Charting a True Course at Sacramento International Airport

26th Annual LCI Congress

Track: Cultivating Waves of Change – Scaling Continuous Improvement

October 24, 2024



DWL ARCHITECTS+

Team Introductions











Sandy Kukla President DWL Architects + Planners, Inc. Kyle
Frandsen
Vice
President
Balfour Beatty

Anvesh
Motadoo
Sr. Project
Manager
Balfour Beatty

Maletic
Vice
President
Balfour Beatty

Justin

Chen

Deputy
Director –
Planning &
Development
Sacramento
County
Department of
Airports

Agenda



SMForward

- 25 Min

- Program Overview
- Design Inspiration: SMF Pedestrian Walkway
- Collaboration + **Delivering Results**



SmartStart®

- 10 Min



Q&A- 7 Min

- What is SmartStart®
- Team Charters
- Scaling SmartStart®



SMForward

Overview of SMForward Program & Pedestrian Walkway Project

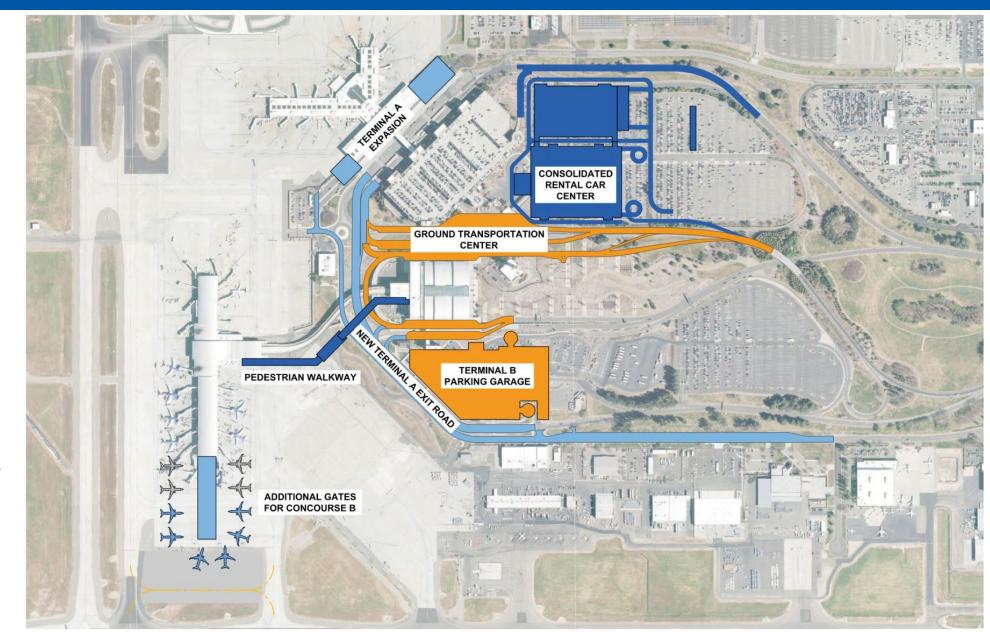




Sacramento County Department of Airports



SMForward - \$1.3 Billion Capacity Enhancement Program







SMForward - \$1.3 Billion Capacity Enhancement Program







Terminal B Parking Garage



Budget \$390M Delivery Method

Design-Build (DB)

Status

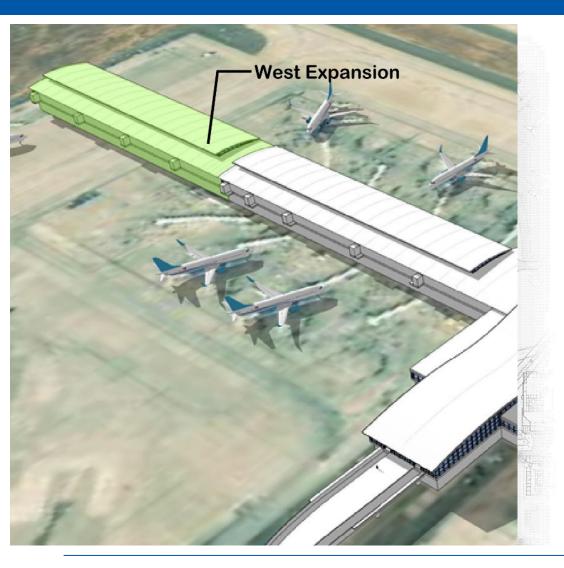
- 5,500 parking stalls
- Parking Guidance System
- PV Ready
- EV Chargers
- Design-Build Entity: Otto Construction

Construction Begins
Q4 2024

Estimated
Completion
Q4 2026



Concourse B Expansion



Budget \$250M Delivery Method
CMAR

Status

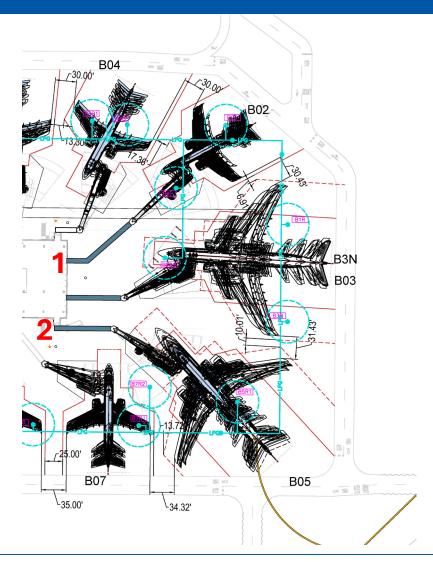
- Project Programming: Underway
- Procurement for CMAR: RFQ to be released in Q4 2024
- NEPA Environmental Assessment (EA): Underway
- Contractor: TBD
- Design Consultant: DWL Architects
- Will pursue BIL funding

