Stakeholder Engagement Team (SET)

Spring 2023 General Session

CDM

Collaborative
Decision Making

Stakeholder Engagement Team

The SET aims to increase NAS efficiency by providing transparent, collaborative, and inclusive review processes that lead to actionable changes and improvements.

Co- Leads: Renee Fields (FAA), Erin Cobbett (DAL)

Photo credit: Eric Silverman

Team Members:

- Marc Meekma (FAA)
- Orion Barker (FAA)
- Lauren Faith (FAA)
- Shawn McClosky (FAA)
- Frank Oley (A4A)
- Eric Silverman (AAL)
- Mike Marticek (AAL)
- Jim McClay (AOPA)
- Tony Vassiliadis (DAL)
- Sally Russell (JBU)
- Dean Snell (NBAA)
- Tim Matuszewski (NKS)
- Erin Hogan (SWA)
- Edwin Solley (SWA)
- Roberta Zimmerman (UAL)
- Joe Mantello (UAL)

- *And honorary pet Bruno*

Task 103: Standardized National System Review (NSR) Process

Purpose: Develop a set of detailed guidelines for development, execution and delivery of the NSR

Closed: 3/28/23

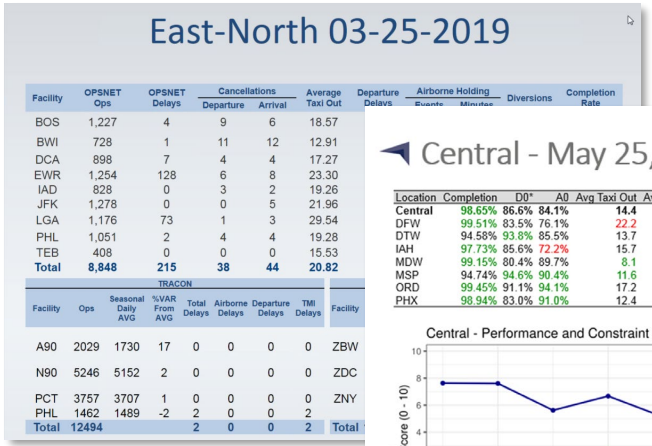
Task 103: NSR Process

Develop National System Review (NSR) reporting that addresses both Industry and FAA perspectives

- Objectively determine yesterday's performance in a succinct format that gives quick, easy context to the data
- Continuously improve the quality of discussion on NSR
- Develop an effective daily distribution function

Task 103: NSR Process

- The redesigned automated report was launched in June 2021
- 3 subsequent major updates were implemented to enhance the NSR

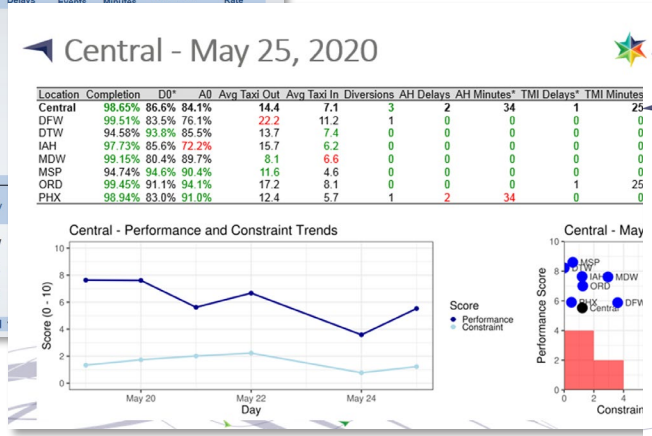


East-North 03-25-2019

Facility	OPSNET Ops	OPSNET Delays	Cancellations Departure	Cancellations Arrival	Average Taxi Out	Departure Delays	Airborne Holding Events	Airborne Holding Minutes	Diversions	Completion Rate
BOS	1,227	4	9	6	18.57					
BWI	728	1	11	12	12.91					
DCA	898	7	4	4	17.27					
EWR	1,254	128	6	8	23.30					
IAD	828	0	3	2	19.26					
JFK	1,278	0	0	5	21.96					
LGA	1,176	73	1	3	29.54					
PHL	1,051	2	4	4	19.28					
TEB	408	0	0	0	15.53					
Total	**8,848**	**215**	**38**	**44**	**20.82**					

