



SFO



SAN FRANCISCO INTERNATIONAL

# Where SFO is Headed

Geoffrey W. Neumayr SE, DBIA

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SFO

- How is the Airport Funded
- Completed Projects Plan
- Terminal 3 West Modernization
- Airport Development Plan
- Sustainability
- Resiliency Framework

# How is SFO Financed

## Budget

Category	Approved Budget
Personnel	\$340,500,000
Non-Personel Servcies	\$268,900,000
Material & Supplies	\$22,100,000
Equipment/Vehicles	\$12,200,000
City Servcies	\$223,200,000
Annual Servcie Payment	\$54,200,000
Other Expenses	\$23,600,000
Debt Service	\$631,200,000
<b>Total Operating Budget</b>	<b>\$1,575,900,000</b>

## Revenue

Type	Estimated Revenue
Airline Revenue	\$472,770,000
Non-Airline Revenue	\$1,103,130,000
<b>Total Revenue</b>	<b>\$1,575,900,000</b>

## Capital Improvements Funding

Type	Funding
General Revenue Bonds	Debt Service
Grant Funding	Transactions
Passenger Facility Charges	Charges

## Budget Evaluation

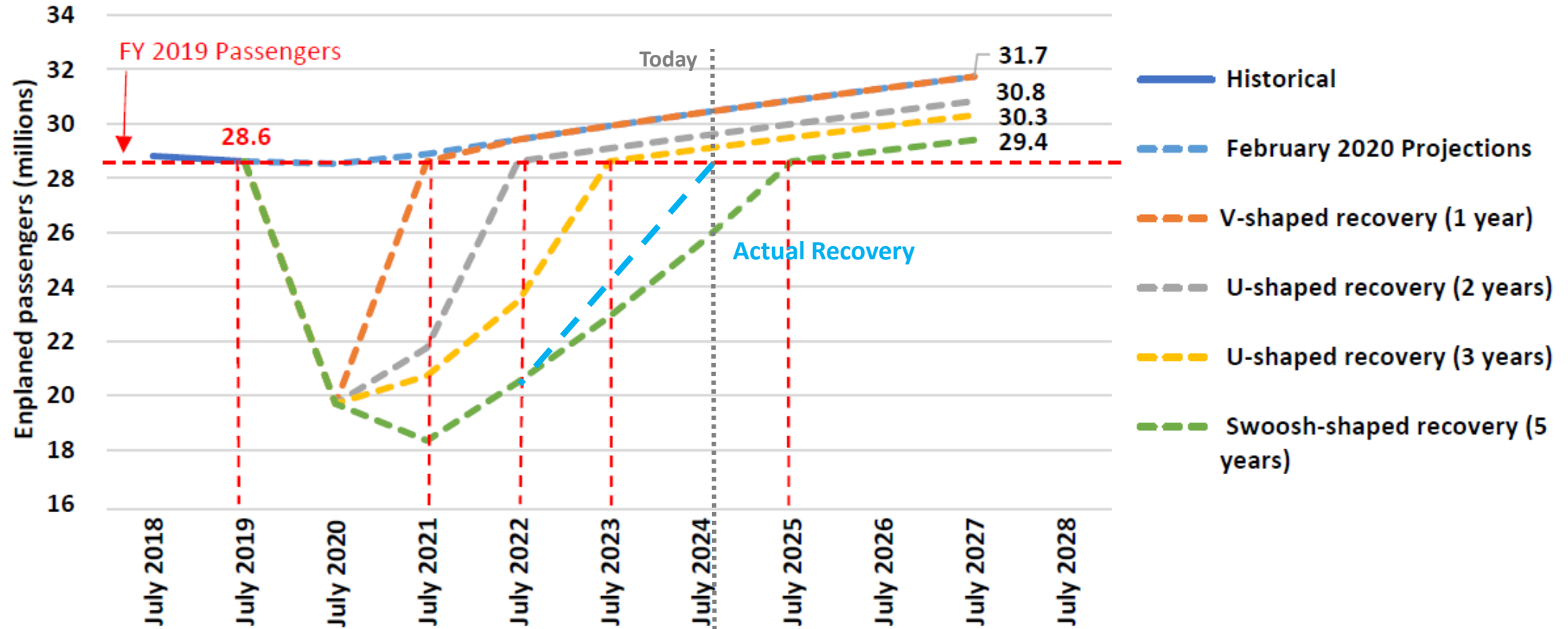
Cost Per Enplaned Passenger (CPE)

$$\text{CPE} = \frac{\text{Revenue Paid by Airlines}}{\text{Enplaned Passengers**}}$$