Construction Begins
Q3 2025

Estimated
Completion
Q1 2028



Near-Term Augmentation Gates (Enabling Project)



Budget \$16.5M

Delivery Method

Design – Job Order Contracting & Equipment Procurement

Status

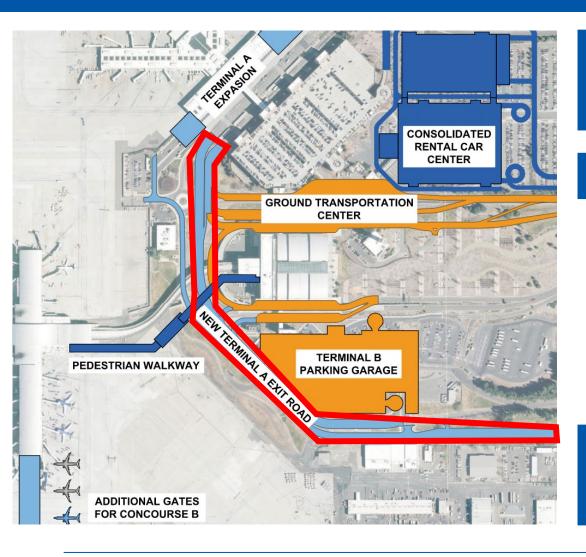
- Final Design: Complete
- Procurement for Passenger Boarding Bridge: Underway
- Contractor: Building Modification North Star Construction (JOC)
- Design Consultants: RS&H & Kimley-Horn

Construction Begins
Q3 2024

Estimated
Completion
Q4 2025



Terminal A Exit Roadway



Budget \$15M Delivery Method

Design-Bid-Build

Status

Final Design: Underway

Contractor: TBD

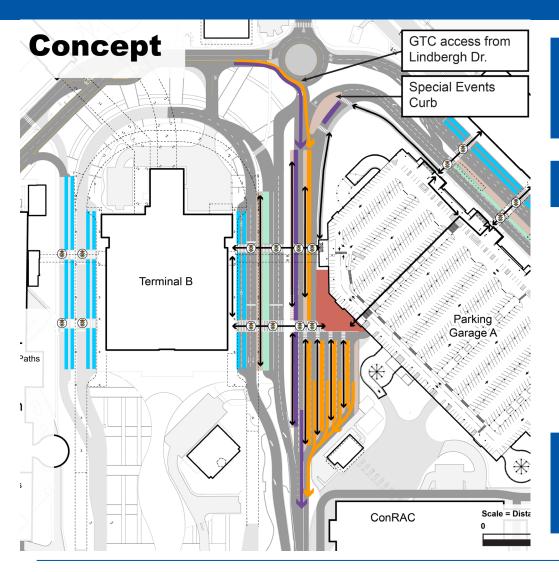
Design Consultant: ARUP

Construction Begins
Q2 2025

Estimated
Completion
Q3 2026



Consolidated Ground Transportation Center (GTC)



Budget \$50M Delivery Method

Design-Bid-Build

Status

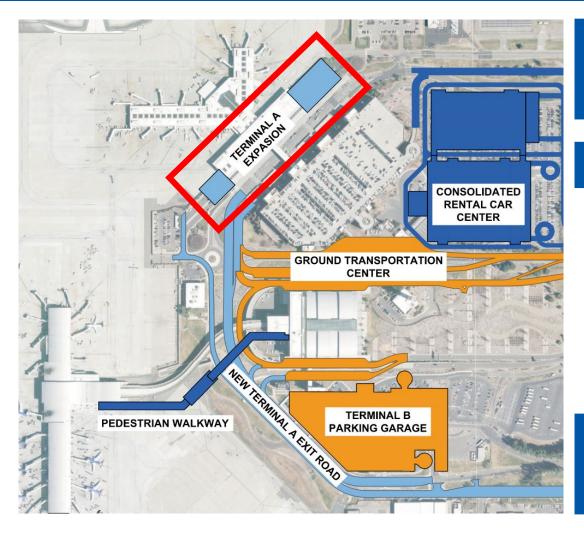
- Design Development: Underway
- Contractor: TBD
- Design Consultant: ARUP

Construction Begins
Q3 2026

Estimated
Completion
Q3 2027



Terminal A Expansion



Budget \$50M Delivery Method
CMAR

Status

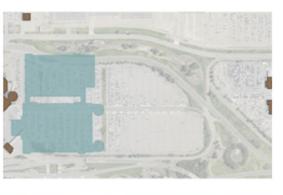
- Existing Conditions Assessment: Complete
 - Evaluating BHS, utilities, ticketing lobby, bag claim, etc.
- Contractor: TBD
- Design Consultant: DWL Architects

