



Airfield Services

wsp.com



40+ AIRFIELDS
> 225 miles



600+ AIRPORTS
\$130 billion portfolio

ABOUT WSP

WSP is a globally-recognized professional services firm, which has provided solutions to our clients' most complex challenges since 1885. WSP has over **200 offices in 46 states**, employing **9,000 employees** from coast-to-coast. We are a trusted partner to national, state and local government agencies; multilateral institutions; and commercial industry clients worldwide. WSP has successfully partnered with airports across the United States to deliver more than **\$70 billion in capital programs over the last 25 years**.

WSP brings a 360° perspective to support aviation owners in developing and implementing practical, effective solutions to the challenges they face. Our team of **planners, designers, program/construction managers, financial analysts, management consultants, systems engineers, architects, and IT specialists** work with aviation clients throughout the project life cycle. Drawing on current technologies and innovations, we plan, design, and manage implementation of aviation projects that provide modern, sustainable, state-of-the-art facilities.

OUR AIRFIELD SERVICES



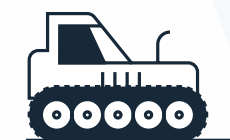
AIRFIELD PLANNING



**AIRFIELD
PAVEMENTS DESIGN**



**ELECTRICAL &
LIGHTING DESIGN**



**PROGRAM MANAGEMENT
& CONSTRUCTION
MANAGEMENT**

LGA

LaGuardia Airport
New LaGuardia Plan



Airfield Planning

Airport staff members are busier than ever, and often a master plan is one of several ongoing efforts that require their attention. WSP prides itself on adapting to the client's needs, focusing on critical decisions to reduce the airport's related workload, while preserving client control. We work with our clients early in the process to establish optimal communication protocols. Together we determine review requirements, involvement in technical development and strive to see the big picture to develop plans that can be phased and implemented. We take a conservative view of the financial demands of a plan to allow airports to fund what is affordable along the way.

Services

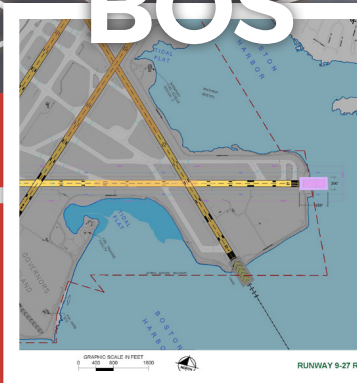
- Airport Master Planning/Strategic Planning
- Airport Layout Plans/Updates
- Airspace Analysis
- Heliport Planning
- Airfield Capacity Studies
- Apron Optimization and Gating Analysis
- Air Traffic Control Tower Siting/
Line-of-Sight Analysis
- Airport Site Selection Studies
- Business Planning, Financial and
Operational Feasibility Studies
- Environmental Planning and Air Quality Studies

LGA



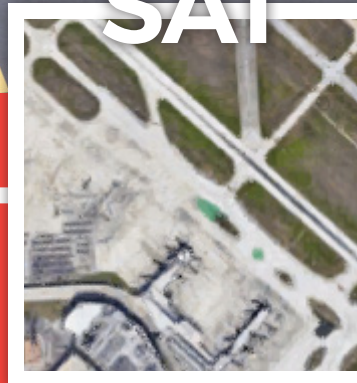
LaGuardia Airport
New LaGuardia Plan

BOS



Boston Logan International Airport
Runway 9-27 Runway Safety Area

SAT



San Antonio International Airport
Strategic Development and Master Plan

STL



St. Louis Lambert International Airport
Master Plan Update

GEG



Spokane Felts Field
Master Plan Update

SFO



San Francisco International Airport
Apron Alpha/Gate Planning Study

CLT

**Charlotte Douglas
International Airport**
De-icing Pad and
South Crossfield Taxiway



Airfield Pavements Design

With a clear focus on customer satisfaction, WSP understands that creating a positive airport experience starts with a great design. We also believe that developing effective design solutions requires an in-depth knowledge of the unique environment in which airports operate. From safety and security to changes in aircraft size, design criteria and operational constraints are continually evolving. We create design solutions that minimize disruptions so that airports and other aviation facilities stay operational throughout the construction/rehabilitation process.