\*\* Enplaned Passenger – Passengers who originate at SFO

# Airport Recovery

## SFO Passenger Recovery Scenarios





# Completed Projects

## Long Term Parking Garage No. 2



# Completed Projects

## Harvey Milk Terminal 1



# Completed Projects

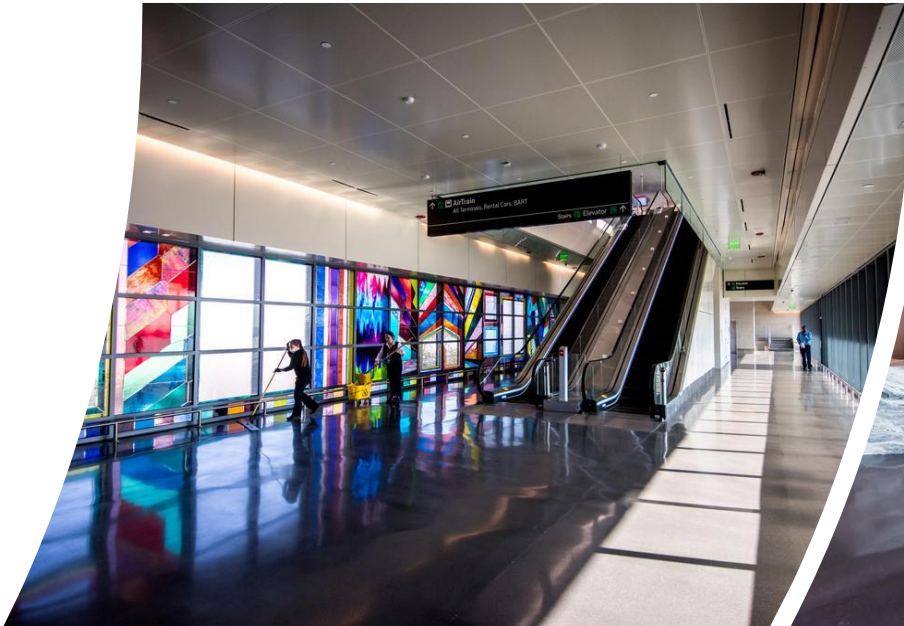
## Harvey Milk Terminal 1





# Completed Projects

## AirTrain Station at The Grand Hyatt Hotel



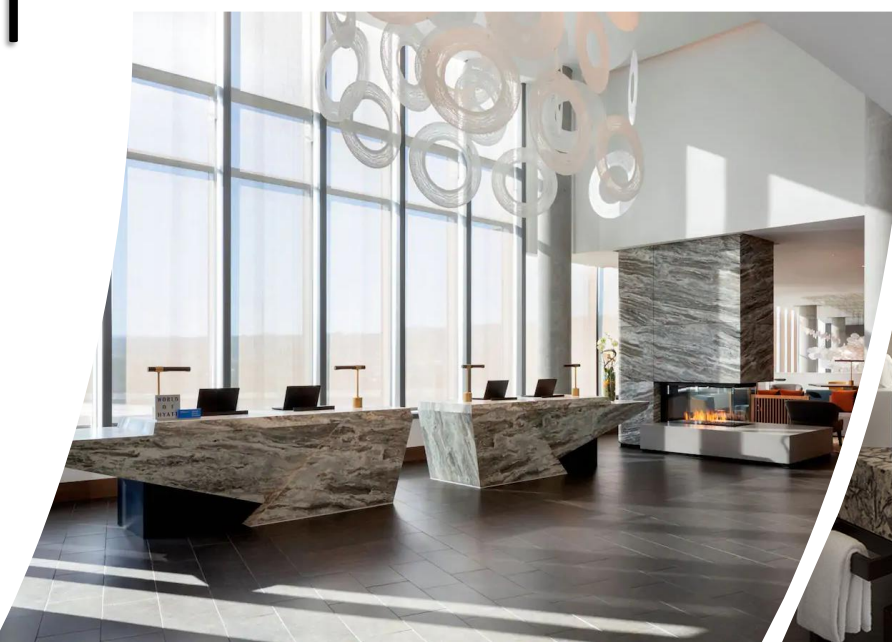
# Completed Projects

## Grand Hyatt Hotel



# Completed Projects

## Grand Hyatt Hotel



## COURTYARD 3 CONNECTOR



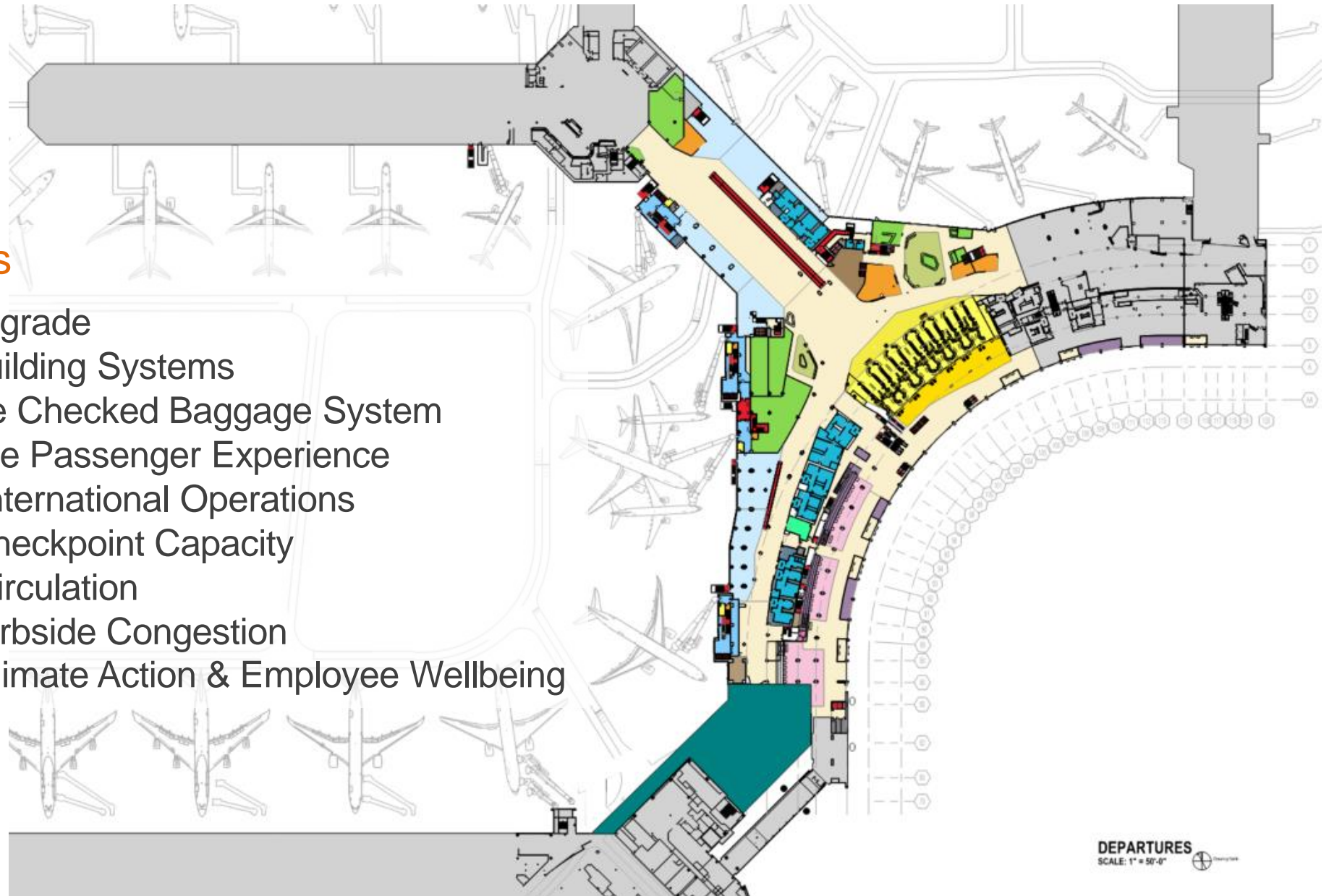
A photograph of a large, modern building under construction, featuring a curved glass facade and multiple levels of dark, cantilevered balconies. The sky is overcast with grey clouds. A semi-transparent white banner is overlaid across the middle of the image, containing the text "Terminal 3 West Modernization" in a red, sans-serif font.