Construction Begins
TBD

Estimated
Completion



Consolidated Rental Car Facility (ConRAC)









Budget \$390M Delivery Method
TBD

Status

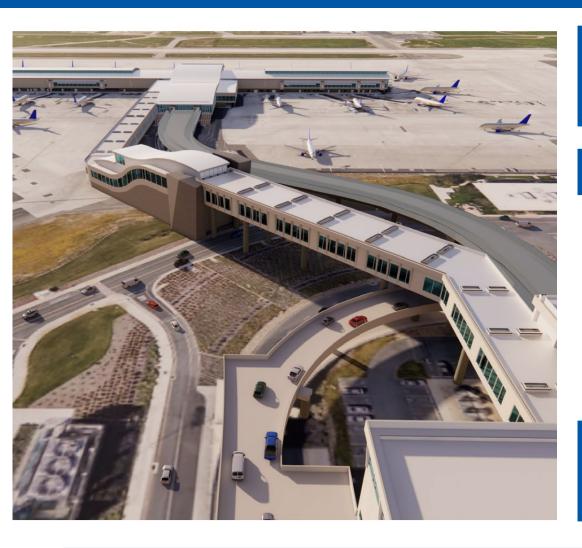
- Delivery model assessment and determination: Underway
- Contractor: TBD
- Design Consultant: TBD

Construction Begins TBD

Estimated
Completion



Terminal - Concourse B Pedestrian Walkway



Budget \$140M Delivery Method
Construction Manager at Risk
(CMAR)

Status

- 100% CD: Being finalized
- Multiple PGMPs have been issued; \$60M worth of remaining work
- Value Engineering: Reduction of \$6.7M in ROM cost (Feb 2024)
- Contractor: Balfour Beatty
- Design Consultant: DWL Architects
- Bidding opportunities & PGMPs are managed by CMAR
- Funded by BIL grants and TIFIA Loan

Construction Begins
September 2024

Estimated
Completion
Q1 2026



Additional Information Related to SMForward

- → Executive Program Manager: Answer Advisory
- → Construction Management and Inspection Services: Parsons/Vanir
- → CWTA/PLA and OCIP: All SMForward Projects (except for the Pedestrian Walkway Project) is subject to OCIP and CWTA/PLA;
- → Pedestrian Walkway Project is under its own CCIP
- > Additional info: www.smforward.com





Department of Airports Capital Improvement Program Overview

SMForward Plan of Finance (as of 7/16/2024)						
Project	BIL	CFC	PFC	TIFIA	Airport Funds	Total
Pedestrian Walkway	33,043,639	-	7,103,204	38,834,501	61,018,656	140,000,000
Concourse B Expansion	41,845,758	-	22,000,000	53,625,000	132,529,242	250,000,000
Terminal A Expansion	-	-	-	12,250,000	37,750,000	50,000,000
Terminal A Exit Roadway	-	-	-	-	15,000,000	15,000,000
Ground Transportation Center	-	-	-	-	50,000,000	50,000,000
Terminal B Garage	-	-	-	-	390,000,000	390,000,000
ConRAC	-	390,000,000	-	-	-	390,000,000
Total	74,889,397	390,000,000	29,103,204	104,709,501	686,297,898	1,285,000,000

Sources and Uses are Preliminary and are likely to change as projects and funding sources are refined



[&]quot;BIL" = "Bipartisan Infrastructure Law - Including awarded discretionary component and forecasted entitlement component

[&]quot;PFC" = "Passenger Facility Charge"

[&]quot;CFC" = "Customer Facility Charge"

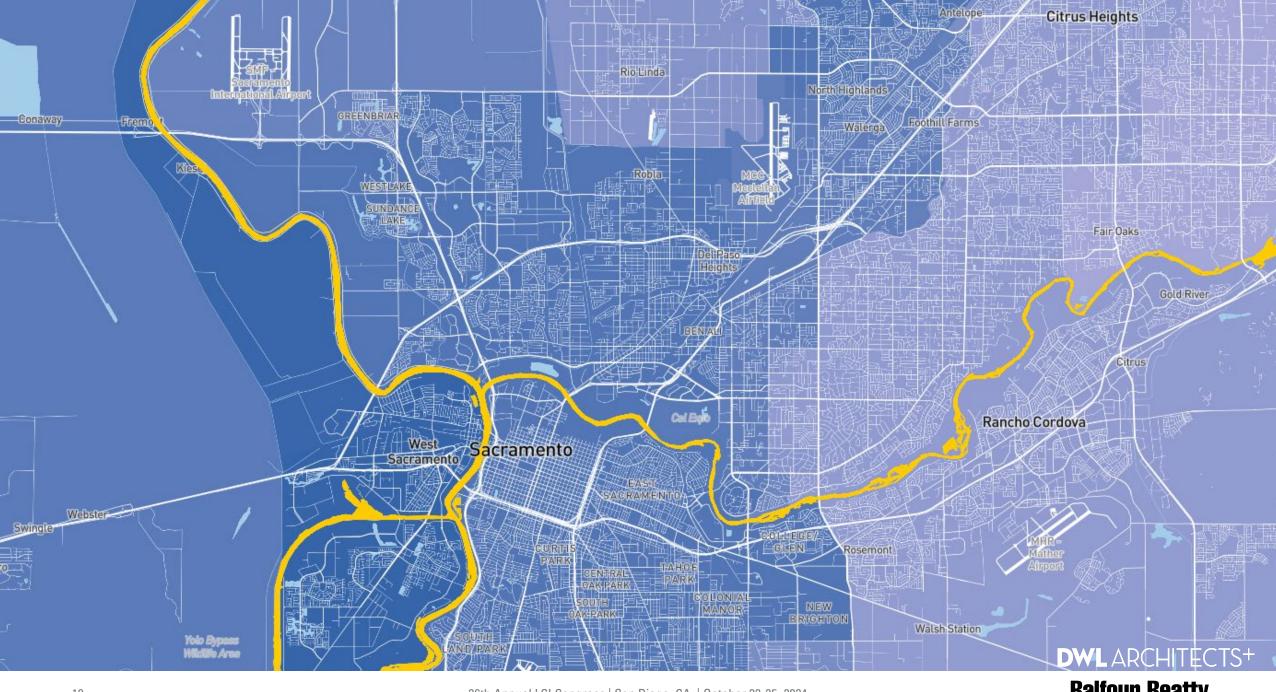
[&]quot;TIFIA" = "Transportation Finance Innovation Act" - Low-interest loans from the federal government for eligible projects

