# NAS Enterprise Architecture



Infrastructure Roadmaps v19.2

#### **BASELINE**

July 2025



#### **Infrastructure Roadmap Overview**

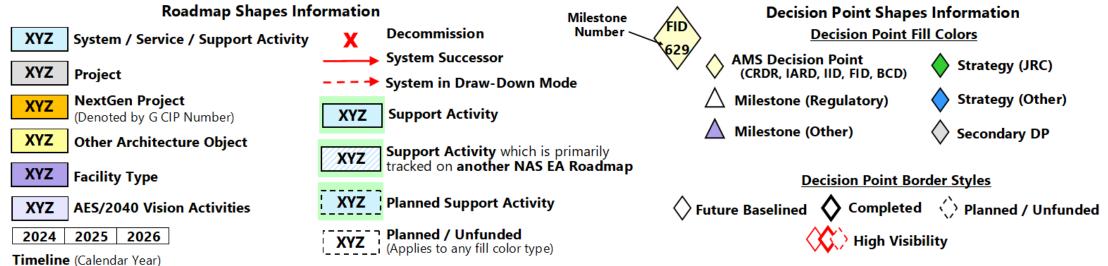
#### What are the Infrastructure Roadmaps?

- 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

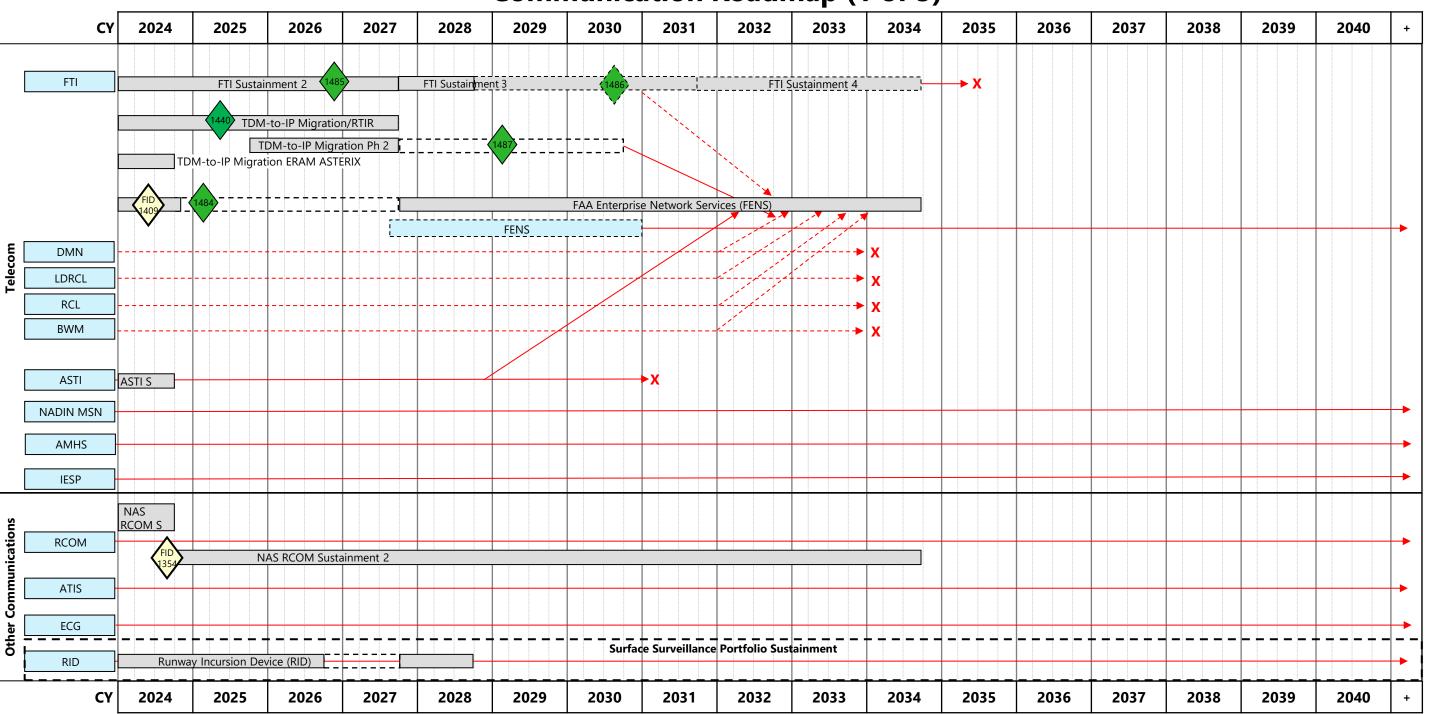
#### Infrastructure Roadmap Legend



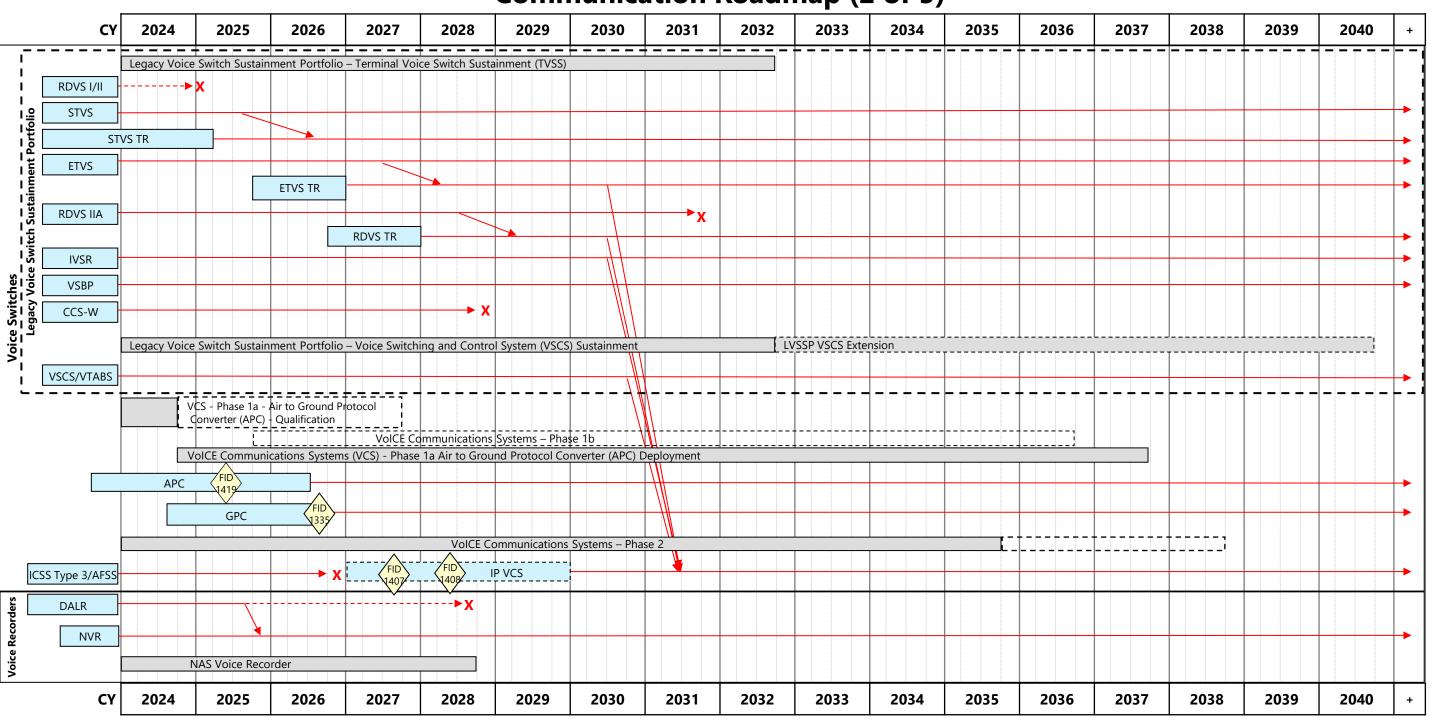
## **Communication**

The Communication Roadmap presents an Executive View (EV) of the current communication systems supporting the National Airspace System and their enhancement, sustainment or replacement through major development programs and support activities. The Communications Roadmap is intended to convey the major communication program strategy and acquisition decision points as well as program funding. The roadmap serves as a summary view of more detailed plans within each development program.