# Terminal 3 West Modernization

# SFO Terminal West Modernization

## Project Goals

1. Seismic Upgrade
2. Replace Building Systems
3. Consolidate Checked Baggage System
4. Enhance the Passenger Experience
5. Add New International Operations
6. Increase Checkpoint Capacity
7. Enhance Circulation
8. Mitigate Curbside Congestion
9. Advance Climate Action & Employee Wellbeing



# SFO Terminal West Modernization



# SFO Terminal West Modernization

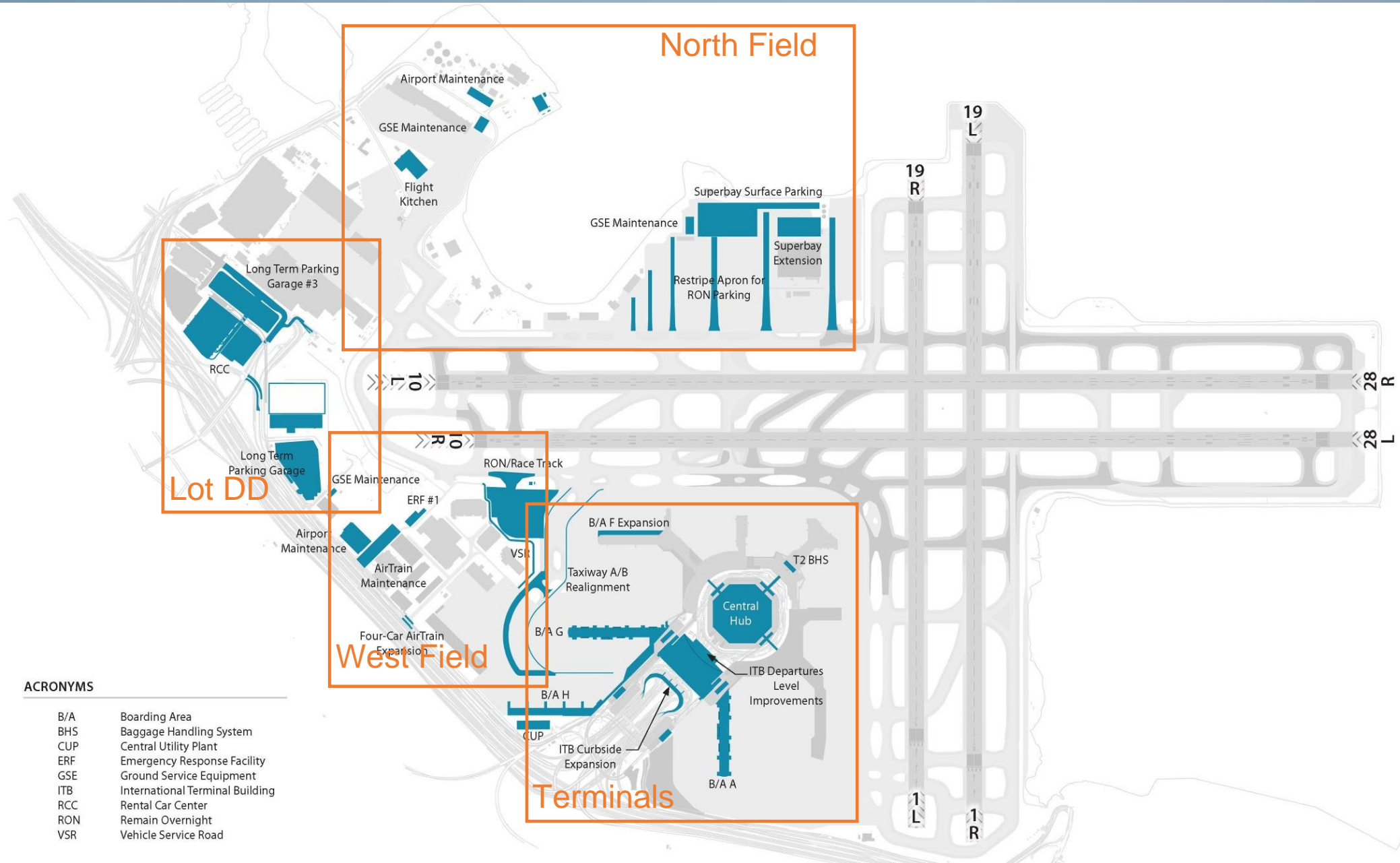






# AIRPORT DEVELOPMENT PLAN (ADP)

# Airport Development Plan

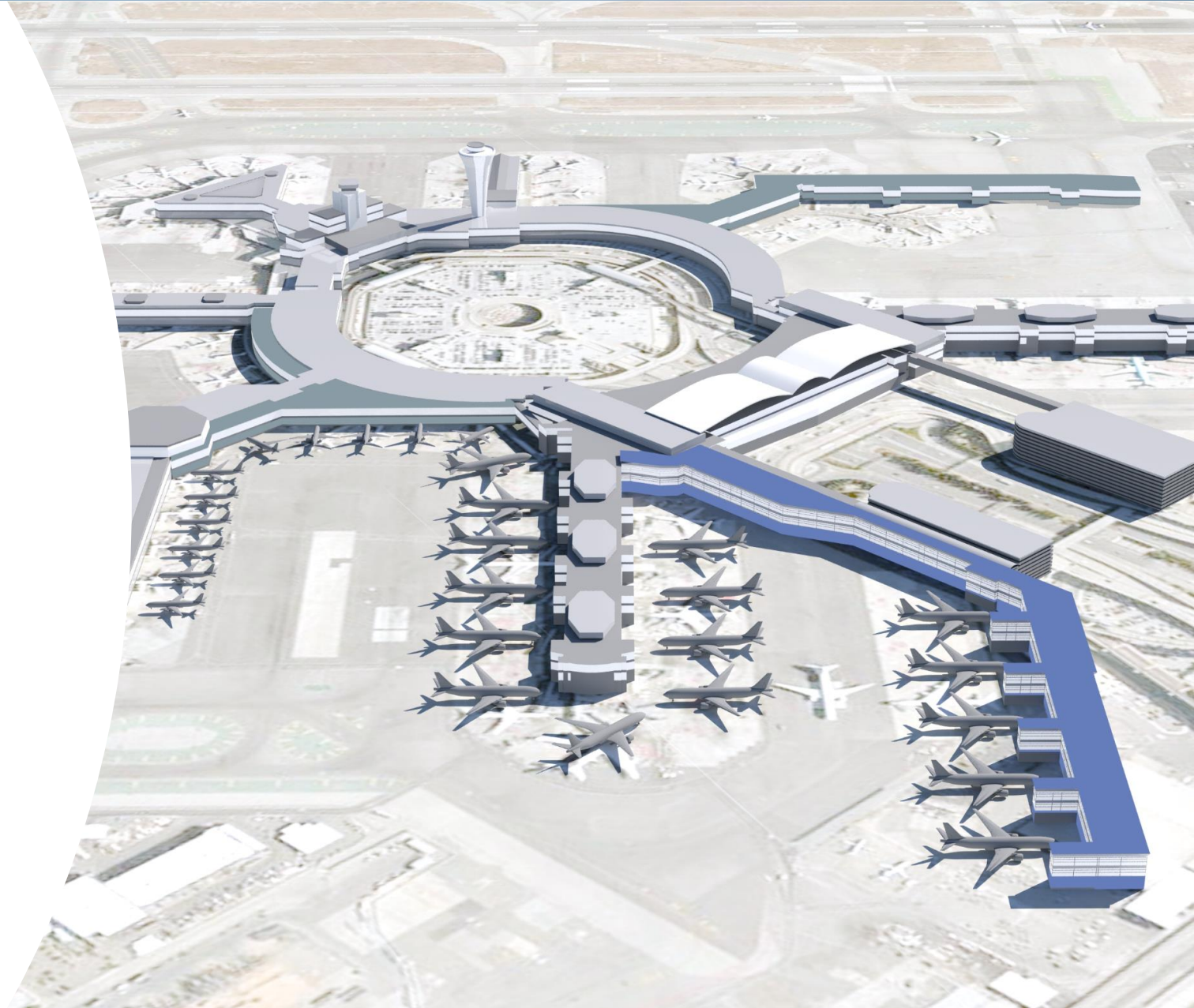