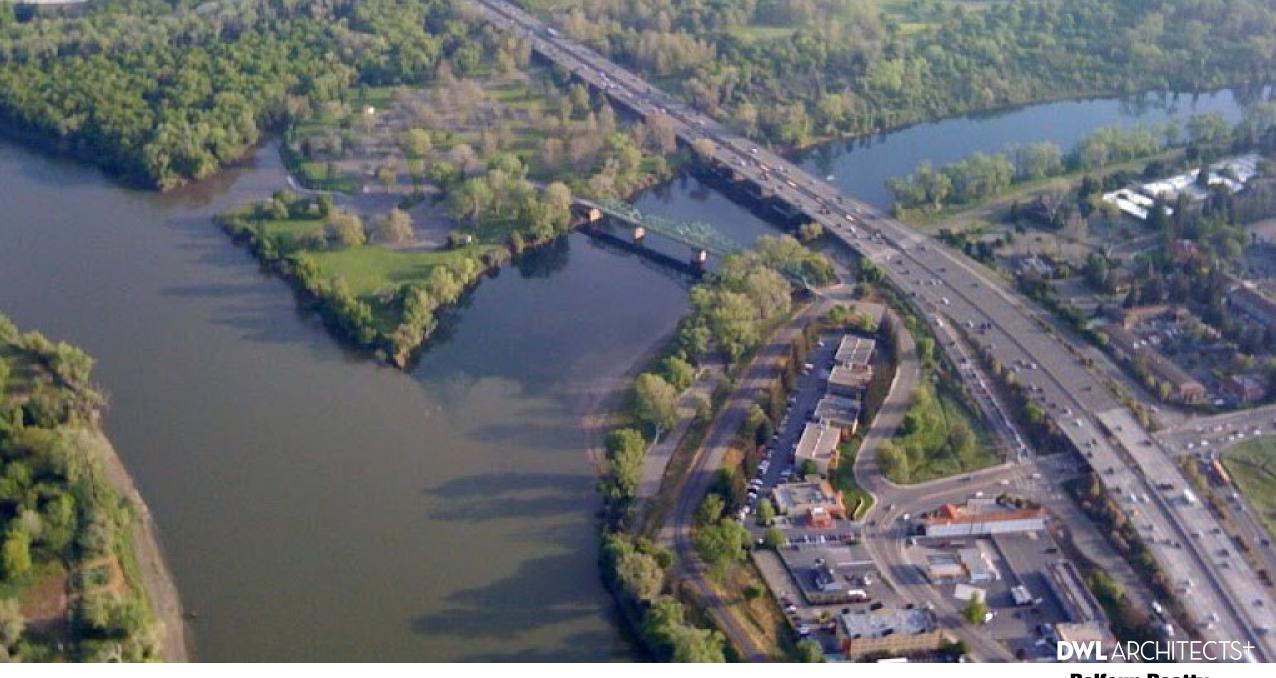
[&]quot;GARB" = "General Airport Revenue Bonds"

[&]quot;Airport Funds" consist of a combination of revenue bonds and airport cash in proportions to be determined when financed

