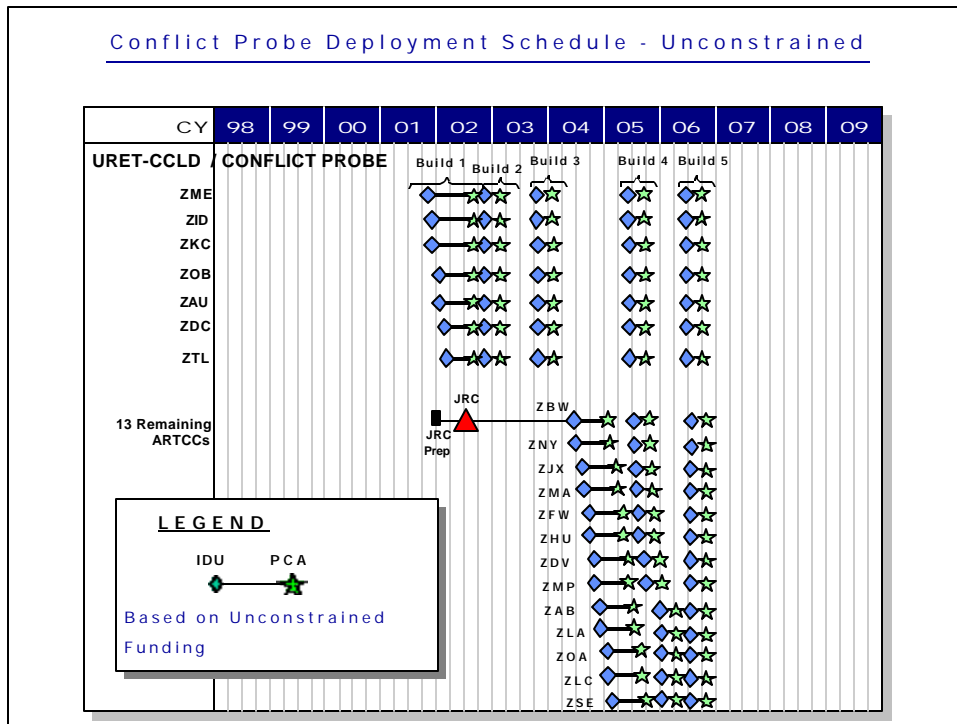


RTCA Select Committee on Free Flight Implementation



This is what RTCA has defined in their briefing as new capabilities required for Conflict Probe

Conflict Probe Deployment Schedule - Unconstrained



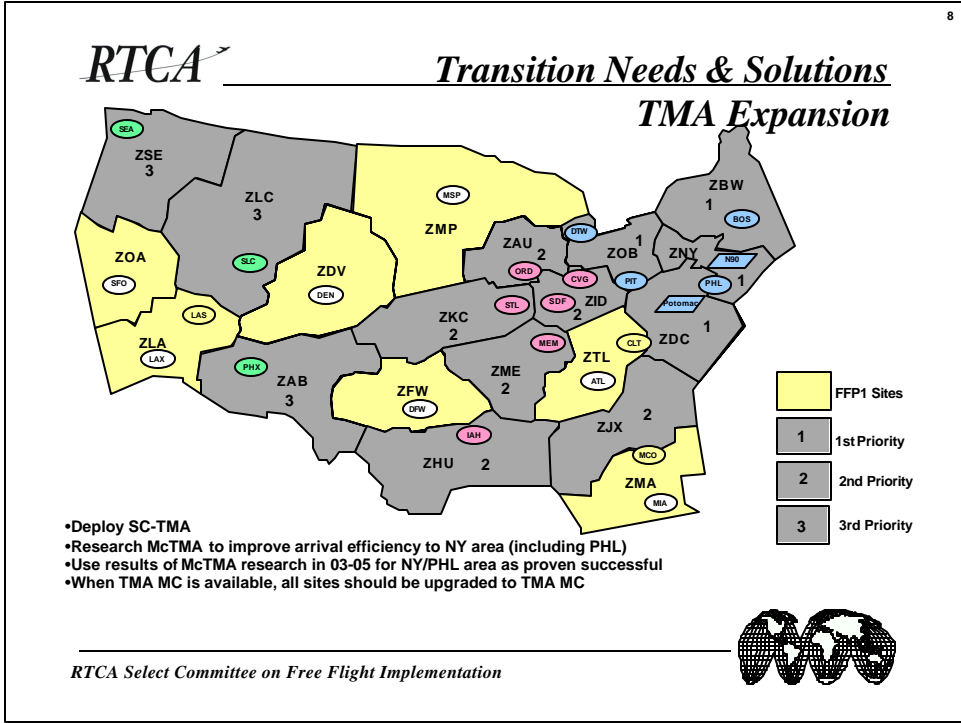
This is the FAA's response...