## ACRONYMS

B/A	Boarding Area
BHS	Baggage Handling System
CUP	Central Utility Plant
ERF	Emergency Response Facility
GSE	Ground Service Equipment
ITB	International Terminal Building
RCC	Rental Car Center
RON	Remain Overnight
VSR	Vehicle Service Road

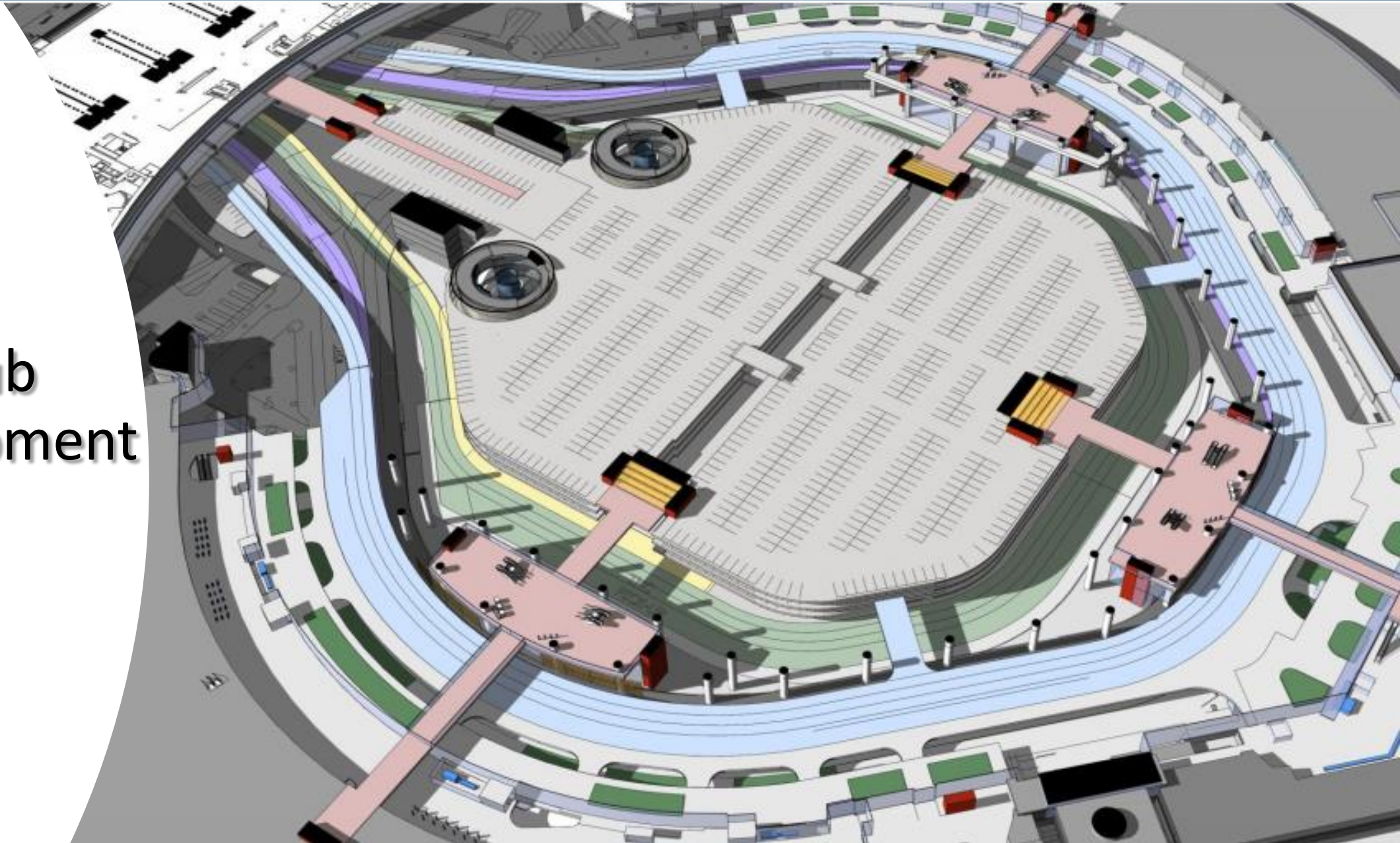
# Airport Development Plan

## Boarding Area H



# Airport Development Plan

## Central Hub Redevelopment





## Sustainability

*“Our Mission at SFO is Delivering an airport experience where people and our planet come first”.*