TRACON

Facility	Ops	Seasonal Daily AVG	%VAR From AVG	Total Delays	Airborne Delays	Departure Delays	TMI Delays	Facility
A90	2029	1730	17	0	0	0	0	ZBW
N90	5246	5152	2	0	0	0	0	ZDC
PCT	3757	3707	1	0	0	0	0	ZNY
PHL	1462	1489	-2	2	0	0	2	
Total	**12494**			**2**	**0**	**0**	**2**	**Total**



Central - May 25, 2020

ATOSysOps

Location	Completion	D0*	A0	Avg Taxi Out	Avg Taxi In	Diversions	AH Delays	AH Minutes*	TMI Delays*	TMI Minutes
Central	**98.65%**	**86.6%**	**84.1%**	**14.4**	**7.1**	**3**	**2**	**34**	**1**	**25**
DFW	99.51%	83.5%	76.1%	22.2	11.2	1	0	0	0	0
DTW	94.58%	93.8%	85.5%	13.7	7.4	0	0	0	0	0
IAH	97.73%	85.6%	72.2%	15.7	6.2	0	0	0	0	0
MDW	99.15%	80.4%	89.7%	8.1	6.6	0	0	0	0	0
MSP	94.74%	94.6%	90.4%	11.6	4.6	0	0	0	0	0
ORD	99.45%	91.1%	94.1%	17.2	8.1	0	0	0	1	25
PHX	98.94%	83.0%	91.0%	12.4	5.7	1	2	34	0	0

Central - Performance and Constraint Trends

Score (0 - 10)

May 20 | May 22 | May 24

Day

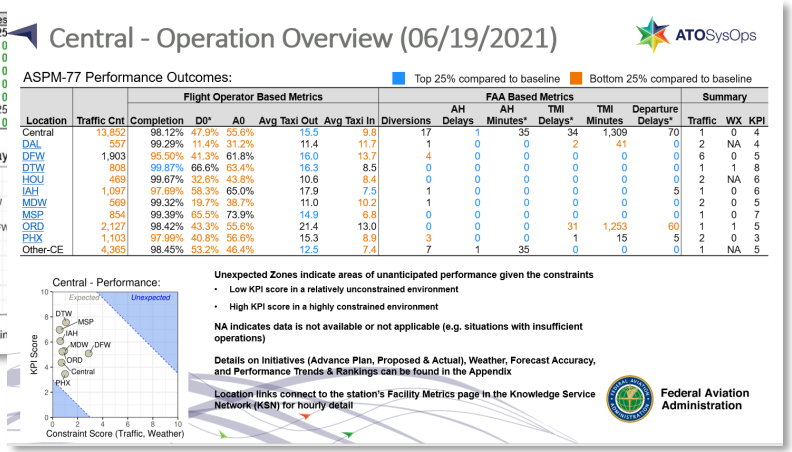
Score: Performance, Constraint

Central - May

Performance Score

MSP, DTW, IAH, MDW, ORD, PHX, Central, DFW

Constrain



Central - Operation Overview (06/19/2021)

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ASPM-77 Performance Outcomes:

Top 25% compared to baseline | Bottom 25% compared to baseline

		Flight Operator Based Metrics					FAA Based Metrics						Summary		
Location	Traffic Cnt	Completion	D0*	A0	Avg Taxi Out	Avg Taxi In	Diversions	AH Delays	AH Minutes*	TMI Delays*	TMI Minutes	Departure Delays*	Traffic	WX	KPI
Central	13,852	98.12%	47.9%	55.6%	15.5	9.8	17	1	35	34	1,309	70	1	0	4
DAL	557	99.29%	11.4%	31.2%	11.4	11.7	1	0	0	2	41	0	2	NA	4
DFW	1,903	95.50%	41.3%	61.8%	16.0	13.7	4	0	0	0	0	0	6	0	5
DTW	808	99.87%	66.6%	63.4%	16.3	8.5	0	0	0	0	0	0	1	1	8
HOU	469	99.67%	32.6%	43.8%	10.6	8.4	0	0	0	0	0	0	2	NA	6
IAH	1,097	97.69%	58.3%	65.0%	17.9	7.5	1	0	0	0	0	5	1	0	6
MDW	569	99.32%	19.7%	38.7%	11.0	10.2	1	0	0	0	0	0	2	0	5
MSP	854	99.39%	65.5%	73.9%	14.9	6.8	0	0	0	0	0	0	1	0	7
ORD	2,127	98.42%	43.3%	55.6%	21.4	13.0	0	0	0	31	1,253	60	1	1	5
PHX	1,103	97.99%	40.8%	56.6%	15.3	8.9	3	0	0	1	15	5	2	0	3
Other-CE	4,365	98.45%	53.2%	46.4%	12.5	7.4	7	1	35	0	0	0	1	NA	5

