



CDM

Collaborative
Decision Making

Focus 5

- Brief overview of Focus 5 initiatives
- New CDM subteam and task discussion



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Focus 5 Performance/Efficiency Initiatives

- Safety is our primary mission in the FAA. However, efficiency enhances predictability and stability of the system while driving optimization and throughput of available capacity.
- ATO leadership will work with leading air carriers to set clear goals for the operation.
- The ATO is committed to being a data driven agency that relies on metrics to improve system performance.
- While keeping safety as our main focus, the ATO strives to employ the most efficient strategies and techniques to reduce delays wherever possible.

FAA — PERFORMANCE INITIATIVES

The National Airspace System is the safest, most efficient airspace system in the world. While safety is our primary concern, it is efficiency that propels our optimization of available capacity. ATO leadership is working with leading air carriers to set clear goals for the operation in the coming years. By establishing a baseline, managing constraints, and measuring how the NAS operates, we will be able to identify what we can do to improve overall system performance. Our collective success depends on your commitment to moving the system forward.



Miles-in-Trail Stringency

Stringency analysis helps to identify how effectively Miles-in-Trail are being used to manage the flow of air traffic. The goal of Stringency tracking is to encourage a more tailored approach to the application of Miles-in-Trail and the elimination of unnecessary constraints. For 2020, we will compare calendar month against the same 3-year baseline month with a target of 3% reduction.



Program Compliance

Program Compliance is a new metric that we will be examining. Initially, the internal measurement will be compliance with departure release times (EDCT). ATO is responsible for setting a proper baseline and developing a "scorecard" to help track Program Compliance throughout the system. Leading air carriers have committed to better educating their personnel on the importance of participation and cooperation with operational initiatives. Increased compliance is expected to expose other factors which lead to over and under-delivery at the receiving facility.



Departure Gate Capacity

Increased use of available Departure Gate Capacity will depend on communication, common situational awareness, transparency, and participation. We will be using analytics to track utilization of playbooks, escape routes, capping and tunneling, etc., during connective weather, or other operationally impacted events. In some instances where we have historically published "recommended" routings, we will implement the use of "required" routes along with an expected % of utilization by industry. In addition, with industry's commitment to increase participation, we will continue to develop "pathfinder" processes.



Arrival Fix Balancing

We will use arrival fix balancing to maximize surface capacity. Congestion of arrival fixes is not a challenge at all facilities. However, in those locations where we can identify an opportunity to maximize arrival throughput we will work together with industry to develop new solutions to relieve over-scheduled routes.



Airspace Flow Program (AFPs)

For 2020, we will refine and adapt Flow Constrained Area (FCA) design using new tools to make timely, data-driven decisions. Where possible we will provide industry with options of FCA based reroutes as an alternative to AFPs. Improvements to the AFP process started in 2019 through re-evaluation and adjustments to reference rates of historical FCA applications in limited locations. The 2020 initiatives expand on that.



Communication

Explaining the "why" and engaging directly with ATO and industry workforces will be critical for overall success. It will require multiple touch points on an on-going basis to ensure awareness and adoption. ATO is committed to providing a steady stream of content to keep internal and external audiences up to speed on performance and developments.

It is our goal to reduce delay minutes NAS-wide by 3% in the coming year.

By the end of January baselines and benchmarks will be in place for Stringency and Program Compliance. Performance data on these will be provided on a regular basis.

Departure Gate Capacity, Arrival Fix Balance, and Airspace Flow Programs will require additional analysis. ATO is targeting April 1 to roll out a more formalized approach for each.

Because these efforts are not solely about ATO performance, the air carriers have also committed to providing data on how constraints in the operation impact the flying public.

Our joint commitment to NAS-wide reduction of delay minutes is about keeping our promise to the American people to optimize capacity without compromising safety.

ATO | 2021 EFFICIENCY PERFORMANCE INITIATIVES | FOCUS FIVE

The National Airspace System (NAS) is the safest, most efficient aerospace system in the world. While safety is always paramount, efficiency maximizes the use of available airspace. In 2020, the ATO undertook several initiatives to improve operational efficiency. Continuing to build on this foundation, the ATO will focus on five Efficiency Performance Initiatives for 2021.

