NAS Enterprise Architecture



Infrastructure Roadmaps v19.2

BASELINE

July 2025



Infrastructure Roadmap Overview

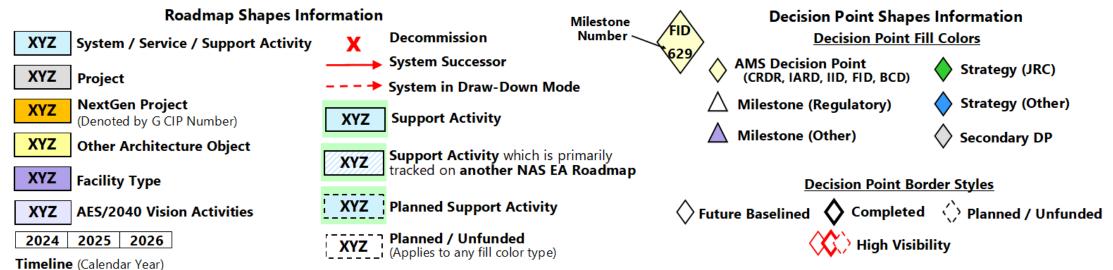
What are the Infrastructure Roadmaps?

- The FAA Infrastructure Roadmaps show the progression of system deployments, investments, and key decision points for major NAS acquisitions. They depict the acquisition strategy to evolve the NAS from the As-Is to the To-Be environment.
- The Infrastructure Roadmaps show all <u>Capital Investment Plan (CIP)</u> investment projects and systems identified in the NSIP that will deliver the necessary functionality to enable OIs and BTIs.

Guidelines for Understanding the Roadmaps

- The Infrastructure Roadmaps are organized by Domain (Automation, Communication, etc.) and depict projects, systems, services, decision points, and support activities.
- The timeline is in calendar years and shows a 17-year outlook.
- The roadmaps have swim lanes for Infrastructure (white), Support Activities (green), and Platform/Compute (purple).
- The DP diamonds represent the quarter in which a decision will occur.
- The Support Activity bars represent the dates that work is being performed on the activity.
- The Project bars represent the dates that CIP funding is allocated to a project.
- The System and Service bars represent the dates that a system or service is operational, with red lines indicating sustainment, drawdown, or convergence