Central - Performance:

Expected | Unexpected

DTW, MSP, IAH, MDW, DFW, ORD, Central, PHX

KPI Score

Constraint Score (Traffic, Weather)

Unexpected Zones indicate areas of unanticipated performance given the constraints

- **Low KPI score in a relatively unconstrained environment**
- **High KPI score in a highly constrained environment**

NA indicates data is not available or not applicable (e.g. situations with insufficient operations)

Details on Initiatives (Advance Plan, Proposed & Actual), Weather, Forecast Accuracy, and Performance Trends & Rankings can be found in the Appendix

Location links connect to the station's Facility Metrics page in the Knowledge Service Network (KSN) for hourly detail

Federal Aviation Administration

Task 103: 4/27/22 Update

Enroute information on Reroutes, MIT of 25+ and AFPs included in the daily deck

Initiatives: Reroutes

Location	Reason	Route Type	Sent	Start Time	Initial End Time	Actual End Time	Revisions
ATL_CDR_SWAP	WEATHER	RQD	12/1026	12/1030	12/1500	12/1700	1
FCA010:NO_AR_ATLANTIC_Y-RTES_TO_MCO_TPA_AREAS	OTHER	RQD	12/1143	12/1500	13/0400	13/0400	1
FCA011:NO_AR_ATLANTIC_Y-RTES_TO_RSW_AREA	OTHER	RQD	12/1144	12/1700	13/2000	12/2000	1
FCA027:UPSTATE_NY-CANADA_VIA_J61_Q103	VOLUME	RQD	12/0135	12/1100	12/2200	12/2200	
FCAEU1:DC_METROS_TO_ZEU							
FCAHP1:SOUTH_AND_WEST_TO_HPN							
FCAIL3:SOUTH_AND_WEST_TO_TEB_MMU_CDW							
FCAIL4:ZDC_NORTH_ZJX_TO_TEB_MMU_CDW							
FCANE1:DC_METROS_TO_ZBW							

Reroute slide gives a summary of the degree of structure in the enroute airspace

High MIT (25+):

Requesting	Providing	NAS Element	MIT	Effective	Reason
ZJX	ZMA	ARS	30	1250-1500	VOL:COMPACTED DEMAND
ZJX	ZMA	ARS	25	2000-2200	VOL:VOLUME
ZJX	ZMA	ARS	25	2015-2130	VOL:VOLUME
ZJX	ZMA	ARS	25	2030-2115	VOL:VOLUME
ZJX	ZMA	ARS	30	2045-2345	VOL:VOLUME
ZJX	ZMA	ARS	25	2315-0030	VOL:VOLUME
ZNY	ZBW	BAL	40	1700-0121	VOL:VOLUME
ZJX	ZTL	BANNG	30	1522-1615	VOL:VOLUME
ZDC	ZID	BKW	25	1710-2030	VOL:OTHER
ZDC	ZID	BKW	25	2130-2230	TM INITIATIVES:MIT
ZDC	ZID	BKW	25	2345-0121	TM INITIATIVES:MIT
ZMA	MIA	BNGOS, BNICE, GLADZ	30	1230-2000	WX:THUNDERSTORMS
			25	1710-2030	VOL:OTHER

High MIT (25+) constraints provide more detail of the enroute environment

NAS - Enroute Overview (05/06/2022)

ATOSysOps

Initiatives: AFPs

Location	Reason	Sent	Effective	Proposed Duration	Actual Duration	Revisions	Delays Charged To
FCADC7	Thunderstorms	06/1556	1700-0359	659	376	1	ZDC
FCAID1	Thunderstorms	06/1558	1700-0359	659	374	1	ZID
FCAOB6	Volume	06/1558	1700-0359	659	370	1	ZOB

AFP slide provides timing details of these programs

Task 103: 8/10/22 Update

Impacts for GS, GDP and AFP initiatives were added to the respective tables to include the number of impacted flights and the associated delays

Initiatives (GS, GDP):

