Leigh | Fisher

SUSAN T. TAM
Senior Consultant

CORE STRENGTHS	
• Passenger terminal and parking facilities planning • Federal Inspection Services facility planning	• Master planning • Airfield planning • Apron/aircraft parking layouts

SELECTED CLIENT EXPERIENCE	
• Austin • Brazil • Colorado Springs • Des Moines • Fort Lauderdale-Hollywood	• Houston Intercontinental • Los Angeles • San Diego • San Francisco • Transportation Security Administration (TSA)

SELECTED EXPERIENCE

Ms. Tam specializes in airport facilities planning and master planning, including the planning of passenger terminal facilities; Federal Inspection Services (FIS) facilities; security screening checkpoints; airfield, apron, and aircraft parking layouts; and parking structures. She has served as lead terminal planner and key technical staff for various master plans and terminal area master plans in the United States and abroad. Ms. Tam also played key roles in several terminal optimization projects, generating plan alternatives to maximize existing terminal area utilization while optimizing major terminal capital expenditures. Ms. Tam is vetted to work on TSA projects and maintains current knowledge of the evolving security checkpoint development. She is highly proficient with AutoCAD and PathPlanner, an AutoCAD extension that simulates aircraft and ground service equipment movement.

Ms. Tam is serving as lead terminal planner for the Master Plan for George Bush Intercontinental Airport, and is developing conceptual plans to provide alternative solutions to the capacity constrained terminal core. In collaboration with ground transportation experts, she generated terminal alternatives within the core to address roadway congestion issues which also met projected gate and passenger demands. In addition, Ms. Tam managed a team of subconsultants to define the recommended development plan and a series of phased development plans corresponding to three forecast planning periods at the 25, 33, and 40 million passenger enplanement levels.

LeighFisher served as the sell side advisor to the Brazilian government for the sale of Rio de Janeiro–Galeão and Tancredo Neves (Confins) international airports. Ms. Tam was part of the key technical team providing planning support for two master plan studies. She developed high-level concept plans for new passenger terminals and parking structures to meet anticipated passenger demand, enhance passenger flow, provide increased revenue generation opportunities, and integrate with the existing terminal complex. Both master plans were completed within four months in parallel with significant forecasting and capital expenditure (CapEx) analysis efforts.

In 2012, Ms. Tam completed the terminal master plan facility requirements analysis for San Diego International Airport. The analysis was performed to provide general guidance on terminal facility sizing at a master plan level, based on annual enplanement and peak hour passenger activity levels. Ms. Tam tailored a requirements model using industry standard assumptions, benchmarking studies, and recommendations outlined in Airport Cooperative Research Program (ACRP) Report 25. Results of the facility requirements are serving as the basis for future development of the terminal facilities.

Having completed terminal optimization studies at Albuquerque International Sunport, San Francisco International Airport Terminal 3, and Fort Lauderdale-Hollywood International Airport Terminals 1, 2, and 3; Ms. Tam is experienced with developing plan alternatives to reconfigure primary passenger processing areas within the existing terminal facilities while redefining terminal space utilization. Specific technologies were recommended to increase processing capacity within a constrained physical envelope. Ms. Tam has also developed an airfield geometric analysis for Fort Lauderdale-Hollywood International Airport. She generated a profile analysis, plan alternatives, and phasing diagrams for the new Runway 10R-28L extension project, which required an understanding of runway/taxiway clearances, Approach Lighting Systems (ALS), and Instrument Landing Systems (ILS).

At Los Angeles International Airport, Ms. Tam used PathPlanner to perform an inbound baggage tug route analysis to evaluate a spatially challenged third-party design layout for the Tom Bradley International Terminal (TBIT) West

SELECTED EXPERIENCE *(continued)*

Expansion. With a thorough assessment of the airport's existing tug (cart/dolly) equipment, an assumed capacity at each inbound carousel, and PathPlanner's simulated output, Ms. Tam identified areas of potential conflict and proposed remedies to the third-party design. This analysis helped both the client and the baggage system designer visualize baggage tractor movements and operational challenges at the inbound baggage drop-off area.

Ms. Tam participated in the Electronic Baggage Screening Program for the Transportation Security Administration. She provided assistance in concept development for the dual-use security screening checkpoint study and implemented preferred concepts on selected airport case studies. Ms. Tam analyzed spatial feasibilities of these security checkpoint modules at each terminal facility and developed alternatives to resolve spatial challenges.

At Des Moines International Airport, Ms. Tam was the technical lead providing oversight on the development of facility requirements, land-use and terminal concept alternatives through a workshop based setting, collaborating with the Advisory Committee, airport staff, stakeholders, and the consultant team. Ms. Tam was instrumental in the generation of two shortlisted terminal alternatives that propose either a replacement terminal or a greenfield terminal that relocates the passenger facility to the south quadrant of the airport. Ms. Tam also developed high-level phasing plans with cost estimating support by a small business partner. Ms. Tam is also the terminal technical lead for the terminal expansion project at Austin-Bergstrom International Airport and the Master Plan for Harrisburg International Airport, developing terminal program requirements including a space program for a mini-FIS facility. She generated multiple FIS alternatives that reallocate underutilized terminal functions to optimize space and reduce construction costs to support a more feasible development.

EDUCATION

Bachelor of Architecture, California Polytechnic State University, San Luis Obispo.

PROFESSIONAL REGISTRATION

Registered Architect, California.
NCARB Candidate.