Build 3 will incorporate the clean up requirements from FFP1

Build 4 will incorporate newly requested functionality

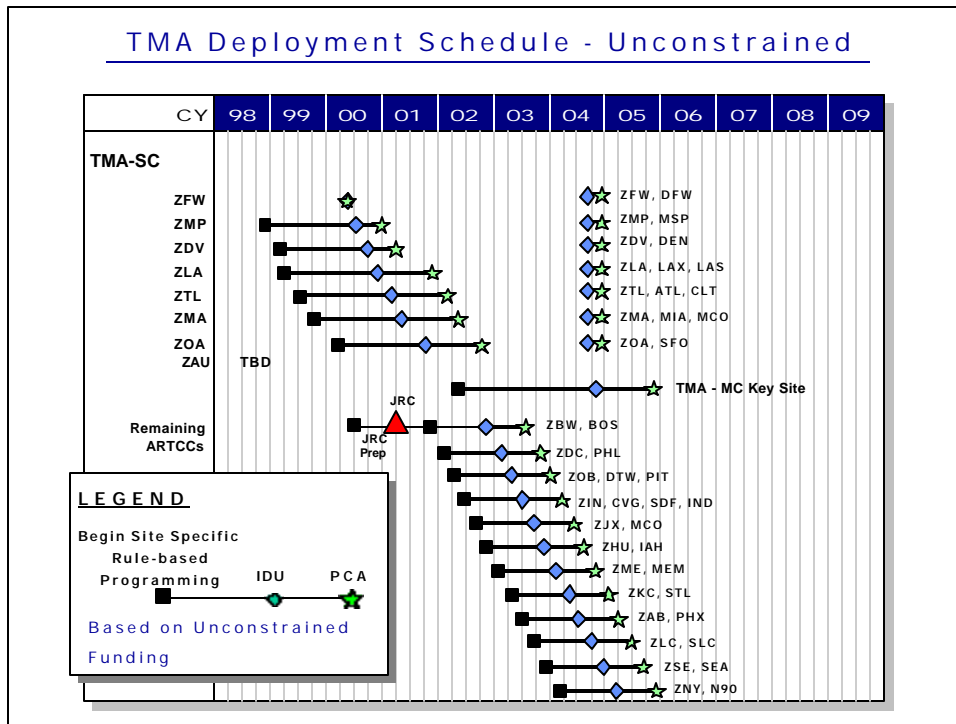
Build 5 will incorporate integration of Free Flight Tools (CP, TMA, CDM)

The site order matches the RTCA requested order



This is what RTCA has defined in their briefing as new capabilities required for TMA

## TMA Deployment Schedule - Unconstrained



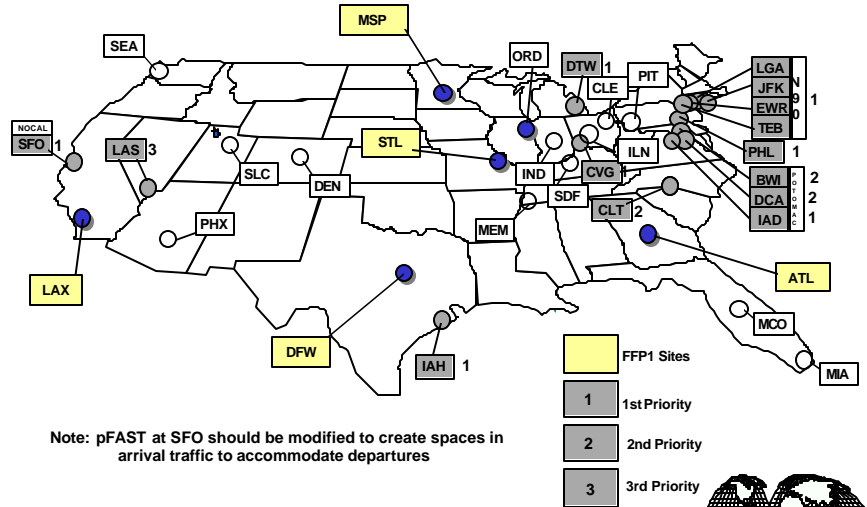
This is the FAA's response...

