SPAN
SP Alliance & Network

Wed-Binar

SPAN X ABE
International Series

Phil Lazarus

Digital Delivery Leader, O'Hare 21

phil.lazarus@jacobs.com
https://www.linkedin.com/in/phil-lazarus/

Jacobs

Phil Lazarus | Digital Delivery Leader, O'Hare 21

USC Architecture in 1997 (Licensed 2001) | MBA in 2006

23 year career in 3d-based design and digital engineering

Digital Leadership roles across Asia since 2006

Architects | Engineers | Builders | Property

Marina Bay Sands, National Stadium, Tanjong Pagar Centre, Paya Lebar Quarter

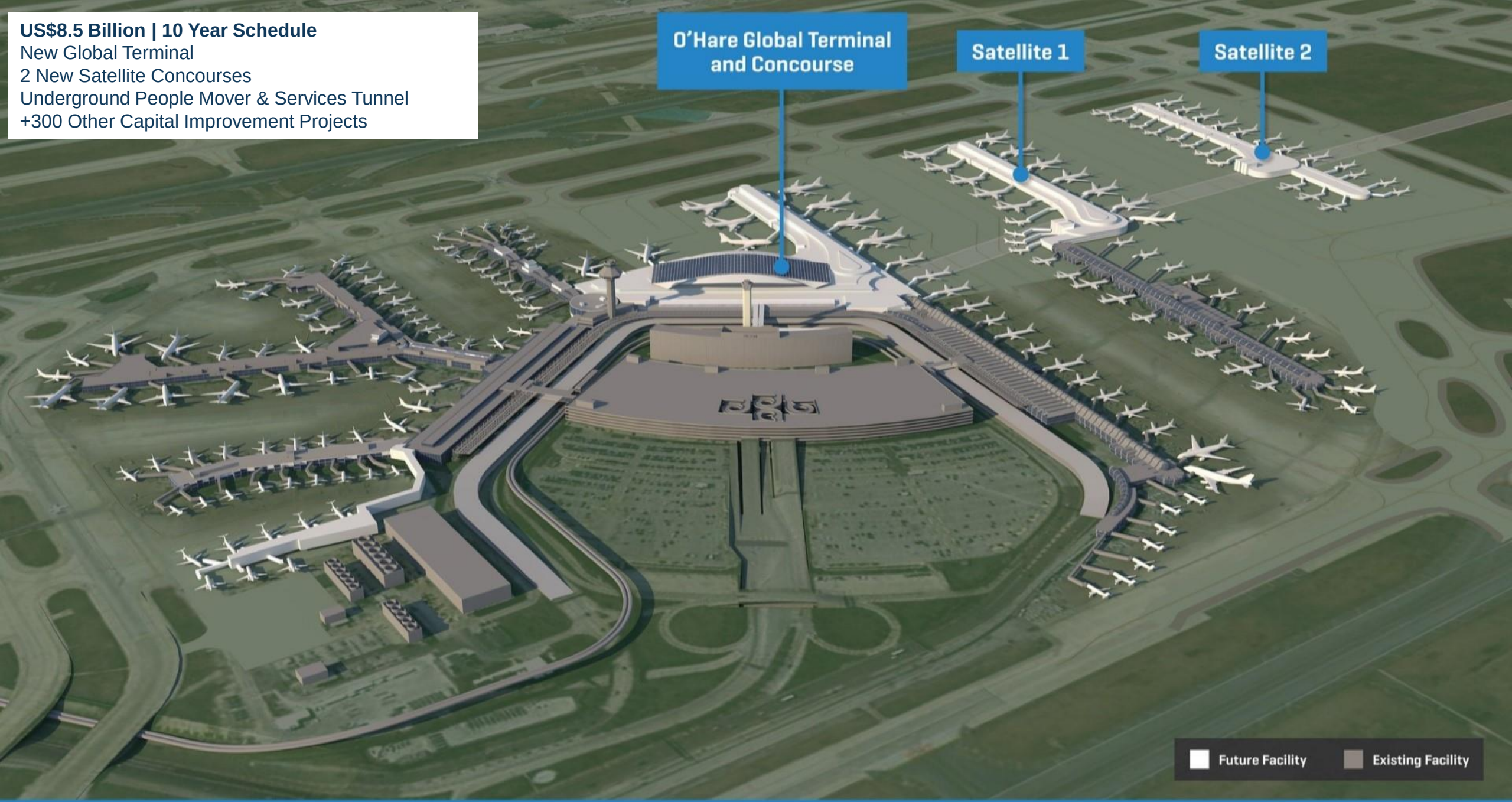
Reviewer for Singapore National BIM Standards