*- SFO's 5 Year Strategic Plan 2023-2028*



**Delivering an airport experience  
where people and our planet  
come first.**

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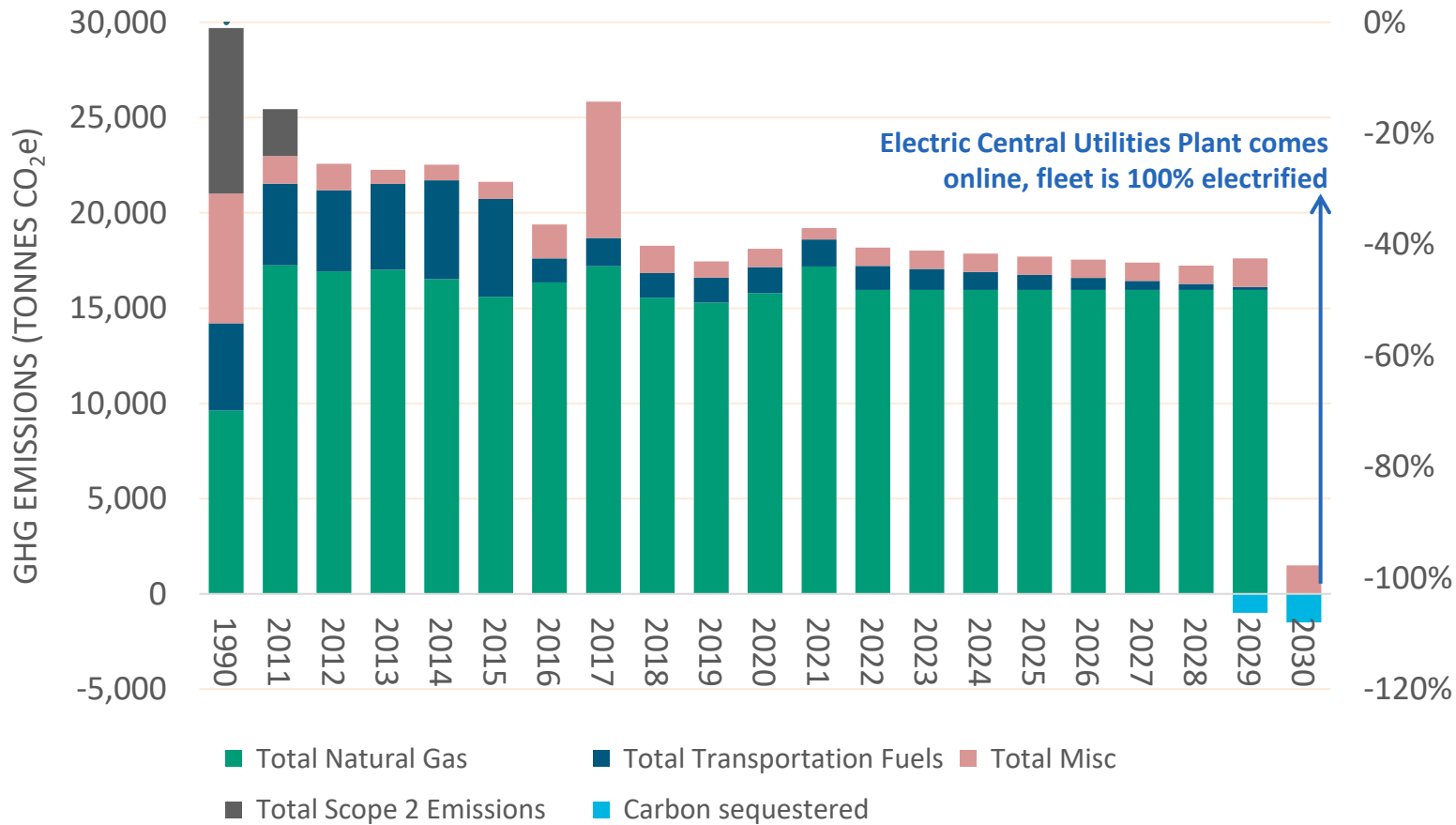
## Take Bold Climate Action

- 4.1 Adopt a resilience capital plan and program to respond and rebound from geologic, climatic, and human-caused hazards, shocks, and stressors.
- 4.2 Inspire the public and industry partners to take bold climate actions.
- 4.3 Achieve net zero carbon for airport-controlled emissions by 2030 and establish a stakeholder emission reduction target and implementation plan by 2024.
- 4.4 Reach net zero energy by 2030 by accelerating distributed energy resources and electrical grid modernization and optimizing the performance of assets across their life cycle.
- 4.5 Become a zero-waste campus for airport-controlled municipal solid waste (MSW) and construction waste.
- 4.6 Be a net zero water campus by achieving balance between water consumption and measures that conserve, replenish, and recycle water by 2030.