Possible | Probable | Expected

Location	Adv Plan Initiatives	Ground Stops						Ground Delay Programs						
		Proposed Duration	Actual Duration	Actual #	Delayed Flights	Total Delay Minutes	Average Delay	Proposed Duration	Actual Duration	Actual #	Revisions	Delayed Flights	Total Delay Minutes	Average Delay
BOS		0	0	0	0	0	0	5h59m	3h38m	1	1	90	4388	49
BWI	GDP/GS	0	0	0	0	0	0	0	0	0	0	0	0	0
DCA	GDP/GS	2h27m	3h27m	2	1	28	28	8h49m	5h10m	1	2	111	9658	87
EWR	GDP/GS	1h29m	2h29m	1	0	0	0	9h29m	8h28m	1	2	196	18772	96
IAD	GDP/GS	0	0	0	0	0	0	0	0	0	0	0	0	0
JFK	GDP/GS	1h20m	1h20m	1	0	0	0	8h20m	5h6m	1	1	85	7406	87
LGA	GDP/GS	3h33m	3h33m	3	0	0	0	9h34m	10h31m	1	3	258	19945	77
PHL	GDP/GS	0	0	0	0	0	0	3h59m	2h24m	1	1	55	2476	45
TEB	GDP/GS	1h29m	1h29m	1	0	0	0	0	0	0	0	0	0	0

Initiatives: AFPs

Location	Reason	Sent	Effective	Proposed Duration	Actual Duration	Revisions	Delayed Flights	Total Delay Minutes	Average Delay	Delays Charged To
FCAJX1	Thunderstorms	12/1335	1700-0259	599	487	2	531	50768	96	ZJX
FCAJG5	Thunderstorms	12/1344	1700-0159	539	487	3	172	15526	90	ZHU
FCAJX3	Thunderstorms	12/1353	1700-0159	539	489	1	93	5976	64	ZJX

AUS and PBI were added to both the airport and TRACON pages

Task 103: NSR Recordings

As of ~May 2022, recordings of the NSR are available on the TFM Learning site, as well as snippets that could be used for training

Task 103: Status

- The SET has concluded Task 103 successfully and submitted all documentation to the Executive Committee (EC)
- Team feels continuous improvement in the NSR is critical to improving this call and identifying opportunities to improve
- SET is working to submit follow on taskings to the EC:
  - Scheduled vs unscheduled traffic counts
  - Predicted KPI score
  - TMI visualization
  - Impacts of rocket launches
  - Impacts of military/ special use airspace
  - Use of over water routes
  - Enroute efficiency scoring

Task 102: Event Review Process

Purpose:

- Establish a joint FAA/ Industry review process
- Learn from the events
- Create a mechanism for continued system improvement

Closed: 3/28/23

Task 102: Major Outcomes

SET developed an event review process that functions as a wrap-around to the Traffic Management Review (TMR) and/or a stand-alone review on industry related topics.

Through this tasking the SET:

- Designed the process
- Developed a standard questionnaire
- Identified and defined the data elements requested from industry
- Revised End of Shift (EOS) Survey
- Conducted 7 event reviews

Task 102: Summer Event Reviews

Two reviews of Summer events conducted (6/12/22 & 7/25/22)

Lessons Learned/Takeaways:

- As appropriate, the strategy of using airspace constraints to roll into terminal programs (AFPs into GDPs) was helpful and should be adopted for future similar events
- Timely, proactive, and inclusive communication leads to collaborative strategy development

Actions proposed:

- Planning telcon calls should go to highly impacted facilities first, e.g. those with the most urgent need of discussion
- Formalize process for early call collaboration from PERTI Advanced Plan call
- Southeast action/strategic plan is needed (similar to NE)

6/12/22

NY Mets, DC Mets, PHL and CLT (not all airlines reported all metrics)	
Cancellations	404
Diversions	6
Gate Returns for Reroutes	53
Passengers Impacted	30,770

7/25/22

NY Mets, DC Mets, BOS, & PHL (variation in reporting based on delay length)	
Cancelled Flights	669
Cancelled Customers	52,806
Delayed Flights	9,507
Delayed Customers	116,150
Gate Returns	86

Task 102: Winter Event Review

Post-Thanksgiving Sunday (11/27/22)

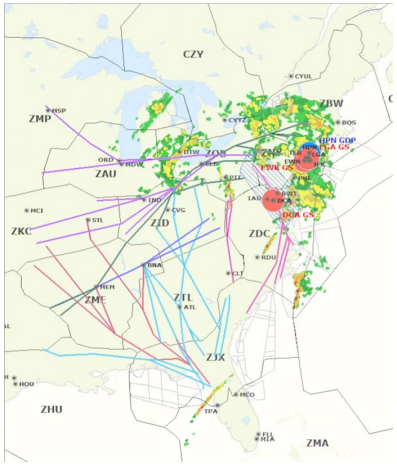
Lessons Learned/Takeaways:

