EDUCATION

Ph.D. in Transportation Science (Transportation Systems Economics), University of California, Irvine, 2014 B.A. in Physics (Distinguished Scientist Scholar), Bard College, 2009 Certificate, Systems Engineering, Loyola Marymount University, 2010

EXPERIENCE

International Air Transport Association, Geneva, Switzerland, 2022-Present Head of Industry Analysis

- Manage and conduct economic research to anticipate trends and developments in the air transport industry.
- Oversee air passenger, cargo and airline financial performance forecasts.

Steer Group, Los Angeles, CA, 2021-2022

Associate, Economics Market Leader (North America)

- Led the strategic growth and business development of Steer's economics market in North America.
- Supervised and provided technical support to the aviation, rail, and toll road markets on projects involving economic analysis, econometric modeling, and traffic and revenue forecasting.

Airports Council International - North America, 2020-2022

Associate Representative, Finance Committee Steering Group

- Collaborated with committee airport members and industry professionals to provide industry intelligence on issues impacting airports in the United States and Canada.
- Teamed with steering group members in working groups and taskforces to develop and respond to policy and regulatory proposals.

Unison Consulting, Laguna Hills, CA, 2016-2021

Director, Airport Finance and Economics Practice

- Supported more than 25 hub airports in the U.S. with aviation activity forecast development, strategic planning and economic analyses for various airport improvement programs.
- Prepared bond feasibility studies supporting bond issuances to finance airport capital projects, including consolidated rental car facilities, parking structures, and terminals.

California Air Resources Board - State of California, Sacramento, CA, 2014-2016

Transportation Economist & Policy Analyst, Office of Economic Policy & Analysis

- Following CEQA and California Department of Finance requirements, prepared standardized regulatory impact assessments (SRIA) to comprehensively assess the economic impacts of proposed major regulations.
- Provided research and technical support to board staff in their efforts to understand project costs, business behavior and competition, and the effectiveness of incentive programs.

Project Highlights

Aviation & Ground Access Demand Forecasts

Planning and Strategy

- Ontario Int'l (ONT)
- Philadelphia Int'l (PHL)
- Phoenix-Mesa Gateway (IWA)
- Reno-Tahoe Int'l (RNO)
- · San Antonio Int'l (SAT)
- St. Louis Lambert Int'l (STL)
- Toronto Pearson Int'l (YYZ)
- Yuma Int'l (NYL)

Bond Financial Feasibility

- Buffalo Niagara Int'l (BUF)
- Dallas Love Field (DAL)
- El Paso Int'l (El Paso)
- Fresno Yosemite Int'l (FAT)
- General Mitchel Int'l (MKE)
- San Diego Int'l (SAN)
- St. Louis Lambert Int'l (STL)

Consolidated Rental Car/Parking Facility

- John Glenn Columbus Int'l (CMH)
- Louis Armstrong New Orleans Int'l (MSY)
- Miami Int'l (MIA)
- Newark Liberty Int'l (EWR) (P3)
- Sonoma County (STS)

Benefit-Cost Analysis

- Pittsburgh-Butler Regional (BDL)
- Valley Int'l (HRL)

Economic Impact Analysis

- Austin-Bergstrom Int'l (AUS)
- Connecticut Airport Authority
- · Long Beach (LGB)
- Port of Portland, Oregon

Toll Roads Traffic & Revenue Forecasts

- Chesapeake Transportation System
- Louisiana Department of Transportation & Development (P3)
- Virginia Department of Transportation Toll Road User Benefit Study (P3)

Sustainable Financing Tools & Strategies

• California Air Resources Board

Paulos Ashebir Lakew

University of California, Irvine, Irvine, CA 2010-2014

Graduate Research Assistant and Teaching Assistant

- Received graduate award from the Airport Cooperative Research Program (ACRP A11-04) for research on the socioeconomic determinants of airport traffic.
- Prepared econometric analysis for expert witness testimony on air travel demand at Ontario Int'l Airport.
- Developed aviation activity components of UC Irvine's California Statewide Freight Forecasting Model, a project funded by the California Department of Transportation (Caltrans).
- Served as a teaching assistant for undergraduate courses in probability and statistics, industrial organization, and social science research.

Los Angeles World Airports, Los Angeles International Airport (LAX), Los Angeles, CA, 2010 Gateways Internship Program

- Assisted contract administrators in Airports Development Division with airport development programs and contracts for Airside, Landside, Terminal, Central Utility, and Infrastructure elements.
- Performed tasks instrumental to implementing airport noise mitigation programs in Environmental Services
 Division.