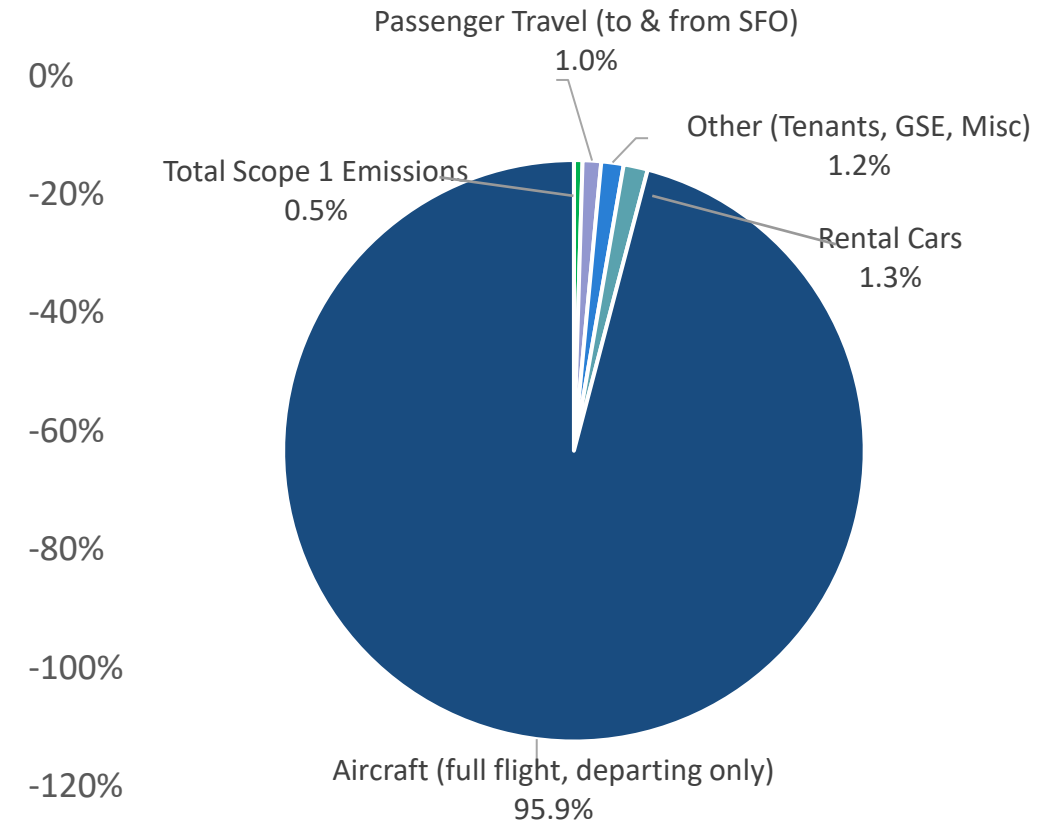
***Supported by 19 initiatives***

# Net Zero Carbon

## SFO's Path to Net Zero Carbon



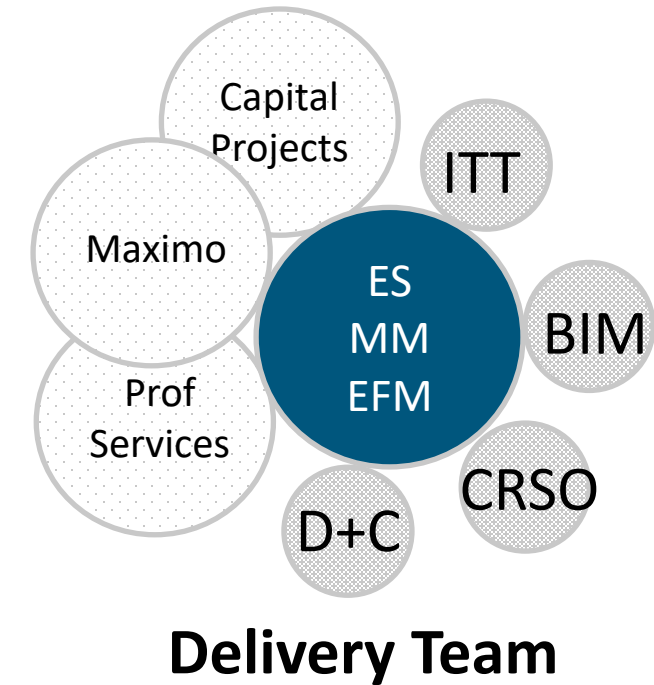
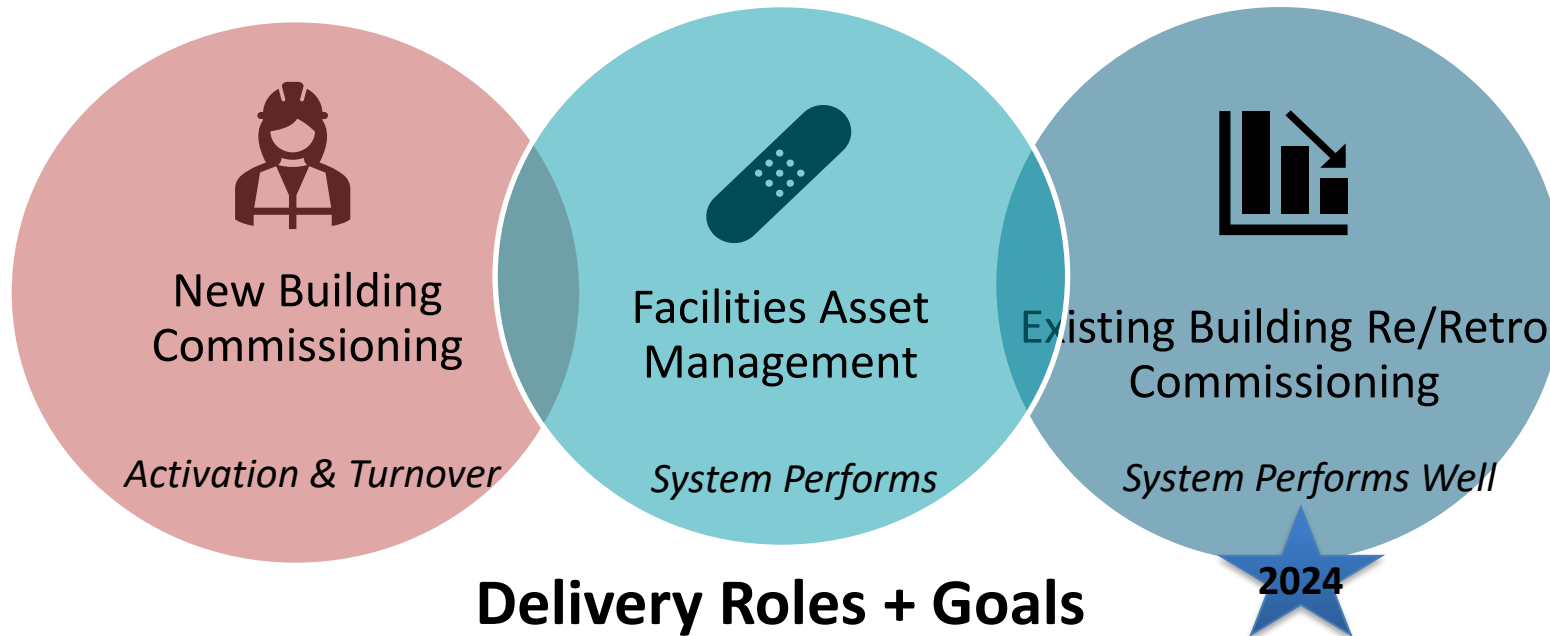
## SFO 2021 Emissions