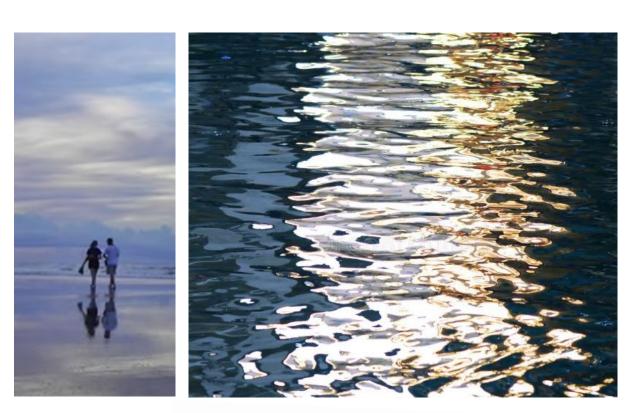
Design Inspiration

SMF Pedestrian Walkway Project



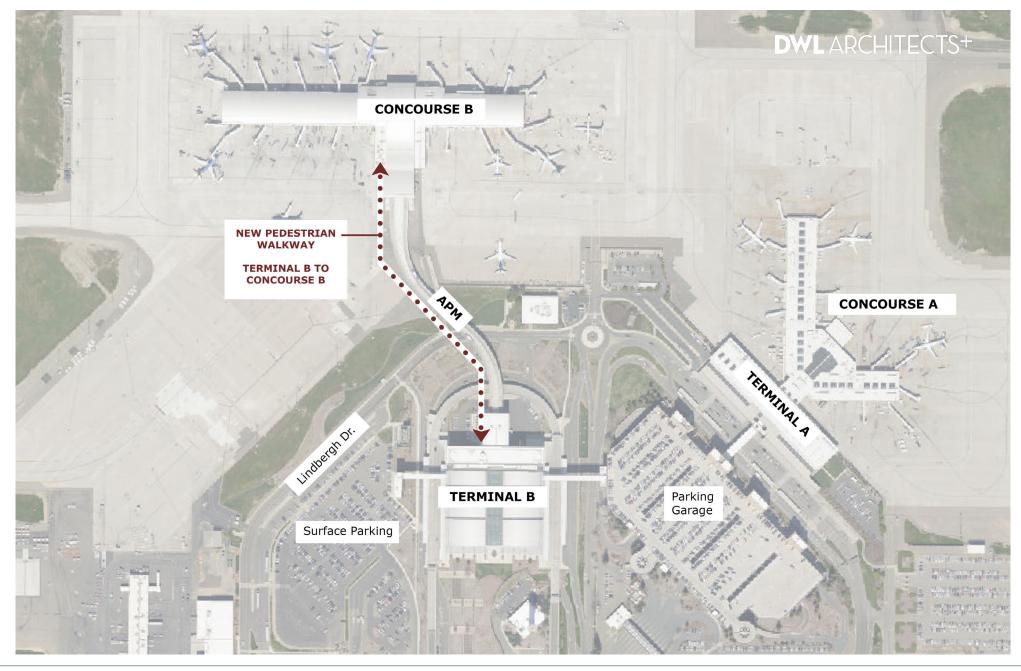








PROMENADE - which through the clauds

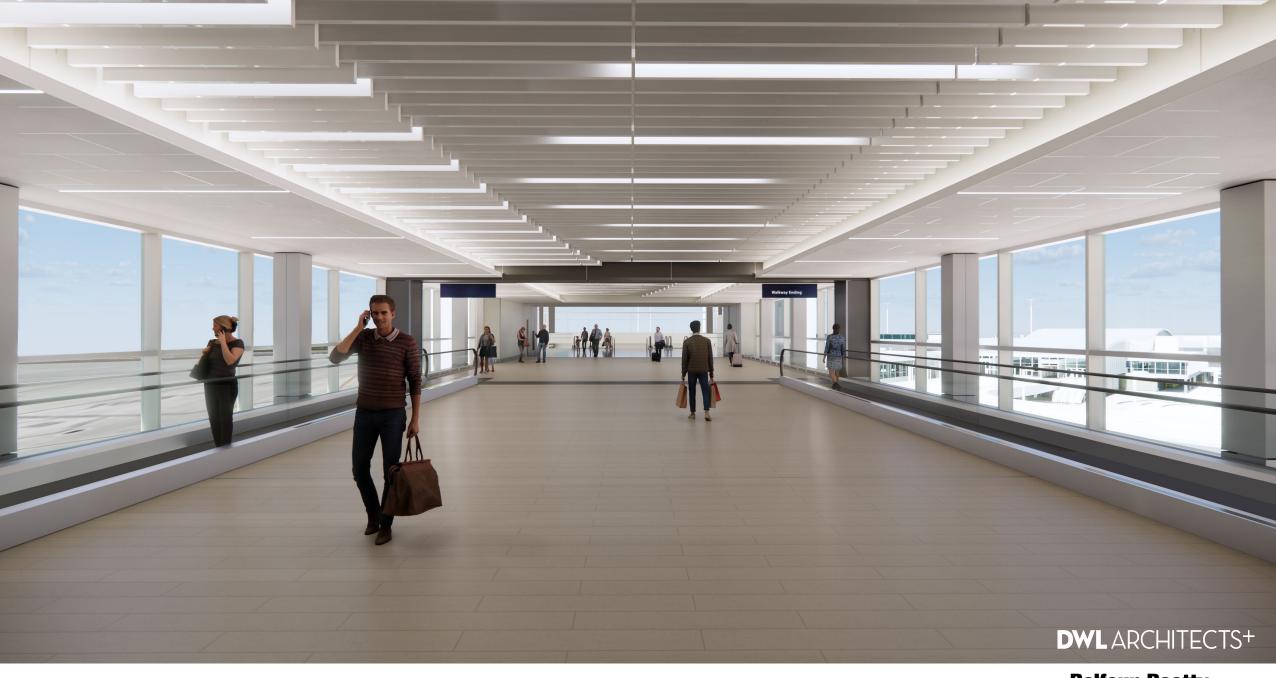




New Pedestrian Walkway

- Three components
 - South Walkway
 - Hub Building
 - North Walkway
- 1,200 LF / 70 K SF
- 29' Floor elevation change
- Four moving walkways
- Four escalators
- Three elevators

















Collaboration

SMF Pedestrian Walkway Project



SMF Pedestrian Walkway SmartStart®





September 6, 2023



Building a strong foundation

Value Exploration & Alignment

PRODUCT

The pedestrian walkway will provide safe and expeditious movement of people through the airport facility that is pleasant, accessible, and intuitive.