Services

- Airfield Pavement Replacement/Repair
- Airfield Pavement Management Systems
- Airfield Pavement Marking
- Airfield Systems/NAVAIDS
- Asset Management
- Environmental Assessment
- Geotechnical Investigations
- Grading/Drainage
- Runway/Taxiway/Apron Geometry
- Security/Communications

FOE



**Topeka Regional Airport
(Forbes Field)**
Runway 13-31
Reconstruction

PSP



**Palm Springs
International Airport**
Airfield Reconstruction

JFK



**John F. Kennedy
International Airport**
West Area Development

VCV



**Southern California
Logistics Airport**
Runway 17-35
Rehabilitation

MGJ



Orange County Airport
Relocation and
Reconstruction of Runway
3-21 and Taxiway "A"

DFW



**Dallas Fort Worth
International Airport**
Southwest
End-Around Taxiway

PSP

Palm Springs
International Airport
Airfield Reconstruction



Electrical & Lighting Design

Continued growth in the air travel industry has resulted in new construction and on-going replacement of airport facilities. At the same time, airports must keep current with technology advancements in lighting and navigational aid systems. WSP aviation lighting staff provides engineering, design and construction phase services nationwide by licensed professional engineers with expertise in FAA Advisory Circulars, AIP procurement, electrical codes, airside electrical/lighting technologies and construction methods, Leadership in Energy and Environmental Design (LEED®) Green Buildings and Illuminating Engineering Society (IES) Airport Lighting.

Services

- Lighting Layout
- Centerline, Edge, Threshold, Touchdown Zone, Lead-on, Lead-off
- Runway Guard Lights
- LED Fixtures
- Signage Layout
- Mandatory Hold, Location, Directional
- Runway Distance Remaining
- Wind Cones
- Airfield Lighting Vault
- Constant Current Regulators
- Airfield Lighting Control & Monitoring System (ALCMS)
- Obstruction Lighting
- FAA Cables/Fiber
- Deicing Ramps/Approach Lighting
- Navigational Aid Systems (NAVAID)
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REIL)
- Instrument Landing Systems (ILS)
- Apron/Gate Flood Lighting
- PV Glare Analysis

STL



St. Louis Lambert International Airport
Airfield Lighting Control and Monitoring System Replacement

MDT



Harrisburg International Airport
Runway Edge Lights Reconfiguration

DAL



Dallas Love Field
Airfield Electrical Condition Assessment

LGA



LaGuardia Airport
High Mast Apron Lighting

IAG



Niagara International Airport
Runway 10L-28R Edge, Center, Touchdown Zone Lights

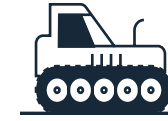
SUS



Spirit of St. Louis Airport
Runway 8R-26L Pavement and Electrical Rehabilitation

ORD

Chicago O'Hare
International Airport
O'Hare Modernization
Program



Program Management & Construction Management

From the outset, our priority is to establish a strong partnership that protects our clients' best interests throughout the planning, implementation and commissioning stages. We emphasize the importance of visionary planning, creative funding strategies, organizational efficiency and risk management, as well as strong project controls to analyze performance and support decision-making.

Services

- Owner's Representative
- Owner's Engineer
- Project Manager
- Construction Manager
- Construction Inspection
- Delivery Partner
- Program Manager
- Procurement

ATL



**Hartsfield-Jackson Atlanta
International Airport**
ATLNext

IAD



**Washington Dulles
International Airport**
New Fourth Runway and
Associated Taxiways

MSY



**Louis Armstrong New
Orleans Airport**
North Terminal
Development Aprons and
Taxiways

MCO



**Orlando International
Airport**
Owner's Authorized
Representative

BNA



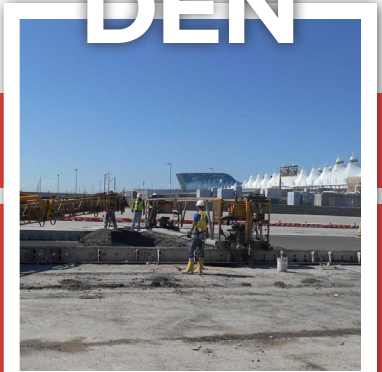
**Nashville International
Airport**
BNA Vision Program

EWR



**Newark Liberty
International Airport**
Terminal A Aprons and
Taxiways

DEN



**Denver International
Airport**
Concourse Expansion
Aprons and Deicing Facility