FAA will deploy TMA single center functionality to all CONUS centers

Single Center functionality will be upgraded to Multicenter functionality following key site research by NASA

The site order matches the RTCA requested order

# RTCA *Arrival/Departure Needs & Solutions* *pFAST*



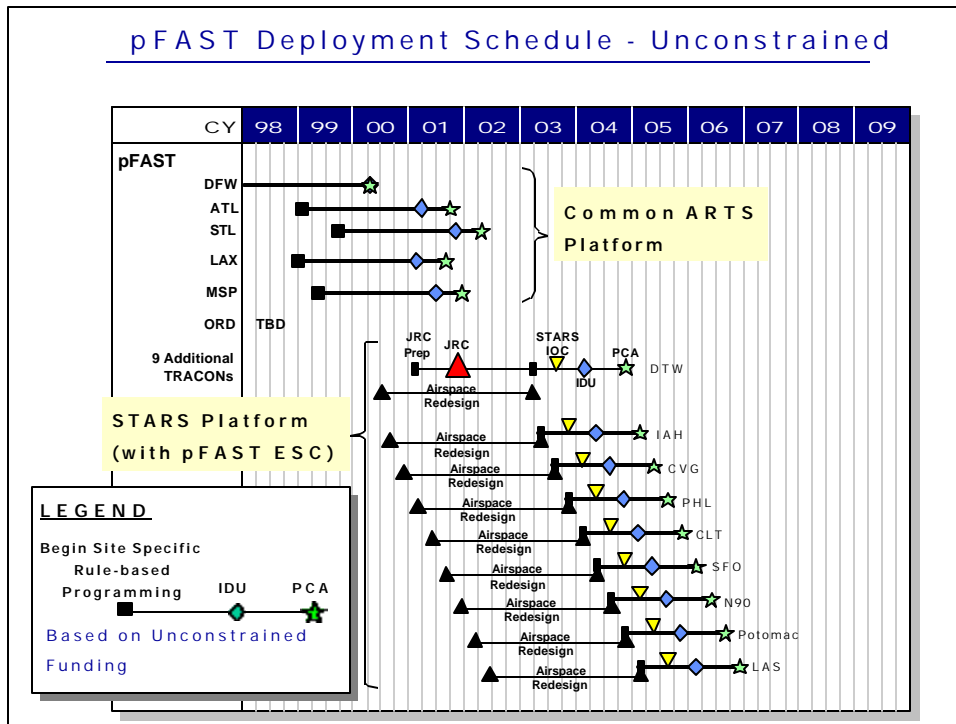
Note: pFAST at SFO should be modified to create spaces in arrival traffic to accommodate departures

RTCA Select Committee on Free Flight Implementation



This is what RTCA has defined in their briefing as new capabilities required for pFAST