- Redundancy Alternative mode of transition to the Automated People Mover
- Reliability Simpler system with fewer moving parts
- Capacity Critical infrastructure that enables future growth/expansion of SMF
- Customer Choice Enables travelers to choose their mode of transition across the concourse

"Move people safely and efficiently to their destination"

PEOPLE

A team of experienced professionals who are empowered to act for the greater good of the project.

- Respect Awareness and appreciation for various stakeholder viewpoints
- Transparency Clear, open, and honest communication
- Can Do Attitude Solution-oriented with a focus on moving forward and keeping progress
- Fun Team comradery and celebration of project milestones

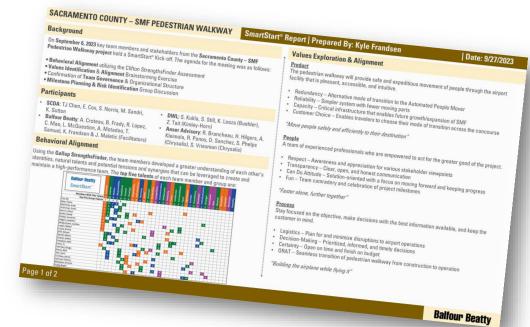
"Faster alone, further together"

PROCESS

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"Building the airplane while flying it"



SmartStart® Report

SACRAMENTO COUNTY – SMF PEDESTRIAN WALKWAY

SmartStart® Report | Prepared By: Kyle Frandsen

Date: 9/27/2023

Background

On **September 6, 2023** key team members and stakeholders from the **Sacramento County – SMF Pedestrian Walkway project** held a SmartStart® Kick-off. The agenda for the meeting was as follows:

- Behavioral Alignment utilizing the Clifton StrengthsFinder Assessment
- Values Identification & Alignment Brainstorming Exercise
- Confirmation of **Team Governance** & Organizational Structure
- Milestone Planning & Risk Identification Group Discussion

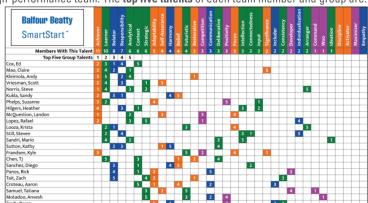
Participants

Page 1 of 2

- SCDA: TJ Chen, E. Cox, S. Norris, M. Sandri, K. Sutton
- Balfour Beatty: A. Croteau, B. Frady, R. Lopez, C. Mao, L. McQuestion, A. Motadoo, T. Samuel, K. Frandsen & J. Maletic (Facilitators)
- DWL: S. Kukla, S. Still, K. Looza (Buehler),
 Z. Tait (Kimley-Horn)
- Anser Advisory: R. Brancheau, H. Hilgers, A. Kleimola, R. Panos, D. Sanchez, S. Phelps (Chrysalis), S. Vriesman (Chrysalis)

Behavioral Alignment

Using the **Gallup StrengthsFinder**, the team members developed a greater understanding of each other's identities, natural talents and potential tensions and synergies that can be leveraged to create and maintain a high-performance team. The **top five talents** of each team member and group are:



Values Exploration & Alignment

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Balfour Beatty

[&]quot;Move people safely and efficiently to their destination"

[&]quot;Faster alone, further together"

[&]quot;Building the airplane while flying it"

Team Charter



Sacramento International Airport Pedestrian Walkway













PRODUCT

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 Automated People Mayer
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"Move people safely and efficiently to their destination"

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 Avariable (decrease)
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"Building the airplane while flying it"