# Building Optimization

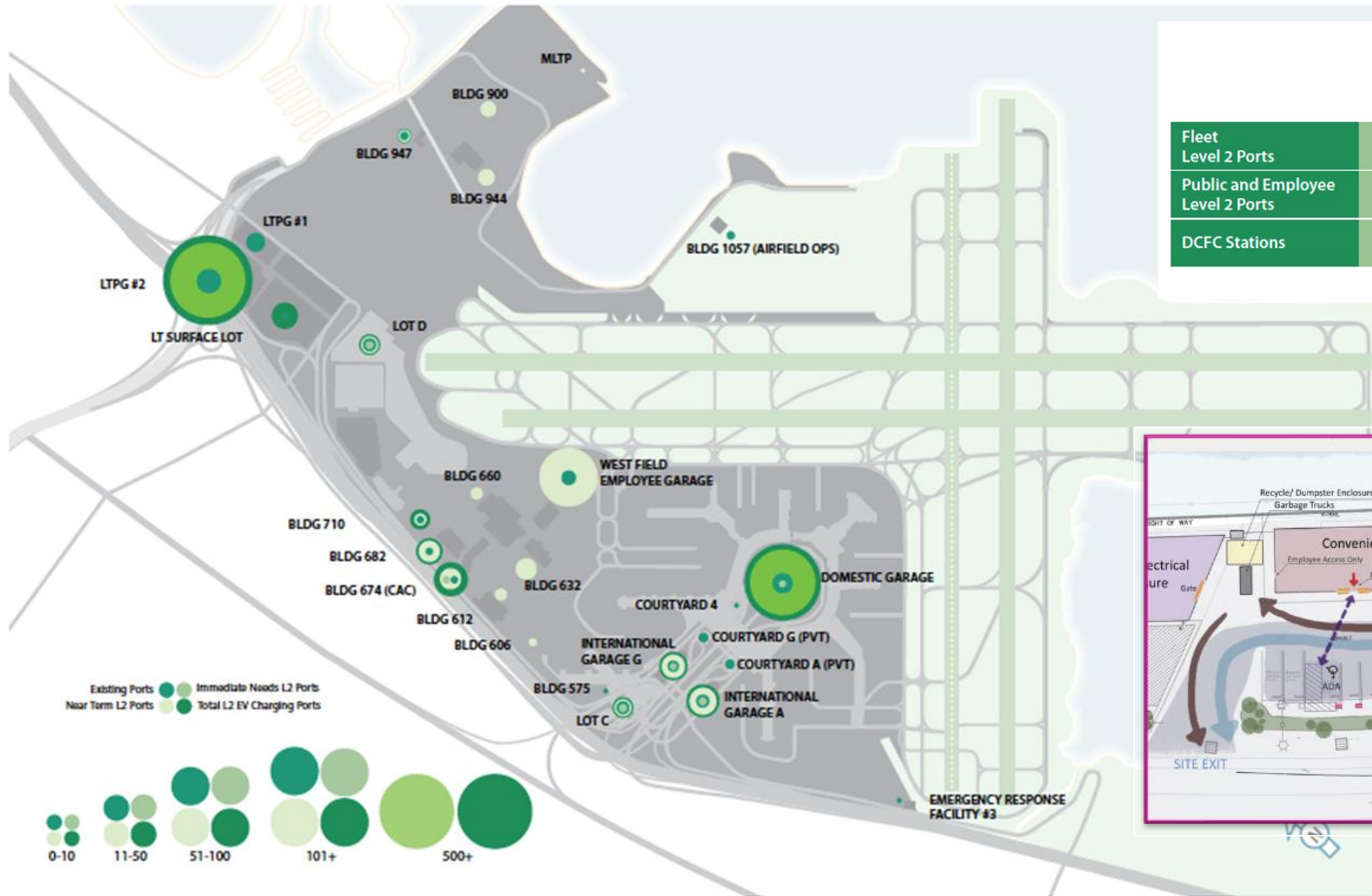
## Continuously Deliver High Performing Buildings

1. Existing Buildings: Execute 53 existing building-specific energy efficiency measures
2. New Buildings (Year 1+) Ensure (EUI) intensity targets for new buildings are met & optimized

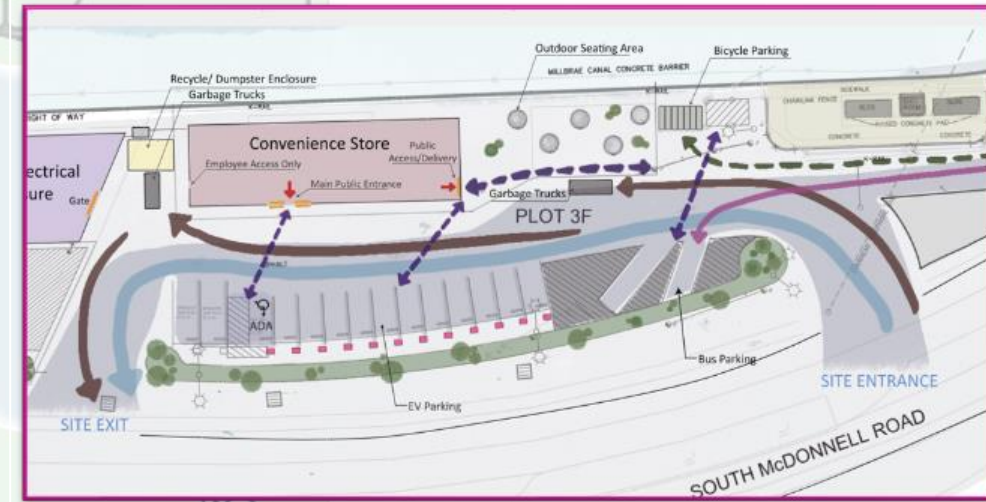




# Electric Vehicle Charging



	Existing		2023 Near-Term		2040 Long-Term	
	Count	Percent*	Count	Percent*	Count	Percent*
Fleet Level 2 Ports	35	7%	~100	20%	~500	100%
Public and Employee Level 2 Ports	271	1.2%	2,307	10%	5,728	25%
DCFC Stations			10	10%	100	90%
			\$29M-\$40M		\$44M-\$93M	

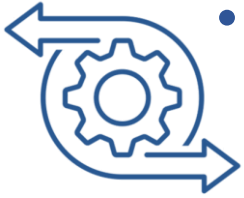


## Resiliency Framework

*“The airport cannot operate without fuel, power, communications, and water. The reliability and restoration of these systems are also the greatest unknown for the airport”.*

*- San Francisco Lifelines Report*

# Definitions: Hazards, Shocks & Stressors



- **Resiliency:** preparation to adapt, respond and recover due to adversity caused by the impacts of Acute Hazards, Shocks and Stressors



- **Acute Hazards:** potential for injury or damage to occur as a result of an instantaneous or short duration exposure to the effects of sudden shock to physical assets



- **Shocks:** external short-term deviations from long-term trends that have substantial negative effects on people's current state of well being, level of assets, livelihood, safety or their ability to withstand shocks



- **Stressors:** long-term trends or pressures that undermine the stability of a system and increase vulnerability within it

# Types of Acute Hazards, Shocks & Stressors

## Environmental / Climate

Earthquakes

Flooding

Wind

Rising Sea Levels

Excessive Heat

Drought

Air Quality

## Human-Caused

Cyber Attack

Terrorism

Active Shooter

Explosions

Security Breach

Political Unrest

## Disruption

Energy Disruption

Water Disruption

Telecommunication  
Disruption

Environmental  
Hazards

Pandemics

## Economic

Recession

Inflation

Increase in  
Passengers

Reduced  
Passengers

Reduced Human  
Resources

Deferred  
Maintenance

# Types of Acute Hazards, Shocks & Stressors

## Acute Hazards

Earthquakes

Flooding

Wind

Cyber Attack

Explosions

Energy Disruption

Water Disruption

Telecommunication Disruption

Internal Fire

## Shock Events

Terrorism

Active Shooter

Pandemics

Security Breach / Failure

Political Unrest

Aircraft Grounding / Emergencies

External Fire (Smoke)