Advancing NAS efficiency requires a better understanding of operational interdependencies and the intrinsic mixture of science and art that make up air navigational services. The ATO will expand its infrastructure of dashboards and efficiency tracking mechanisms in 2021. These data analytics tools will be the key to measuring progress and identifying where to concentrate corrective actions for years to come.



Miles-in-Trail Stringency

Reducing or eliminating unneeded Miles-in-Trail (MIT) is more relevant now than ever. The compounding effects of MIT initiatives as they ripple through the system lead to system delays and overall inefficiencies. Striving to be the most efficient aerospace system in the world starts at the very lowest level. With the use of the improved Stringency dashboard and targeted MIT reduction action plans, Traffic Management Officers will continue to work for areas where the reduction or elimination of MIT is needed and appropriate.



Program Compliance

In 2020, a new dashboard was created to track facility EDCT compliance for Ground Delay Programs (GDPs) at the departure airport. In 2021, we will educate our workforce on the importance of GDP compliance and the impacts of non-compliance, including excess vectoring, en route holding, ground stops and divers. As the airlines begin to repopulate the skies and the use of GDPs increases, our goal in the coming year will be to increase EDCT compliance by 5%. Leading air carriers have also committed to better educating their personnel on the importance of EDCT compliance. Increased compliance within the ATO and with industry is expected to expose other factors which lead to over and under-delivery at the receiving facility.



Arrival Fix Balancing

Arrival fix balancing will continue to be a joint effort between industry and the ATO. The ATO has assembled a dashboard that identifies overscheduled arrival fixes. Armed with this data, AJP and AJP will work with industry to develop mitigation strategies at our busiest airports. Balancing arrival demand into our busiest airports will have wide ranging benefits to include fewer Miles-in-Trail initiatives, less tactical airborne re-routes and reduced scheduling delays into the overhead stream. The goal of arrival fix balancing is to maximize throughput at the destination airport.



Airspace Flow Program (AFPs)

The ATO is using new data analytics to determine the Unimpeded FCA Throughput (UFT) for FCA's used to implement AFPs. Using historical data to determine UFT allows for a new starting point to discuss Day of Operations AFP rates. In addition to the refinement of FCA throughputs, a new Midwest FCA structure will be established in preparation to dry-line weather events. The ATO will also educate traffic management personnel on the optimal use of AFPs.



National Traffic Management Log (NTML) TMI Reporting

The ATO is committed to using data to make actionable, informed decisions to improve aviation efficiency. The National Traffic Management Log (NTML) is the primary data source for efficiency metrics. NTML accuracy at the service delivery point is vital to organizing the data into actionable information. In 2021, the ATO shall develop standardized training and guidance for NTML entries particularly with Traffic Management Initiatives (TMIs). Improved NTML data will help us prioritize our efficiency goals and allow us to make meaningful efficiency decisions across the aviation system.

"The ATO is committed to being a data driven agency that relies on efficiency metrics to successfully improving aviation efficiency."



The FAA's TFM job is to ensure **SAFETY** of flights and the **EFFICIENT** utilization of NAS resources.



FAA
Air Traffic Organization

ATO | 2022 Focus Five | Efficiency Initiatives

The Mission of the FAA is to provide the safest, most efficient aerospace system in the world. Safety is always our primary concern. However, efficiency enhances predictability and stability while driving optimization throughout the system.

The Traffic Management System mission is to balance air traffic demand with system capacity to ensure the maximum efficient utilization of the National Airspace System (NAS). A safe, orderly, and expeditious flow of traffic, while minimizing delays, is fostered through continued analysis, coordination, and dynamic utilization of TMI initiatives and programs.

Miles-in-Trail Stringency



This past year has seen traffic volume return to near pre-COVID levels. MIT usage, however, remains at two-thirds of the pre-COVID baseline. In part, this is a testament of the hard work of our DODS, District TMOs and TMCs working together with the Command Center to ensure only the appropriate MIT are applied to achieve system objectives.