Team Signatures By Dad Splan

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K A

Delivering Results

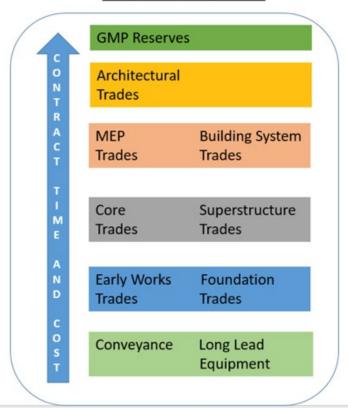
SMF Pedestrian Walkway Project

One Vision + One Team



Buyout Strategy

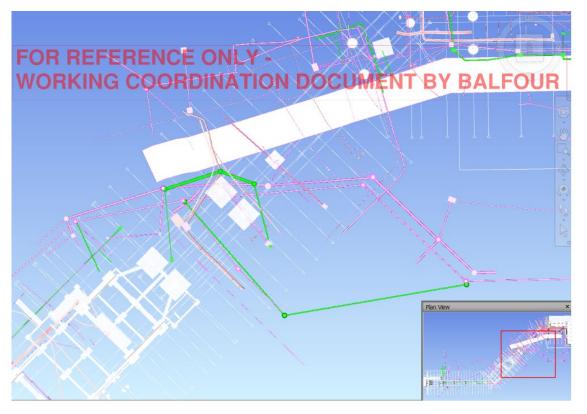
Progressive GMP Buyout



Task Name	D	Start	Finish	2024 2025
	(i)			in Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov D
Buyout Schedule				
Enabling - 8 Contracts	40d	04/15/24	06/07/24	Enabling - 8 Contracts
Package A - 2 Contracts	35d	04/26/24	06/13/24	Package A - 2 Contracts
Package B ACIPS (Design Assist) - 1 Co	35d	04/15/24	05/31/24	Package B ACIPS (Design Assist) - 1 Contract
Package C - 1 Contract	35d	06/20/24	08/07/24	Package C - 1 Contract
Package B + Option 1 (Pile Caps, Colum	35d	08/02/24	09/19/24	Package B + Option 1 (Pile Caps, Columns, Bents, Bearings) - 1 Contract
Package B + Option 2 (Pile Caps, Colum	35d	10/14/24	11/29/24	Package B + Option 2 (Pile Caps, Columns, Bents, Bearings) - 1 Contract
Package B ACIPS (Construction) - Chan	11d	10/07/24	10/21/24	Package B ACIPS (Construction) - Change Order
Package C+D - 18 Contracts	50d	01/02/25	03/12/25	Package C+D - 18 Contracts

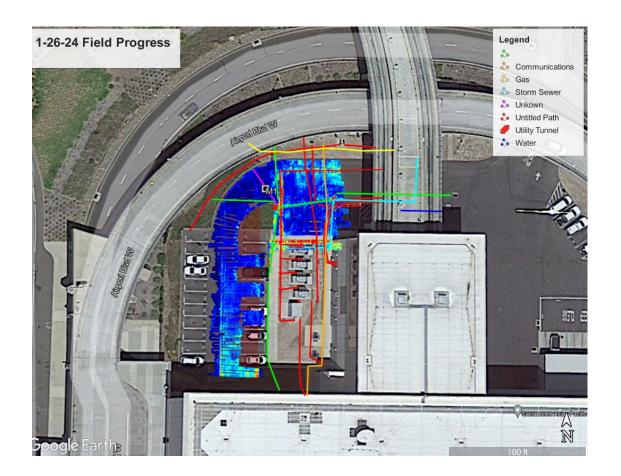


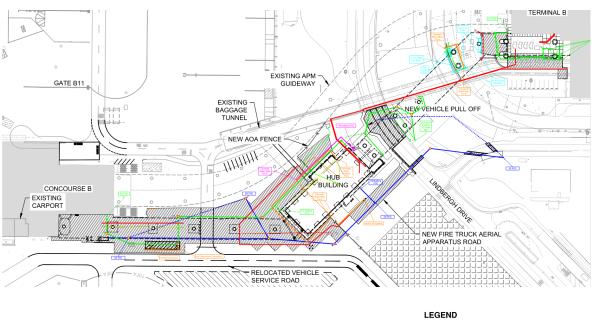
Early Investigations









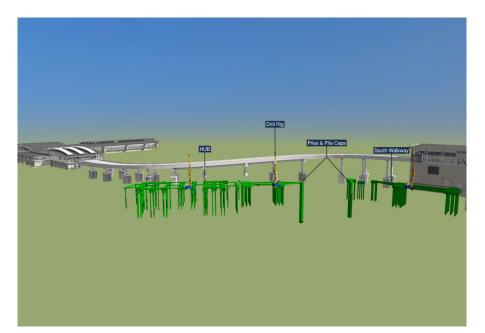


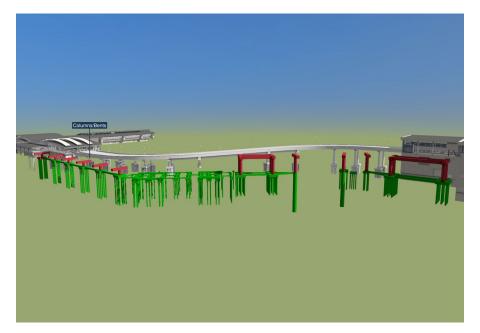
STORM DRAIN ————————————————————————————————————
GAS — DEMO GAS ———————————————————————————————————
ELECTRICAL
FIRE WATER
SANITARY SEWER ———————————————————————————————————
WATER————————————————————————————————————
UNKNOWN UTILITY
NEW MANHOLE

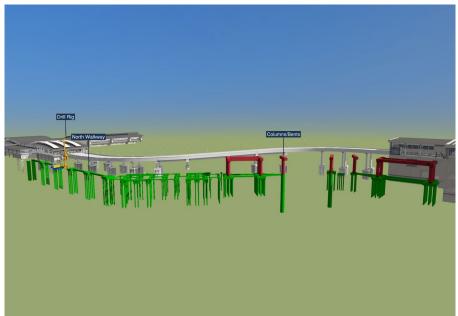
Schedule Development (4D)

