NextGEN



Federal Aviation Administration

The Next Generation Air Transportation System, or NextGen, is a transformative change in the management and operation of how we fly, which will reduce delays, save fuel and lower carbon emissions. This comprehensive initiative integrates new and existing technologies, including satellite navigation and advanced digital communications. Airports and aircraft in the US national airspace system (NAS) will be connected to NextGen's advanced infrastructure and will continually share information in realtime to improve air transportation's safety, speed, efficiency and environmental impacts. The combined initiatives that make up NextGen will provide a better travel experience.

www.faa.gov/nextgen

OPTIMIZATION OF AIRSPACE AND PROCEDURES IN THE METROPLEX

In response to recommendations from the aviation community through RTCA's NextGen Mid-Term Implementation Task Force, the FAA is putting integrated NextGen capabilities in place to improve air traffic flow for an entire region, or metroplex.

The FAA has identified 21 metroplexes—geographic areas that include several commercial and general aviation airports in close proximity serving large metropolitan areas. Airspace congestion and other limiting factors, such as environmental constraints, combine to reduce efficiency in those areas.

By optimizing airspace and procedures in the metroplex, the FAA provides solutions on a regional scale, rather than focusing on a single airport or set of procedures. The optimization plan takes into account all airports and airspace that support each metropolitan area as well as how air traffic in those areas interacts with other metroplexes. It considers myriad factors including safety, efficiency, capacity, access and environmental impact.

Using a consistent, repeatable approach, study teams of FAA and aviation community experts analyze the operational challenges of metroplexes and explore airspace and procedures optimization opportunities. Collaborative design and implementation teams then put in place the solutions the study teams recommend, including performance-based navigation procedures and airspace redesign.