SUMMARY OF PROJECT WORK

Transportation Demand Analysis & Forecast Development

- Developed investment-grade forecasts for transportation demand as inputs to master plans, financial feasibility studies, and various financial and planning models:
 - Aviation activity passenger and air cargo traffic, commercial operations and general aviation operations
 - Rental car demand rental contracts, transaction days, and contract duration
 - Parking demand parking transactions, parking duration, and parking occupancy
 - Airport ground access mode choice
 - Highway and toll road traffic

Financial Feasibility Study

Completed financial feasibility studies supporting bond issues raising billions of capital funding for airport
development projects, including special facilities like consolidated rental car facilities, parking structures, and
terminals.

Benefit-Cost Analysis (BCA)

• Performed research and data analysis for BCAs supporting toll road rate studies and airport applications for federal grants under the Airport Improvement Program for airfield and terminal development projects.

Economic Impact Study

- Performed research and data analysis for economic impact studies that assess the economic contributions of transportation infrastructures in terms of job creation, earnings, value-added, and output.
- Evaluated the direct costs of regulatory actions on the California economy and used computable general equilibrium and input-output models to estimate indirect and induced impacts of regulations.

Environmental Policy Development

- Developed financial and market-based incentive models to support air quality and climate initiatives.
- Worked with industry stakeholders and regional government agencies to implement programs that include regulations, incentives, and policies designed to help move regional and statewide freight transport systems to sustainable system that reduces adverse impacts of freight operations on local communities.

AFFILIATIONS

- ACI-NA Finance Committee Steering Group
- American Association of Airport Executives (AAAE) / Airport Consultants Council (ACC)
- Airport Cooperative Research Program (ACRP)
- Transportation Research Board, Standing Committee on Aviation Economics and Forecasting

PEER-REVIEWED PUBLICATIONS

- Causes and Effects of Air Traffic Delays, Evidence from Aggregated Data, Co-author: Volodymyr Bilotkach, Journal of Transport, Economics and Policy, 56(2), 103-128 (2022)
- Airport Delays and Metropolitan Employment, Co-author: Volodymyr Bilotkach, Journal of Regional Science, 58(2), 424-450 (2018)
- Airport Traffic and Metropolitan Economies: Determinants of Passenger and Cargo Traffic, Transportation Research Record: Journal of the Transportation Research Board, 2471, 58-72 (2015)
- Determinants of Air Cargo Traffic in California, Co-author: Andre Tok, Transportation Research Part A, 80, 134-150 (2015)
- Economies of traffic density and scale in the Integrated Air Cargo Industry: The Cost Structures of FedEx Express and UPS Airlines, Journal of Air Transport Management, 35C, 29-38 (2014)
- On Sources of Market Power in the Airline Industry: Panel Data Evidence from the US Airports,
 Co-author: Volodymyr Bilotkach, Transportation Research Part A, 59, 288-305 (2014)

ACADEMIC SERVICE

• Journal Referee: Transportation Research Part E, Part A; Transportation Research Record: Journal of the Transportation Research Board; Transportation; International Journal of Aviation Management; Journal of Air Transport Management; Research in Transportation Economics; Transport Policy

PRESENTATIONS

Master Plan Aviation Activity Forecast Presentations to Airports and Stakeholders

- Phoenix-Gateway Airport (IWA) Phoenix, AZ, July 2018
- Clarksburg/North Central West Virginia Airport (CKB) Bridgeport, WV, March 2018
- Reno-Tahoe International Airport (RNO) Reno, NV, March 2017

Industry Conference Presentations

- "Forecasting Amid COVID-19 Shock and Uncertainty", AAAE-Unison Capital Improvement Program (CIP)
 Planning and Finance Workshop Virtual, December 2020
- "Aviation Activity Forecasting: Impact of the 737 MAX Grounding", AAAE-Unison Capital Improvement Program (CIP) Planning and Finance Workshop - Austin, TX, December 2019
- "Airline Delays and Market Power", INFORMS Annual Meeting Seattle, WA, October 2019
- "TNC Growth and Impacts on Rental Car Demand at US Airports", AAAE-ACC Airport Planning and Construction Symposium Denver, CO, February 2019
- "Transportation Network Company (TNC) Adoption: Impacts on the Airport Business Model", AAAE-Unison CIP Planning and Finance Workshop - San Diego, CA, December 2017

Academic Conference Presentations

- "Airline Delays and Market Power", INFORMS Annual Meeting Seattle, WA, October 2019
- "Airport Traffic and Metropolitan Economies: Determinants of Passenger and Cargo Traffic" (ACRP 11-04), Transportation Research Board 94th Annual Meeting Washington, D.C., January 2015
- "Aircraft Age and Airfares: A new look at the impact of service quality on ticket prices", University of California Transportation Center Conference, Cal Poly Pomona Pomona, CA, April 2014

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- "Determinants of Air Cargo Traffic in California", Transportation Research Board 93rd Annual Meeting Washington, D.C., January 2014
- "On Sources of Market Power in the Airline Industry: Panel Data Evidence from US Airports", University of California Transportation Center Conference, UC Davis Davis, CA, April 2012