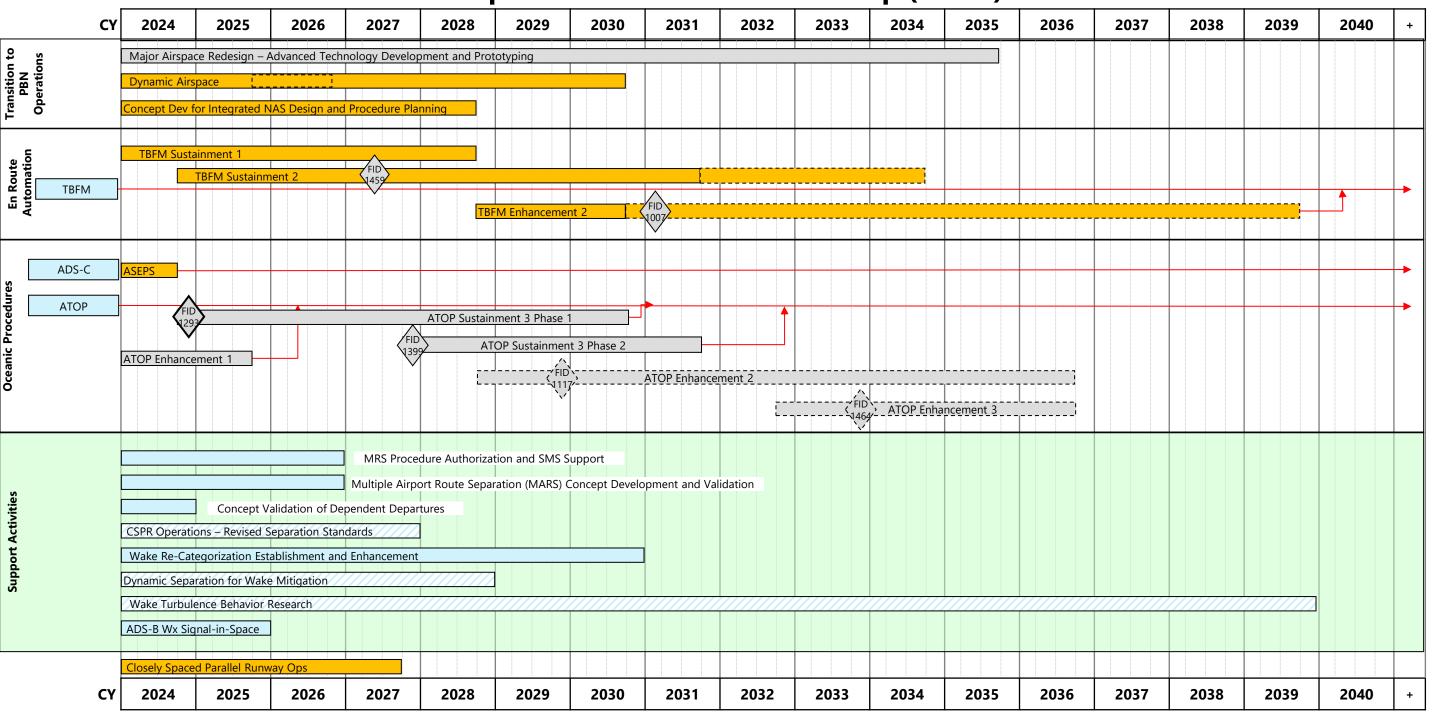
Infrastructure Roadmap Legend



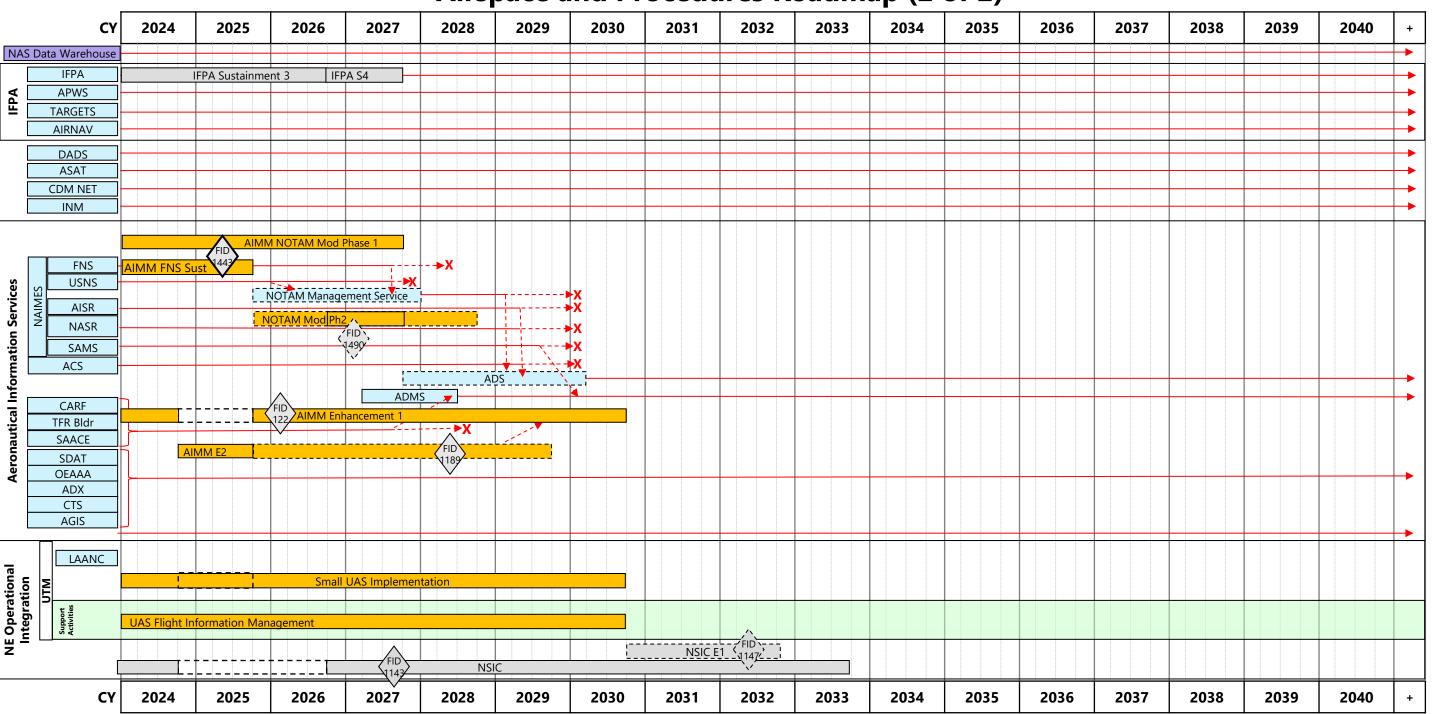
Airspace and Procedures

The Airspace and Procedures roadmap presents an Executive View (EV) of systems and procedures, including associated research projects, with an effect on the large-scale redesign and optimization of major airspace.

Airspace and Procedures Roadmap (1 of 2)



Airspace and Procedures Roadmap (2 of 2)



Airspace & Procedures Roadmap: Assumptions

Identifier	Description
A&P-01	Integrated Arrival/Departure Airspace Assumptions
	a) Key Integrated Arrival/Departure Airspace enablers:
	1. Extension of 3 Mile Separation & Terminal Procedures
	2. Integrated arrival/departure airspace configurations
	3. Flexible sector & bi-directional routes published
	4. 5 mile lateral spacing for Required Navigation Performance (RNP) enables 5 mile lateral route spacing
	5. New voice system (NAS Voice System), leased circuits, and Air-Ground communications channels to handle transition
	6. Cost benefits are based on creating X Integrated Arrival/Departure (Big Airspace) facilities, covering X major metropolitan areas
	b) Cost analysis based on general assumptions about the concept, not on any detailed requirements or technical solutions
	c) Benefits analysis based on extrapolating results from FT simulations to other sites given traffic forecasts and historical weather patterns
	d) Sites identified where large TRACON facilities exist could accommodate additional BA operational positions with refurbishment. New buildings would be needed where no large TRACON exists.