



SAN DIEGO
INTERNATIONAL AIRPORT

LET'S **GO.**

Climate Action Planning at SAN

UC Davis Noise & Air Quality
Symposium 2020

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San Diego County Regional Airport Authority



Over 25 million
passengers in 2019

Airport operations grew
3% in 2019

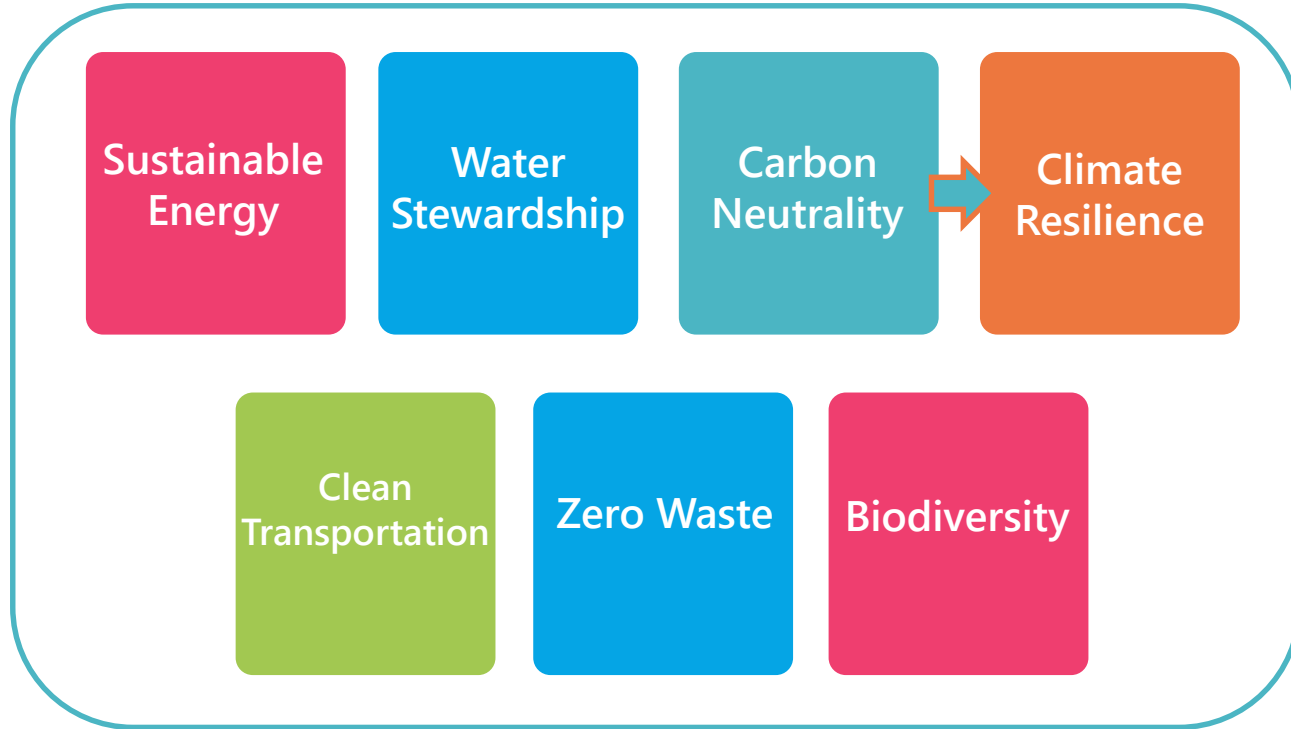
50% passenger growth
expected by 2035

Busiest single runway in
United States

Runway is limited at
9,601 ft.

