



+ Aviation



UNITED AIRLINES

N775

# We embrace your vision as our own



Airport facilities, existing or new, and their associated structures and systems are technologically complicated. New airports need care and innovative thinking to become functioning, smart, operational entities that deliver secure, convenient, and viable services, always within budget and schedule constraints. Existing facilities require upgrades to their infrastructure and continuous maintenance to keep up with growing demands.

Your aviation project is not like anyone else's. So we don't approach it with out-of-the-box designs or cookie-cutter strategies. We've worked on dozens of airport facilities worldwide. Our professional skills and the lessons we've learned from years of aviation consulting combine to bring high-quality, one-of-a-kind solutions, each and every time.

Our experts understand the dynamics of airport operations: airside and landside infrastructure, airport facilities, and systems. We work with you to find solutions that combine state-of-

the-art designs with the utmost consideration to security, sustainability, and sensitivity to the environments in which you operate.

You benefit from life-cycle cost savings and award-winning results. Your project proceeds smoothly and predictably, with excellent professional services that meet or exceed your expectations.

We're proud of our work. Its quality speaks for itself.

# The professional services you need

All over the world, operators of aviation facilities have trusted us to assist them with any and all aspects of airside, landside, and airport development projects. From planning through to feasibility studies, from design, program or project management for the owner, to budgeting, scheduling, procurement, and construction management. We do it all.

## Project delivery

Our services cover the full scope of project management disciplines, from concept through design, management, and implementation:

- Engineering
- Project management
- Procurement
- Construction management
- Design-build
- Public-private partnerships.

## Consulting

There's no substitute for experience. We bring training, practice, and years of delivering the kind of results our clients count on in areas like:

- Management consulting
- Technologies
- Environmental services
- Systems and process controls.

## The best predictor of success

From concept to activation, the success of your aviation-facility project is only enhanced by involving experienced partners to help you. We have the leadership and project management skills to ensure smooth, safe, and efficient airport operations.

Our technical experts can assist you with:

- Airside and landside infrastructure
- Runway, taxiway, and aircraft aprons
- Air passenger terminals
- FBOs and business jet terminals
- Airfield ground lighting systems
- Aircraft maintenance and aerospace facilities
- Freight and cargo terminals
- Integrated ramp services
- Utilities and stormwater drainage facilities
- Intermodal transportation systems
- Pavement management
- Aviation fueling systems
- Central deicing plants for aircraft
- Information technology systems
- Environmental assessments and mitigating design.



Vancouver International Airport,  
Richmond, British Columbia

# Airside

Without a well-planned airside, your airport facility simply cannot function. You can expect safety, security, and the efficient flow of aircraft and airside operations when you're building on a foundation of strong, experienced planning, right from the very beginning.

Ordered and balanced airside systems go hand-in-hand with good airport terminal design. We're innovators in the design of airfield pavements for the A380 and next generation aircraft in North America and worldwide. Our professionals are experienced industry leaders in conceptualizing and designing runways, taxiways, aprons, and gates. By optimizing airside capacity and flexibility, our solutions can make a world of difference to your operations.

Some of our major specialties are:

- Airfield planning
- Runways and taxiways
- Aircraft aprons and gate stands
- Runway-end safety areas
- Airfield ground lighting
- Underground services and utilities
- Airfield drainage
- Navigational aid infrastructure
- Signage and lighting
- Pavement management and rehabilitation.
- Airport tunnels.



# Landside

This essential link connects passengers and cargo to your airport. It's the key to an optimal airport experience. Access roads and bridges alleviate congestion. They incorporate circulation plans for internal vehicles and provide access to and from terminal buildings, parking garages, and adjoining road works.

Our landside capabilities include:

- Transportation planning
- Access and egress airport roadways
- Highways and bridges
- Air-terminal building frontage roads
- Access tunnels
- Pavement and bridge rehabilitation
- Car parking facilities
- Signage and lighting
- Rail, APM links, and intermodal terminals
- Traffic and signal engineering
- Pavement management.



# Aircraft maintenance facilities

Hangar projects are high-tech undertakings. They need competent, strategic planning and careful, thorough design expertise to deliver solid construction and operational functionality.

Today, like never before, these buildings have special needs and functions. They come with highly technical requirements and specifications that may change—perhaps several times—over the course of their physical lives.