Extreme Precipitation

Storm Surge

Excessive Heat

## Chronic Stressors

Recession / Inflation

Deferred Maintenance

Passenger Volume Changes / Capacity

Capacity Constraints

Loss of Human Resources

Pandemics

Air Quality

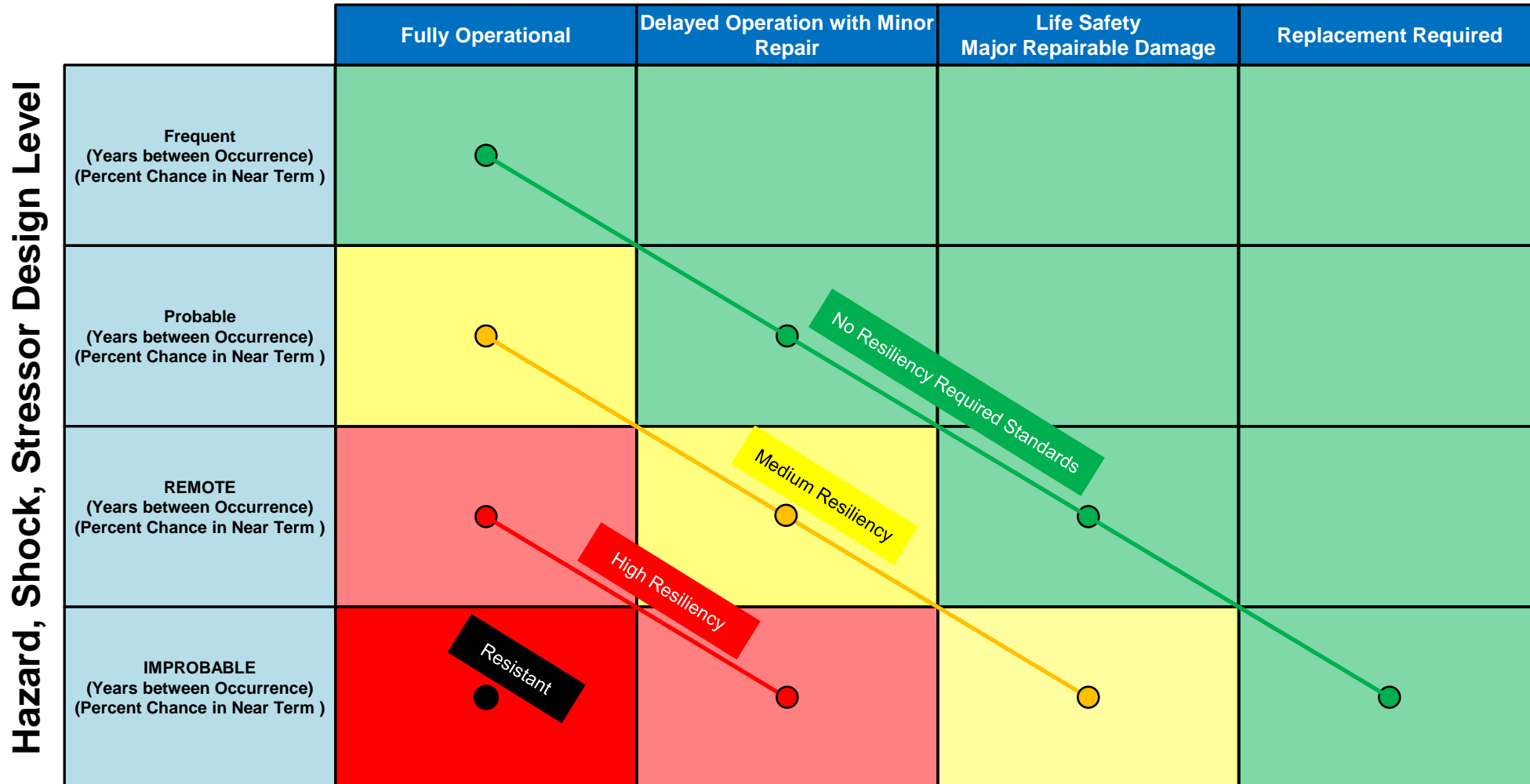
Drought

Climate Impacts / Severe Weather

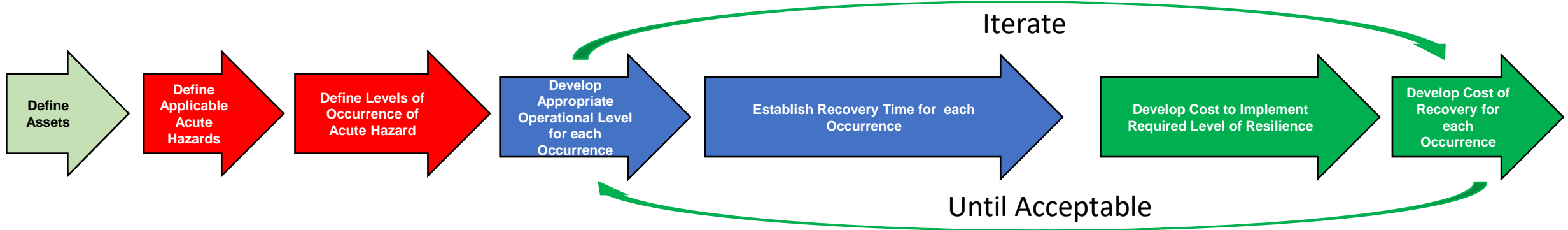
Rising Sea Levels

# Resiliency Levels

## Operational Desired Performance / Service Level



# Resiliency Plan



Asset	Acute Hazard	Occurrence/Probability Acute/Level of Hazard	Operational Performance	Operational Recovery Time	Operational Response Plan	Cost to build Resilience	Recovery Financial Plan	Recovery Cost
See List	See List	Frequent	Resistant	Days	Operational Plan for each Level of Acute Hazard Performance	Cost to implement desired Resilience into the design	Financial Plan for the Recovery of each Level of Acute Hazard Recovery	\$
		Probable	High Resiliency	Days				\$\$
		Remote	Medium Resiliency	Days				\$\$\$
		Improbable	No Resiliency	Days				\$\$\$\$

# Shoreline Protection Program





# Phased Resiliency Framework Process

**Now**

**Finalize Resilience  
Framework &  
Proof of Concept**

**In-House**

**Near: 1-3 Years**

**Develop Long-Term  
Resiliency Plan**

**Consultant-Supported**

**Next: 5-10 Year**

**Implement Long-  
Term CIP Program**

**Capital  
Improvement  
Projects**

# Questions?



# Thank you