

**Eric Bill, Chief Economist** eric.bill@autocase.com 613.323.3956

# **Aviation Economics**

Autocase Economic Advisory supports the aviation sector by quantifying and valuing terminal enhancements, sustainable investments in airport design, energy and water efficiencies, among other aviation infrastructure investments. Autocase Economic Advisory are the economic consulting stream of Autocase. Our team of experienced consultants have conducted economic analyses on over \$100 billion worth of projects and successful grant applications, our expertise in aviation is concentrated in:

#### **Economic Analyses**

- Capital Investment Planning Valuation and Alternative Energy Prioritization
- Carbon Life Cycle Analysis
- Cross Asset Strategic Planning
- Cost Benefit Analysis (CBA)
- · Econometric Modeling
- Economic Impact Analysis (EIA)
- Environmental, Social & Governance (ESG) Utility Master Plan Alternatives Analysis
- Financial Life Cycle Cost Analysis
- Geospatial (GIS) Impact Evaluation
- Grant Application Support
- Life Cycle Cost Analysis (LCCA)
- Multicriteria Decision Analysis (MCDA)
- Real Estate Economic Analysis
- Regulatory Economic Analysis
- Resilience Analysis with Climate Change
- Risk Analysis

#### **Sector Knowledge**

- Cargo Supply Chains
- Climate Adaptation & Hazard Mitigation
- LEED, WELL, Fitwel, Envision Certifications
- Terminal and Fleet Electrification
- Terminal Decarbonization & Net Zero Energy
- Terminal Waste Diversion

#### **Valuation Methods**

- Ecosystem Services & Natural Capital
- Input-Output Multipliers
- Macroeconomic Indicators
- Probabilistic Risk Analysis/Monte Carlo
- Social Cost of Carbon and Air Pollution



### Quantify

- Life Cycle Impacts
- Hazards Mitigated
- Operational Reliability & Redundancy
- Optimal Capital Planning
- Passenger Benefits



#### Value

- Ecosystem Service Value
- Return on Investment
- Life Cycle Costs
- Noise Externalities
- Water Conservation and Quality



#### Communicate

- Case Studies
- KPIs
- Literature Reviews
- Methodology Reports
- Technical Reports
- Stakeholder Seminars



# Trusted by Industry



Engaged with Los Angeles World Airports to conduct a probabilistic Financial Analysis and TBL-CBA. The analysis evaluated the triple bottom line life cycle costs, social, and environmental benefits relating to 17 alternative scenarios across six various utility-types (i.e., domestic water, fire water, sewage, electricity, chilled and heated water capacity, and chilled and heated water distribution) to provide recommendations for project prioritization.



San Francisco International Airport (SFO) is committed to sustainability practices and operations, based on informed, responsible investment. To this end, SFO now requires a triple bottom line cost benefit analysis (TBL-CBA) to support investment decisions. Autocase Economic Advisory conducted economic analyses across multiple adaptation and sustainability investments at SFO including installation of electric vehicle (EV) chargers; high-performance design attributes of terminal redevelopments; zero waste glove recycling program; electric CUP; and Net Zero Energy buildings.



Autocase Economic Advisory supports Hartsfield-Jackson Atlanta International Airport (ATL) with ongoing design decision and capital planning evaluation support. We have evaluated the ATL's decision to transition its existing fleet of shuttle buses toward alternative fuels. This long-term strategic move generates a suite of financial, social and environmental impacts. This analysis enabled ATL to quantify the tradeoffs between financial expenditures and savings such as bus costs with broader environmental benefits such as reduced carbon and air pollutants.



Conducted cost benefit analysis of terminal redevelopment and updates design and planning project team on the new terminal building. One aspect of the efforts related to providing analysis for LEED credits across a broad variety of investments such as optimize energy performance, indoor environmental quality and water efficiency, as well a cool roof analysis supporting an Envision Platinum certification.

## Visit our website for more project experience and case studies.

## **About Us**

Our team of professional economists conduct rigorous, evidence-based economic analyses of the financial, social, and environmental costs and benefits of sustainable and resilient investments in the infrastructure, real estate, public policy and regulatory world.

Our economic analyses help you prioritize investments, understand risks, develop strategic plans, report ESG metrics, secure funding, communicate with stakeholders, support climate equity, and understand the holistic trade-offs of your investments and policies. We provide objective, third-party, data-driven quantitative insights to support you.

