



Airport Facilities and Operations Planning



Comprehensive Planning and Advisory Services

Achievable, Cost-Effective, Flexible

L&B has the expertise and the vision to assist airports of all sizes in reaching their objectives through achievable, cost-effective, and flexible plans. We help airport operators maximize their resources for optimal performance of their airspace, airfields, terminals, and roadways. Unifying these four components distinguishes Landrum and Brown's work from others and separates the airports that achieve their missions from those that don't.

Achievable - Airport plans are merely thoughts and dreams unless they are achievable. The coordinated work of L&B's services guarantees that your recommended course of action is tested from all angles. We develop plans built on sound operating and business principles that become physical reality through gaining airline, government, private, and community support.

Cost-Effective - Balancing operational necessities with financial constraints can be challenging, especially in planning airports decades beyond our time. With the proper mix of experience and economic analyses, airport facilities and operations plans can satisfy existing demands, allow for future flexibility, and deliver cost-effective solutions that last.

Flexible - Change may be the only constant in aviation. As a result airports often find themselves with plans ill-suited to the evolving realities of the industry. Our plans help anticipate change and enable our clients to respond to demand on a timely basis without impacting service levels.

Comprehensive Planning and Advisory Services

From the early definition of a development program through its approval, all facets of our involvement are designed to achieve your strategic objectives and to augment your staff capabilities.

Strategic Program Support Services

Working as a virtual staff counsel to airport management and executives, our advisory services provide the technical expertise, leadership, and strategic insight to formulate, define, secure commitments and develop management plans for the most challenging, time-critical, and often controversial airport development requirements. We pride ourselves in our ability, based on your objectives, to put in place the strategic framework for program success: from the early definition of a development program through its approval, financing, design, implementation, and operation.

Master and Strategic Planning

L&B is the world's preeminent airport master-planning firm. We have developed master plans for the world's most successful airports, including 50 of the 100 largest airports in the U.S. The days of the snapshot master plan that considers only a fixed number of variables are behind us. Creating the blueprints for an airport's future starts with a clear understanding of the goals of airport management and local leaders. The planning moves ahead with sound technical analyses, the most modern and relevant technology, frequent and effective communication, and innovative but sensible judgment. We coordinate all work with our financial and environmental planners, so that your master plan accommodates future improvements and provides alternatives for growth.

Airspace/Airfield Simulation

Simulations of airfield and airspace are fundamental to demand/capacity analysis, alternatives evaluation, cost/benefit studies, and construction programming. Since introducing the AIRSIM and GATESIM models in the 1970s, our staff has deep experience with most of the industry's major models including SIMMOD and TAAM. We know how and when to use simulation applications to an airport's best advantage. Our methodologies are innovative and continually evolving. With collaborative decision making concepts, we realistically assess airport performance and delay by modeling air traffic flow control programs and flight cancellations. For comprehensive, multi-dimensional simulations, we provide integrated airspace, airside, landside, terminal, noise, and air quality modeling.

Airport Land Planning and Development

L&B leads multi-disciplinary teams with expertise in site planning, real estate, ground access, and financial planning to develop airport land plans that optimize resources, create value, and preserve neighborhood harmony. Our airport land planners and development experts have the resources—from land use databases, to local planning information, and GIS technology—to capitalize on the market forces operating in and around airports. This enables us to create collateral development alternatives that integrate airport master planning with regional land use, transportation planning, and economic development initiatives.

Air Cargo Planning

Millions of tons of cargo flow through commercial airports. L&B plans the facilities to accommodate, stimulate, or accelerate this activity. We provide a complete spectrum of air cargo planning services, from detailed market assessments, marketing, demand forecasts and facility requirements, to environmental evaluation and facility development, implementation, and finance.

Airport Layout Plan

Our planners use the latest CADD and GIS tools in the preparation of Airport Layout Plan (ALP) sets and to illustrate physical plans, the geographic aspects of financial and demographic data, or manage spatial data used in complex planning, simulation or environmental analysis models. All of our product deliverables include CADD or GIS supported analyses and many deliverables include CADD files that fully meet our client's internal CADD standards, as well as FAA requirements.

Airspace Analysis

Airports can ensure airspace protection through the use of area-wide mapping of TERPS, FAR Part 77, and OEI surfaces. Our expertise in airspace obstruction analysis, flight procedure design, airport and municipal land use planning, environmental analyses, demand/capacity and air traffic operations analyses, airline operations, and ALP development uniquely qualifies us to assist airports in ensuring airspace protection while maintaining the desired balance with surrounding development.

Ground Access Planning

Before passengers can get into the air, they must get to the airport. Curb front congestion, parking convenience, rental car compatibility, access road efficiency, and on-and off-airport transit must be carefully studied and integrated. We provide flexible, client-specific ground access plans as part of long-term projects and short-term solutions. Our ground access plans can increase passenger convenience, improve on-site traffic flow, and embrace plans for air quality and noise abatement.

Construction/Operations Planning

Expanding, upgrading, or renovating airport facilities should never compromise operations, safety, or revenue - no matter how temporary. We help airport operators coordinate complex construction programs to maintain safe, efficient, and uninterrupted airfield and landside operations. We coordinate expansion programs with commercial development using invaluable program control tools: simulation modeling, analytical techniques, and cost/schedule/quality-control systems. Our positive working relationships with the airlines, airports, tenants, and the FAA help create meaningful solutions for reducing aircraft delays and mitigating the impacts of construction and maintenance.

Airport Information Systems / Technology Applications

Verify your airfield repairs, access your electronic logs, or request a customized weather report for your runway configuration—we have developed a range of technology-based solutions that upgrade operational efficiency and maintain safety. Our database management tools focus on airport operations and maintenance requirements. Our Airfield Inspection and Repair database promotes preventive airfield maintenance programs, reports discrepancies in documented repairs, and quickly verifies compliance for the FAA's Part 139, Certification and Operation. Our information systems automate traditionally manual tasks, with video-based passenger counting technology, automated operational logs, and real-time databases for construction field work.

Multimedia Imaging

Effective, persuasive communication gains private and public support for airport plans, especially through three-dimensional visualizations, multimedia presentations, and video productions. High-resolution animations take audiences on an interior tour of proposed terminals or a fly-over of new or imagined airports. Chroma-key video superimposes moving images of real people and objects onto illustrated three dimensional scenes. High-tech communication methodologies create simple, understandable messages for press releases, public presentations, and private project briefings.

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