We can help you create the maintenance facilities that modern aviation and aerospace depend on in the 21st century. With a strong record of achievement in aircraft hangar design, facility planning, engineering, permitting, and construction, we've carried out assignments for airports, airlines, aircraft manufacturers, maintenance repair organizations, fixed-based operators, and government agencies.

Let us work with you to identify user requirements, assist with decision-making, and evaluate trade-offs. Our integrated approach—not just to the hangar building, but to the flow of materials, traffic, and personnel resources—can save you capital, operating, and maintenance costs.

You'll have a practical engineering solution, one that drives lower life-cycle costs and operational benefits. A solution that ensures high-quality facilities, with the flexibility you need, and the right physical and capital efficiency.

All from a partner with an excellent record of project completion, on budget and on schedule.

JetBlue hangar, JFK, New York





Terminal 1, Toronto Pearson International Airport

# Aircraft ramp services

Today's modern operations need integrated and smart airport systems and technologies for airside and air terminal projects.

In this area especially, the differentiators can add real value. Gate designs enhance multigroup aircraft utilization. Faster aircraft turnarounds become efficiency gains for airlines.

We design sustainable systems, using the latest in passenger boarding-bridge design, aircraft ramp services, and ground support equipment. You realize cost savings; better customer service; enhanced, safer operations; and award-winning results.

Some of our most effective airport systems services are for:

- Passenger boarding bridges
- Aircraft visual docking guidance systems
- Fixed ground power
- Preconditioned air and potable water
- Fueling
- Potable water
- Ramp information display systems.

# Fueling

The timely delivery of the correct, clean, and dry fuel to the aircraft is one of the most important aspects of airport operations. To the typical airline passenger, it's an unheralded part of airport operations. But to those who run a commercial airport or military base, it's the lifeblood of the facility.

Environmental and safety issues are paramount when handling and storing petroleum products for new, replacement, and upgraded jet-fuel and aircraft-fueling systems. You need a partner who understands the issues, intricacies, and dependencies, one who can help you make the right decisions and implement them effectively.

With a broad knowledge of ground-handling equipment, materials, construction techniques, and the fueling requirements of each type of aircraft, our experts deliver practical, cost-

effective, and safe solutions to tackle your toughest challenges.

We're experienced with complete hydrant-system modifications, with controls, instrumentation, truck hauling, and non-hydrant distribution facilities for airports and landside fuel depots. Our integrated approach to fueling systems saves capital, operating, and maintenance costs with sustainable results that translate to your bottom line.

Jet fuel farm



# Deicing

Airplanes and winter weather can be a bad combination. Airside delays due to snow and inclement weather are a major worry for operators and carriers.

We're specialists in aircraft deicing systems, both the traditional aircraft-glycol methods and the proprietary infrared-heating technologies used at various locations in North America.

Our expertise extends to designing supporting infrastructure to treat and dispose of spent glycol in an environmentally safe manner that meets requisite and regulatory standards.

JFK deicing facility, New York



# Freight & cargo

Moving products is big business—on rail, along roads, and in the air. Much of your operation's positive cash flow may rely on the smooth, reliable transportation of goods.

Our experience in a variety of areas brings a wide range of knowledge and lessons learned to projects involving freight and cargo handling and movement.

Our specialists offer full planning and development services for air freight and cargo terminals. These include:

- Cargo aircraft aprons, freight warehouses, and offices
- Apron layout and configuration
- Truck movement areas
- Loading and unloading docks
- Specialized freighter pallet handling
- Facilities for integrated carriers (airmail and parcel couriers)
- System integration
- Security
- Intermodal terminal design
- Airside and landside interface and handling
- Storage and retrieval systems.



FedEx Canada facility

Cargojet maintenance hangar, Hamilton, Ontario





## About Hatch

Whatever our clients envision, our engineers can design and build. With over six decades of business and technical experience in the mining, energy, and infrastructure sectors, we know your business and understand that your challenges are changing rapidly.

We respond quickly with solutions that are smarter, more efficient, and innovative. We draw upon our 9,000 staff with experience in over 150 countries to challenge the status quo and create positive change for our clients, our employees, and the communities we serve.

[hatch.com](http://hatch.com)