- Better communication between facilities or automated distribution of closure status needed to prevent confusion with ARs

Actions proposed:

- Revisit HARP calendar - Are the correct days included?
- Explore ways to better control northbound traffic volume
- Development of a compression AAR adjustment tool
- Southeast action/strategic plan is needed (similar to NE)

19:33 TCF & Published Reroutes



Review Participants: AAL, DAL, JBU, SWA, UAL, NKS and NBAA

	Sunday 11/27 (Not all 7 respondents reported on every metric)
Delayed Flights	4,234
Delayed Customers	239,858
Cancelled Flights	75
Cancelled Customers	4,562
Gate Returns	15

Task 102: Space Event Reviews

Reviews of 3 Rocket Launch Attempts were performed (8/29/22, 9/3/22, & 3/11/23)

<u>Lessons Learned/Takeaways:</u>

- Delays & extension of launch windows create significant uncertainty of timing of TMIs
- Timing is critical therefore coordination needed between all NAS users to determine appropriate times
- Impact data availability continues to be a challenge

<u>Actions proposed:</u>

- ✓ Pre-plan communication needs to happen as early as possible
- ✓ Better communicate scrub plans and disaster recovery
- Add rocket launch strategies to AFP Guidebook
- Overlay Space, Military and Snowbird schedules
- Revisit HARP calendar - Are the correct days included?
- Demand forecasting – How can we better leverage for launches?

Industry Participants: AAL, DAL, JBU, NKS, SWA, UAL

	Saturday 3/11
Cancelled Flights	83
Cancelled Customers	9,578
Delayed Flights	2,640
Delayed Customers	485,778
Gate Returns	60

Task 102: Status

- The SET has concluded Task 102 successfully and submitted all documentation to the Executive Committee (EC)
  - Further reviews will be on hold until an owner of this process is identified by the EC
- Team has identified 2 recommendations to improve this process:
  - Establish procedure with EC for capturing and distributing lessons learned from event reviews that EC deems relevant to distribute to the greater NAS community
  - Develop a technology platform for repository and distribution of event reviews
    - Necessary to close the PERTI loop such that lessons learned are fed back in to promote continuous improvement of NAS efficiency

Task XXX: Reroute Planning & Impacts

Purpose:

- Gain understanding of impacts of reroutes to flight operators
- Better planning via Critical Decision Windows (CDW)
- Actual impacts recorded in NSR

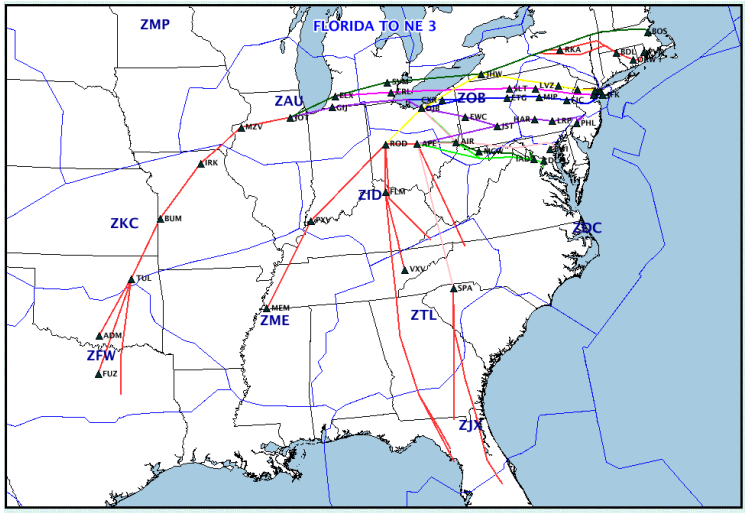
ECD: 10/31/2023

Task XXX: Overview

Reroutes are an important tool to manage flows of traffic around constraints but can have significant mileage increases relative to the preferred or “historical” route.

In this task, SET will:

- Define a list of the most frequently used reroutes
- Define a list of the most impactful reroutes to industry members
- Explore opportunities to integrate reroute CDW into the Advanced Plan (PERTI) or Operational Plan telcons
- Investigate opportunities to integrate Filed vs Flown Dashboard metrics into the NSR



QUESTIONS?

CDM
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Co- Leads: Renee Fields (FAA), Erin Cobbett (DAL)

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