Government Category Honorable Mention

AMP Integration into the AT21 Program

USTRANSCOM JDPAC AT21 Team

The JDPAC AT21 Team has worked closely with partners across USTRANSCOM directorates and transportation component commands to spark creative technical and analytic solutions that save time and resources, mirror complex human cognitive processes, merge multiple lines of business, and improve credibility of operational planning processes.

The most significant effort required creative technical innovation in multiple areas to integrate the Analysis of Mobility Platform (AMP), a legacy simulation model, into AT21's Optimized Delivery (OD) Enterprise Executable Plan (EEP) process. Today, when USTRANSCOM passes a transportation-feasible requirement to Air Mobility Command, there is little visibility on whether they will have the airlift available to support it. The OD EEP process is designed to produce an optimized airlift plan that balances global movement requirements with known daily capacity. USTRANSCOM determined that adapting AMP would provide a cost effective optimization engine to be the core of this process. Historically, AMP has been used to support programmatic analyses focused on 7-20 years in the future. The challenge for the JDPAC team was adapting the existing AMP model to support "real world" operations 10-21 days in the future. Integration efforts with a huge focus on airlift mission quality reinvigorated an AT21 program that was stalling due to numerous technical issues and provided innovations to keep the program moving forward. These innovations creatively overcame significant technical challenges, greatly improved trust and confidence among enterprise partners, and ensured the technology will deliver on advertised AT21 efficiency objectives for USTRANSCOM. Successful AMP integration is now complete and provides the foundation for USTRANSCOM to produce a credible EEP that improves the efficiency and effectiveness of operational planning and scheduling of transportation movements.