Lecturer with Singapore BCA Academy (2010-2018)

Returned to America in December 2019 to lead digital implementation on O'Hare21 Program Management Team

Jacobs phil.lazarus@jacobs.com

US$8.5 Billion | 10 Year Schedule
New Global Terminal
2 New Satellite Concourses
Underground People Mover & Services Tunnel
+300 Other Capital Improvement Projects



O'HARE 21 TERMINAL AREA PLAN PHASE I

Client

CDA
CHICAGO DEPARTMENT OF AVIATION

Program Management

CONNECT CHICAGO ALLIANCE

Lead Design Consultants

GLOBAL TERMINAL + CONCOURSE	TUNNEL, CIVIL, UTILITY	SATELLITE CONCOURSES
StudiORD	HNTB	SOM

Construction Managers

CMR 1	CMR 2	CMR 3
Turner PASCHEN AVIATION PARTNERS	Austin POWER CONSTRUCTION	AECOM HUNT CLAYCO

TAP
Terminal Area Plan

O'Hare Global Terminal & Concourse
Satellite Concourse 1 & 2
Tunnel Connection

CIP
Capital Improvement Plan

Civil & Utility works required to enable TAP and enhance campus operations

BASEMODELING

Conversion of 2D facility & airfield information to BIM (Revit & Civil 3D)

Digital Governance to set deliverable & performance expectations to consultant & contractor teams

BIM 360 Project Hub to host model data for all TAP & CIP projects

GIS implementation by **Chicago Department of Aviation** for airport operations

CHALLENGES

Consistency in Consultant and Contractor Performance.

Information management at the scale of this program.

Effective collaboration between designers and builders.

Application of BIM across all the projects and program.

Resources available for policing compliance and quality.

DIGITAL GOVERNANCE

Comprehensive data standards are the key to consistent deliverable quality and lay the groundwork for a Digital Twin.

1	**Owner s Information Requirements**	Outline CDA expectations on estate-wide matters related to information management and digital delivery.
2	**CDA Nomenclature Standard**	Outline a consistent approach to the naming of CDA project documents, buildings, spaces, and assets.
3	**Building Information Modeling Requirements**	Outline specific technical modeling requirements for CDA Projects.
4	**CADD Standards**	Outline specific technical CADD requirements for CDA Projects.
5	**Project Documentation Guide Template**	To be completed by design team to record the specific Documentation plan for a CDA project.
6	**Project BIM Execution Plan Template**	To be completed by design team to record the specific delivery characteristics of BIM delivery for a CDA project.
7	**File Storage & Sharing Guide**	Provide guidance for file sharing and storage in CDA's ProjectWise and BIM 360 environments.
8	**Basemap & Basemodel Guide**	Provide standards and methodology for use of O'Hare Basemap and Basemodel data.
9	**Data Collection & Survey Standards**	Provide standards and methodology for use in field survey and data collection.

Software and sharing requirements in place

- Autodesk Revit, Civil 3D, BIM 360

Deliverables expectations outlined

- Facilitate real-time sharing among the design teams
- Ongoing model review and progress reporting
- Design to construction handover process outlined
- Asset data requirements for operational integration

Nomenclature, documentation, and data collection standards

- Drive consistency throughout all CDA works

Must be incorporated with department-wide contract requirements and procurement methods.