Our focus this coming year will be threefold. First, we will continue targeting areas where we can reduce or eliminate unnecessary MIT restrictions through MIT reduction action plans. An emphasis will be placed on integrating other efficiency initiatives such as Capping and Tunneling, Arrival Fix Balancing, Departure Gate Balancing and others, to minimize the impact of MIT. Second, we will use new dashboards to target our most impactful MIT initiatives and develop strategies to reduce overall system impacts. Finally, we will educate our workforce on the impacts of MIT and the wide-ranging effects they have as they ripple through the system.

Program Performance



This initiative will build on the success of last year's Program Compliance initiative where we saw a 7% increase in GDP EDCT compliance through our partnership with industry. For 2022, we are taking a more holistic approach to achieving measurable improvements in the throughput and delivery of TMI programs. We will add AFP EDCT tracking to our dashboard with a goal of maintaining at least 95% compliance. We will continue to engage at departure points, focusing on the importance of EDCT compliance while recognizing that occasional deviations from EDCTs can provide efficiency gains at the destination airport. In addition, we are expanding our focus to airline submitted ETMs and how they relate to the success of our traffic management programs.

Time Based Flow Management (TBFM) Data Analysis



ATO will deploy new dashboards to measure TBFM usage and assess the impact of TBFM on NAS users. Each TBFM system is customized for an airport and its surrounding airspace. However, the efficiency benefits and tradeoffs of TBFM usage are not adequately measured and compared across TBFM sites. While a great deal of TBFM data is being gathered, analysis has proven challenging. This initiative will focus on the analysis of the results of TBFM throughout the NAS as well as investigate and identify the impacts of TBFM on our industry partners.

Capping and Tunneling



ATO will develop and deploy training on best practices for capping and tunneling to be shared across the NAS. Capping and tunneling is an effective initiative to maximize available capacity during constrained events due to weather and/or volume. It has long been used for escape routes in both Florida and in the Northeast where universally understood techniques are employed successfully. New capping and tunneling strategies and plans will be developed in regions where it has been limited but will be most beneficial.

Airspace Flow Program



This year, the ATO will develop a more robust post-event review process with the focus on analyzing and assessing throughput and capacity when utilizing AFPs. The Command Center and field facilities need defined parameters and thresholds tied to desired system outcomes and performance to aid in the selection of AFP rates. This analysis will be the basis for defining those parameters and evaluating our workforce and industry on appropriate AFP rates.

The ATO is committed to being a data-driven agency that relies on metrics to successfully improve system performance.



We are accountable to the flying public and our aviation stakeholders in the delivery of a **SAFE** and **EFFICIENT** operation.

This year, System Operations and Air Traffic Services will continue to build on the foundation of using data to identify efficiency drift, educate our workforce, and track progress.

Communication will be critical to our overall success. Explaining the "why" creates a stronger sense of teamwork and builds trust and respect amongst the team.



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Focus 5 Task

- A CDM Subteam will
 - assist with developing and monitoring the progress of the Focus 5 Efficiency Initiatives
 - provide industry input to the identification and tracking of initiatives
 - assess the Focus 5 process to identify gaps and recommend corrective actions
 - focus on one of the efficiency initiatives to develop the collaborative process and may expand to include other initiatives as necessary
 - will work through the Executive Committee to ensure objectives of the VP+1 group are considered in the development of Focus 5 initiatives
 - and will recommend any potential changes to the Focus 5 initiatives



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Adhoc Team Members

- Mike Ferger - FAA
- Lee Brown - JBU
- Paul Litke - UAL
- Ralph Tamburro – PANYNJ
- Scott Campbell - FDX
- Adam Davis - UPS
- Eric Silverman - AAL



Initial Considerations

- Address the Miles-in-Trail Stringency initiative to continue targeting areas where MIT can be reduced or eliminated
- Identify areas where Capping and Tunneling, Arrival Fix Balancing, Departure Gate Balancing and other initiatives could be added to reduce and/or eliminate MIT
- Solicit industry input to identify alternatives to MIT
- Evaluate current monitoring tools for applicability in effectively tracking MIT and current reduction efforts
- Recommend pilot/controller education opportunities to assist with reducing MIT



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