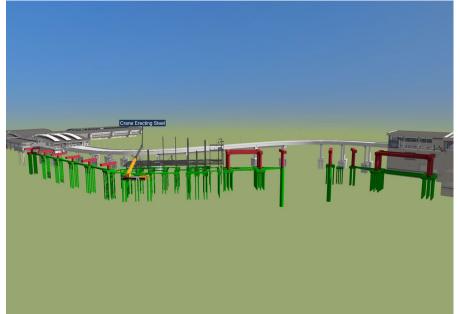
Task Name	Start	Finish	2024								2025												2026												
				Fei														Feb												Feb					Jul
CMAR Preconstruction Services	09/26/23	12/02/24		-	-	-					-	-	-	-	C	MAR F	Precons	struction	Servic	98															
Design Schedule Overview	09/26/23	12/30/24		-	-	-	_				-	-	-	-	\rightarrow		Design	Schedu	le Ove	view															
Construction	07/08/24	04/10/26																														Con	struction		
Schematic Design - 30%	01/08/24	01/08/24	Ç∳Sd	hematic	Design	n - 30%																													
Enabling Package (Permit)	05/24/24	05/24/24	ģ.					ΦE	nabling	Pack	age (Pe	rmit)																							
Design Development - 60%	06/14/24	06/14/24	ģ.						♦ De	sign D	evelopn	nent - 60	0%																						
Package A Sitework (ABC Process)	07/05/24	07/05/24	ģ.							⊕ Pa	ckage A	Siteworl	k (ABC	Process	;)																				
Construction Documents - 90%	09/09/24	09/09/24	ģ.										Construc	ction Do	uments	- 90%																			
Package B Foundation (Permit)	10/04/24	10/04/24	ģ.										⊕ P	ackage l	B Found	ation (i	Permit)																		
Package C Primary Steel (Permit)	11/18/24	11/18/24	ģ.												Packa	ge C F	Primary	Steel (Permit)																
Package D Remaining Scope (Permit)	12/24/24	12/24/24	Ŷ													ф₽а	ckage	D Rema	ining S	cope (P	ermit)														



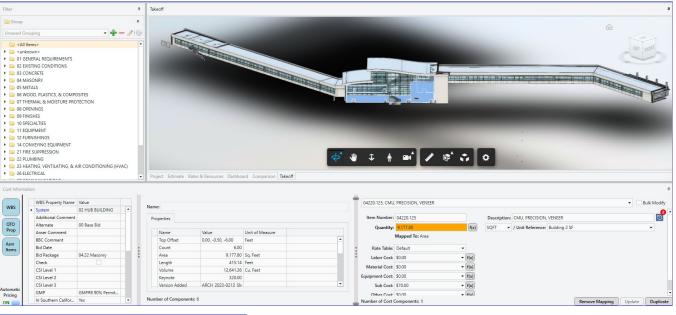








Estimation (5D)

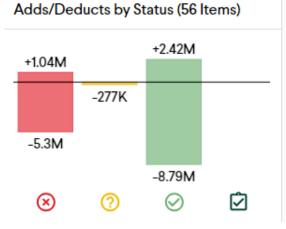




Value Engineering Session 1



Estimate Total	\$112,829,850
Accepted Changes	-\$6,370,747
Running Total	\$106,459,103
Gap	-\$3,618,248
Budget	\$102,840,855



Value Engineering Session 1













Groundbreaking

48

SmartStart® Program

alignment

collaborative planning

SmartStart

support system

proactive design

Tuckman's Stages of Team Development



SmartStart® reduces the time needed to go from Forming → Performing

Source: Tuckman's Stages - Bruce Tuckman, 1965

Why SmartStart®

SmartStart® helps to lead clients and their teams to custom solutions

Surface Problems

- Budget Overruns
- Quality Issues
- Schedule Delays
- Safety Incidents
- Administrative Overload

Underlying Causes

- Poor Planning
- Lack of Coordination
- Late Decisions
- Expertise Lacking
- Unforeseen Conditions
- Misunderstanding
- Communication Challenges
- Unproductive Meetings

Root Causes

- Interpersonal Conflicts
- Motivational Challenges
- · Lack of Decision-Making
- Misalignment
- Lack of Clarity Values/ Risks, etc.
- Lack of Accountability
- Unclear Process
- Mistrust

It starts with identifying, understanding, and addressing root causes.

SmartStart®



- Develop team dynamics through individual strength assessment
- Define value
- Define system of governance
- Agree on decision making protocol



- Engage the supply chain
- · Understand and eliminate risk
- Explore options and opportunities
- · Milestone planning
- Establish performance metrics
- Identify and remove constraints



- Set up target value design mechanisms
- Discover schedule and quality parameters
- Identify high performance building options
- Apply DfMA principles and explore options for off-site manufacturing



- Team health and awareness
- Communication methods and standards
- Information management
- Technology and information workflow
- Digital documentation strategy
- Training approach

SmartStart® is a framework to develop:

- 1. A high-performance team
- 2. A custom project strategy uniquely suited to the Client's values and the specific technical challenges of the Project

SmartStart® Creates a Foundation Around...



Team Charter



Sacramento International Airport Pedestrian Walkway





Balfour Beatty

DWL ARCHITECTS+





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"Building the airplane while flying it"

Team Signatures By Find Spire

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SmartStart® | **Scaling a Process Across the Enterprise**

Create an SOP – Consistent Experience

Deliver It – Get the Reps in

Leverage – Train Others to Deliver

Refine – Continuously Improve it