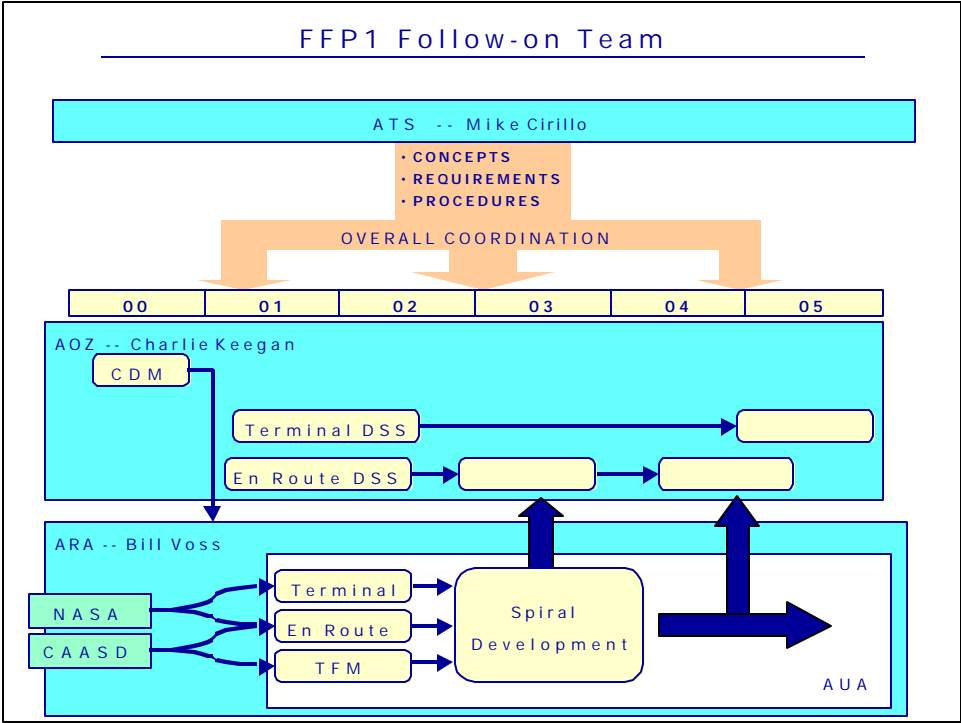
## pFAST Deployment Schedule - Unconstrained

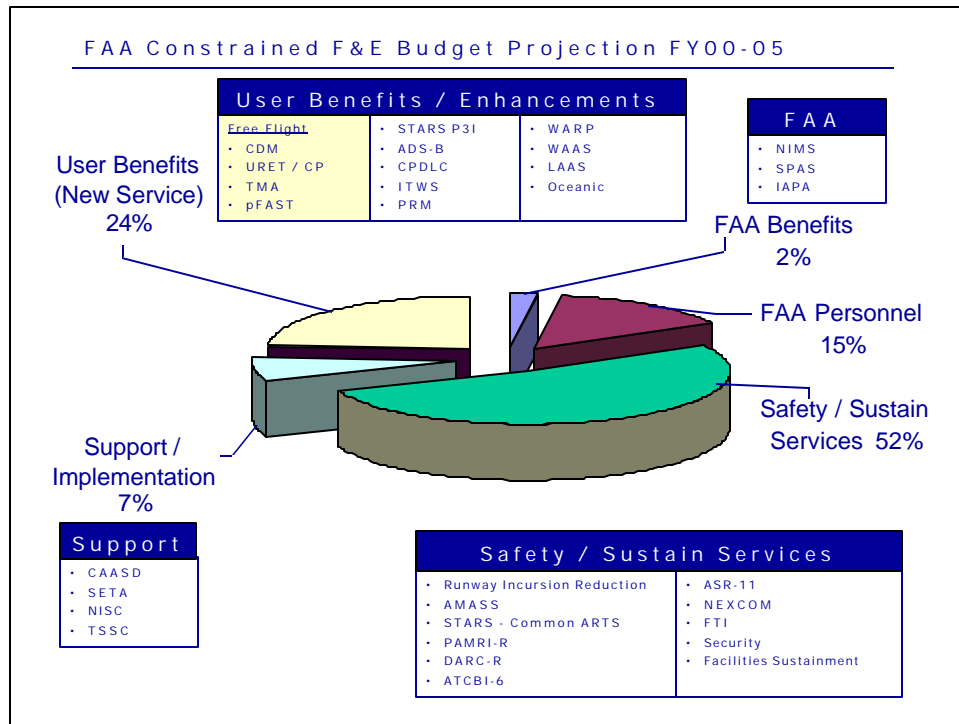


This is the FAA's response...