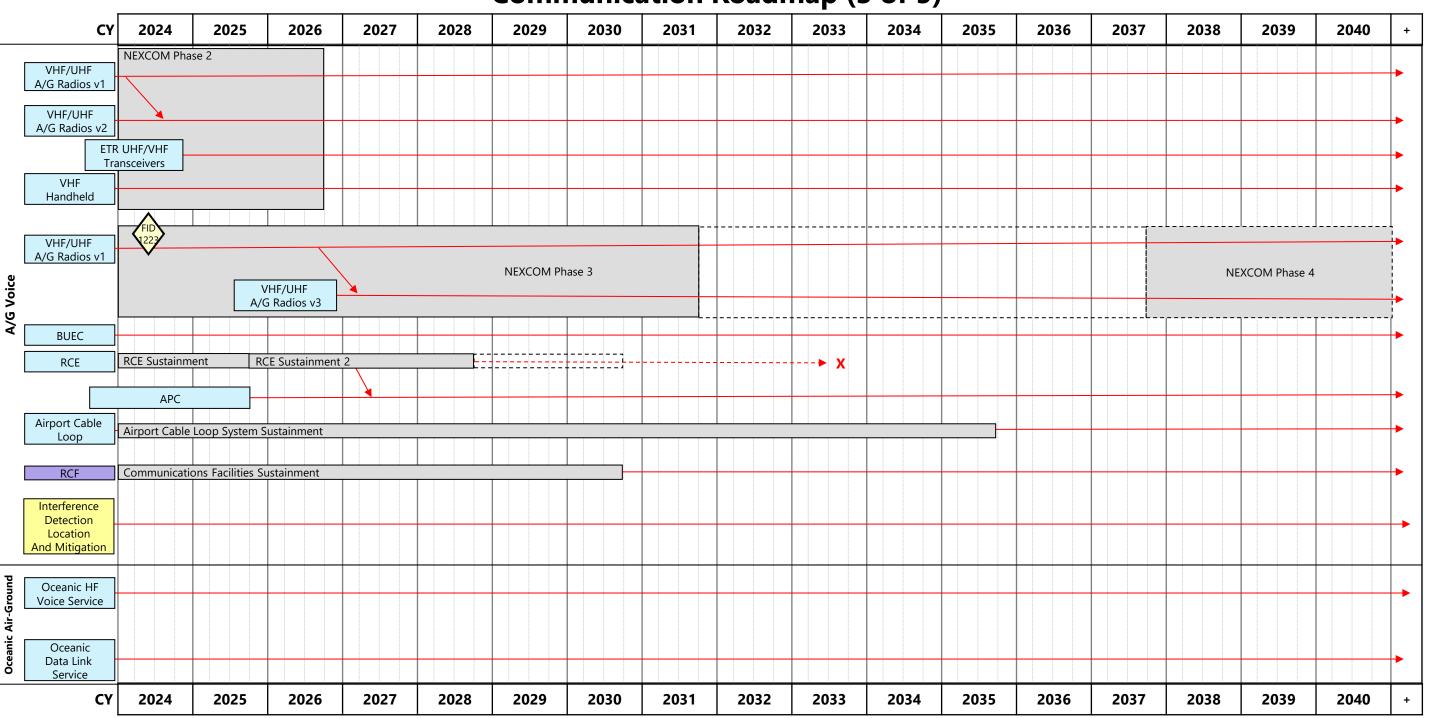
# **Communication Roadmap (1 of 5)**



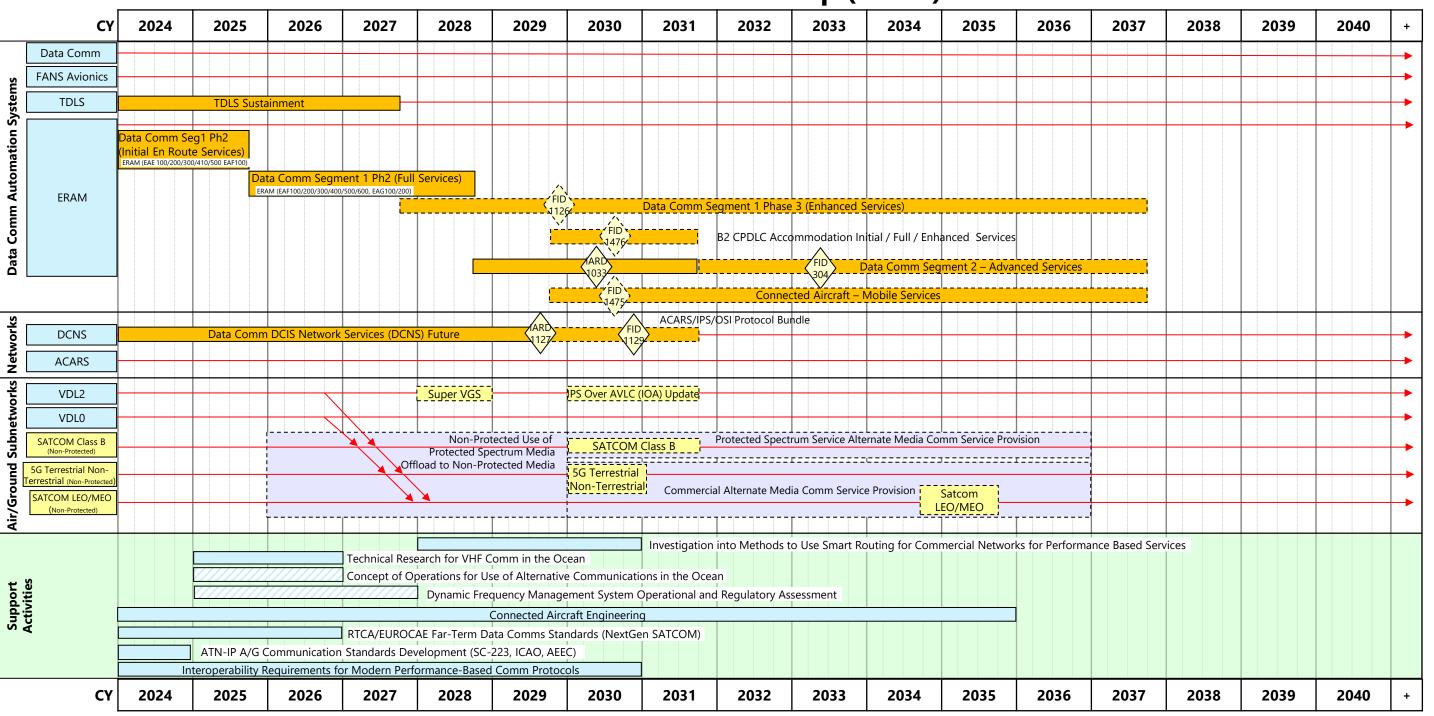
## **Communication Roadmap (2 of 5)**



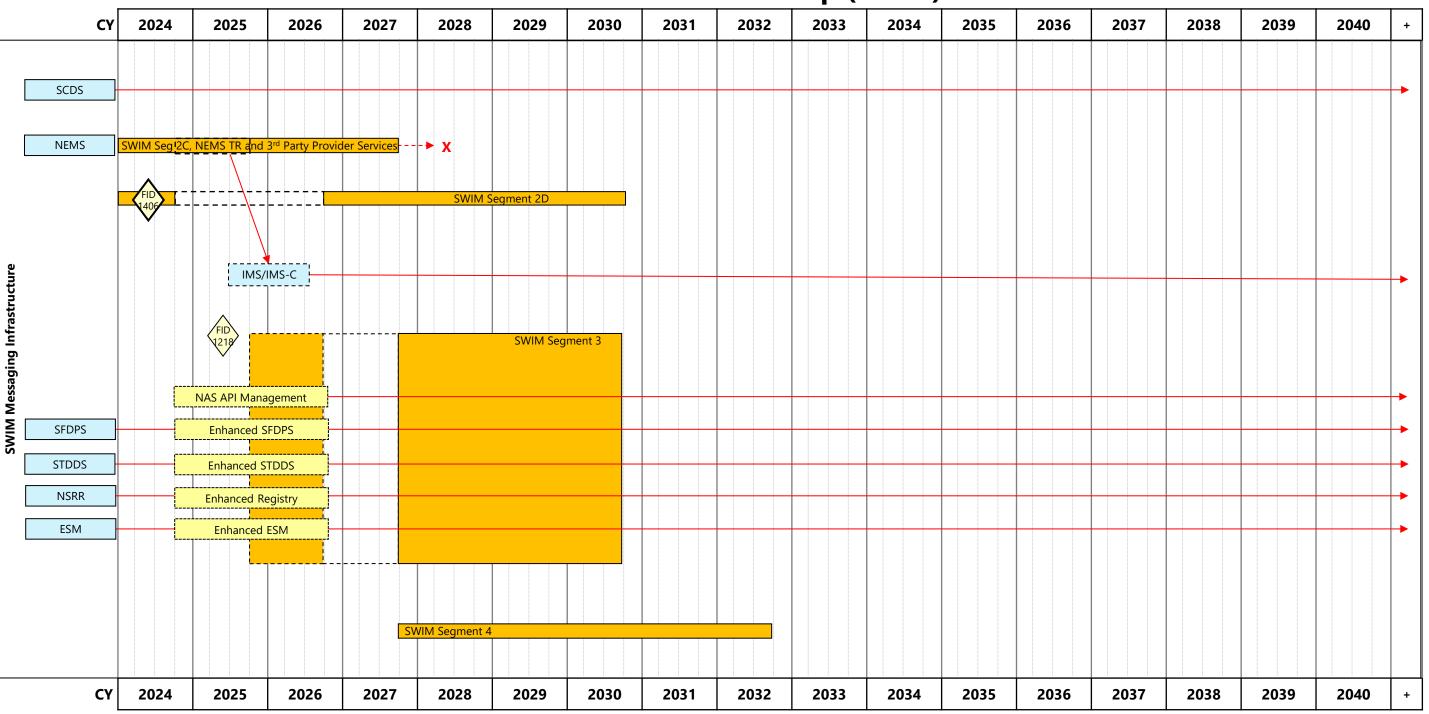
## **Communication Roadmap (3 of 5)**



#### **Communication Roadmap (4 of 5)**



# **Communication Roadmap (5 of 5)**



# **Communication Roadmap: Assumptions**

Identifier	Description
COMM-01	FENS will become the primary ground-based Voice/Data transport system.
COMM-02	All domestic flight safety critical A/G communications are over VHF based systems. Advisory communications (e.g. Weather, NAS Status, NOTAMS) can be supported by VHF A/G Communication or by commercial communications services through airborne access to SWIM services.
COMM-04	Relationship between SWIM and Communications: SWIM Dataflows all leverage NAS OPS IP service and initial SWIM Segment 2 infrastructure is being implemented with FTI & FENS.
COMM-06	ASTI (ANICS) will not be integrated into FAA Telecommunications Infrastructure contract.
COMM-07	FIDI TR will develop IP communication protocols between automation systems (e.g. ERAM, terminal clients) which end systems will provide the investment necessary to implement required changes.
COMM-08	JRC approved a joint IID for Data Comm Segment 1 and 2 in 2008; therefore, it is projected that IID for Segment 2 will be waived.