FAA will complete the Airspace redesign for each terminal area prior to implementing pFAST

The site order matches the RTCA requested order



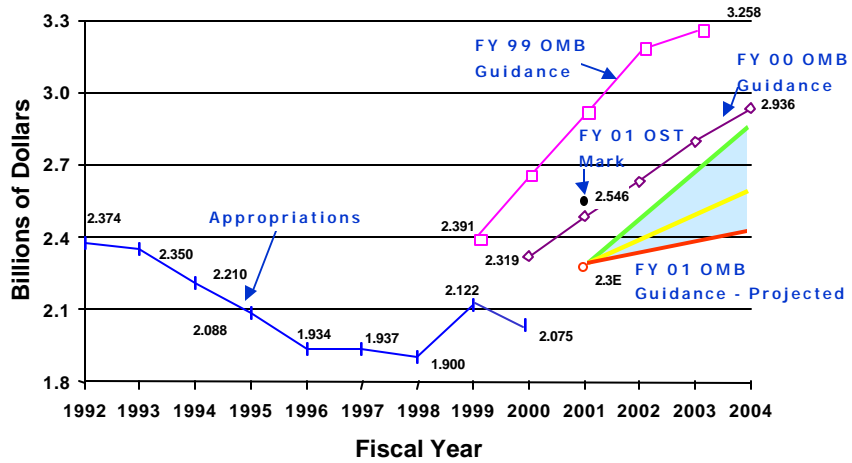


The FAA must balance its funding priorities

Emphasis is placed on Safety, Security, and Sustaining Existing Services

# Facilities & Equipment Budget

## F&E Appropriations and Outyear Targets



### FFPx Cost Summary

Under Review

Unconstrained

FFPX Category	FY00	FY01	FY02	FY03	FY04	FY05
CDM FFP1	37.9	30.4	25.8	39.6	11.3	11.9
CDM FFP2	0.0	37.0	47.0	44.0	32.0	25.0
<b>CDM Total</b>	<b>37.9</b>	<b>67.4</b>	<b>72.8</b>	<b>83.6</b>	<b>43.3</b>	<b>36.9</b>
CP FFP1	83.2	87.6	50.6	0.0	0.0	0.0
CP FFP2	0.0	5.0	10.0	70.0	95.0	70.0
<b>CP Total</b>	<b>83.2</b>	<b>92.6</b>	<b>60.6</b>	<b>70.0</b>	<b>95.0</b>	<b>70.0</b>
Integraton FFP1	5.4	11.1	11.4	0.0	0.0	0.0
Integration/Airspace FFP2	9.0	15.0	21.0	5.0	0.0	0.0
<b>Integration Total</b>	<b>14.4</b>	<b>26.1</b>	<b>32.4</b>	<b>5.0</b>	<b>0.0</b>	<b>0.0</b>
pFAST FFP1	32.5	34.7	24.2	0.0	0.0	0.0
pFAST FFP2	0.0	5.0	15.0	47.0	80.0	80.0
<b>pFAST Total</b>	<b>32.5</b>	<b>39.7</b>	<b>39.2</b>	<b>47.0</b>	<b>80.0</b>	<b>80.0</b>
SMA FFP1	15.7	14.2	2.0	0.0	0.0	0.0
SMA FFP2	0.0	0.0	0.0	0.0	0.0	0.0
<b>SMA Total</b>	<b>15.7</b>	<b>14.2</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
TMA FFP1	21.6	23.2	16.2	0.0	0.0	0.0
TMA FFP2	0.0	16.1	22.2	105.1	119.1	89.8
<b>TMA Total</b>	<b>21.6</b>	<b>39.3</b>	<b>38.4</b>	<b>105.1</b>	<b>119.1</b>	<b>89.8</b>
<b>FFP1 Total</b>	<b>196.3</b>	<b>194.9</b>	<b>136.0</b>	<b>39.6</b>	<b>11.3</b>	<b>11.9</b>
<b>FFP2 Total</b>	<b>9.0</b>	<b>78.1</b>	<b>115.2</b>	<b>271.1</b>	<b>326.1</b>	<b>264.8</b>
<b>Grand Total</b>	<b>205.3</b>	<b>273.0</b>	<b>251.2</b>	<b>310.7</b>	<b>337.4</b>	<b>276.7</b>

Constrained  
Summary

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## Next Steps

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- **FAA Follow-on Advocates will continue working with RTCA to focus priorities for FFP1 Follow-on efforts**
- **Develop Current Plan schedules based on OMB 5 year funding profile**
- **Redirect Research Efforts to support Follow-on Requirements Definition**