Airport is confined to
661 acres

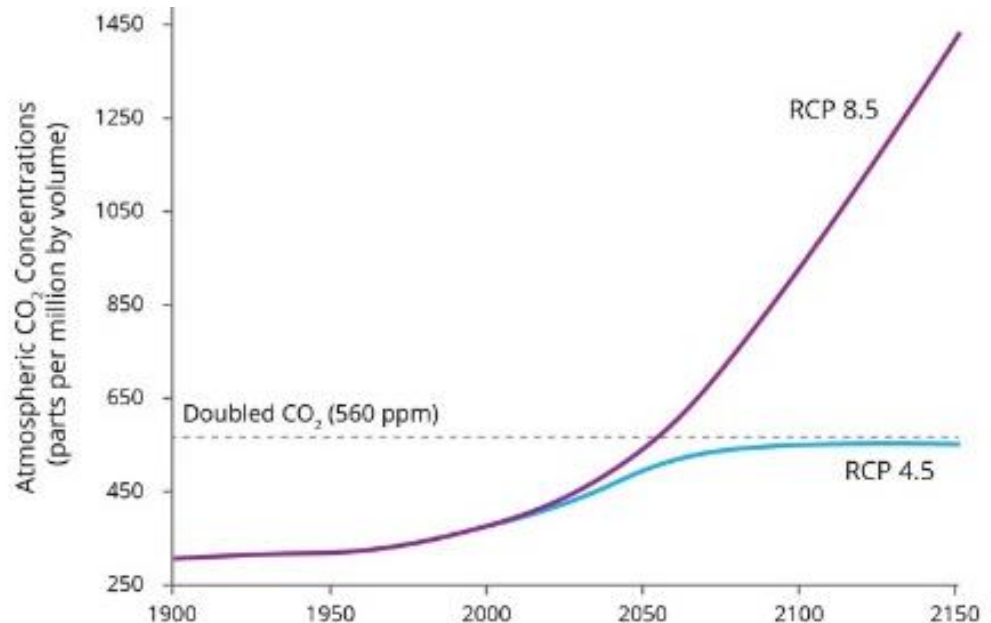
Sustainability Management Planning



Carbon Neutrality & Climate Resilience

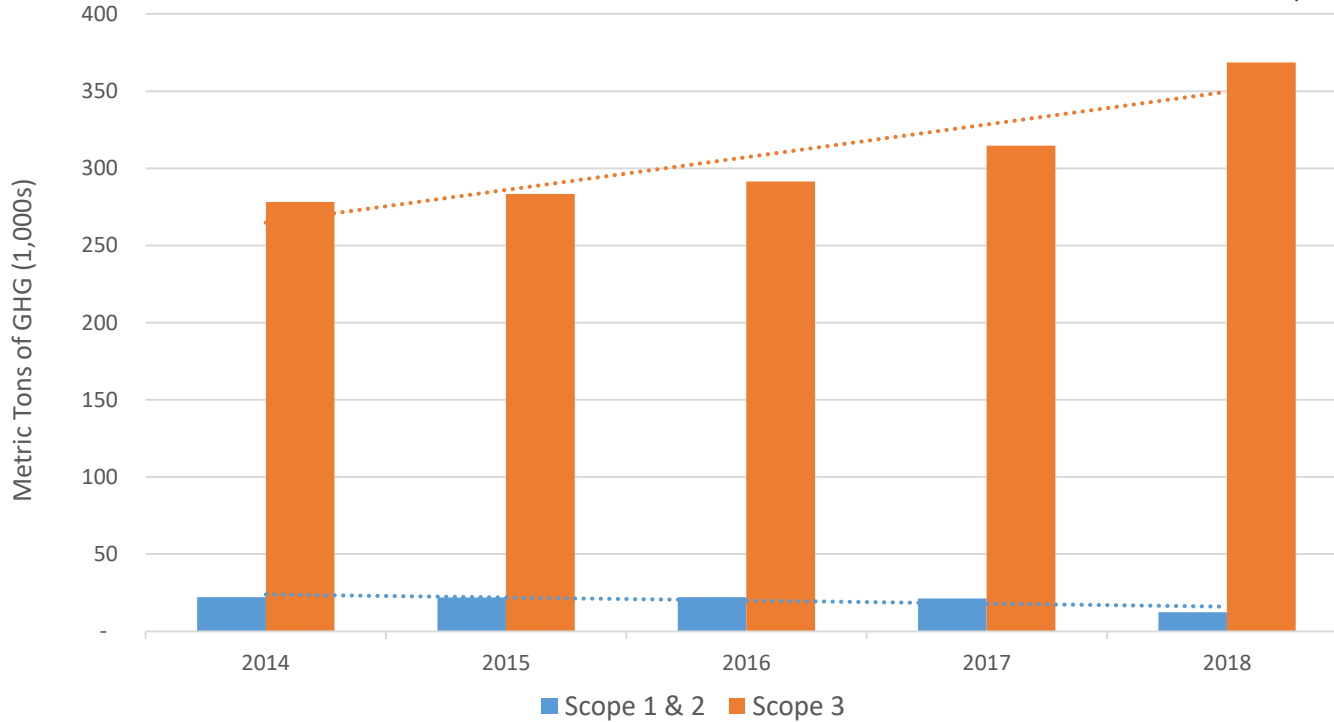
Potential climate change impacts based on GHG levels

- RCP 8.5, also known as the “business-as-usual” scenario
- RCP 4.5, implementation of significant mitigation globally by mid-century



Carbon Neutrality

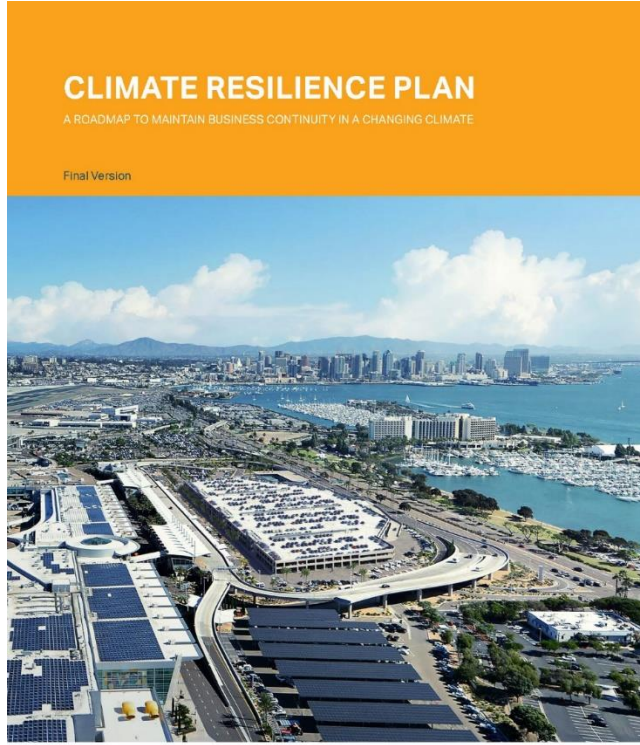
Source: SDIA 2018 Greenhouse Gas Emissions Inventory



Scope 3 = 32% increase
from 2014 to 2018

Scope 1&2 = 43% decrease
from 2014 to 2018

Climate Resilience






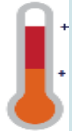
The CRP provides the Authority's strategy for achieving **uninterrupted business continuity in future climate conditions**

Reduce Risks
from Climate
Change

Provide
Regional &
Industry
Leadership

Integrate into
Operations &
Development
Decisions

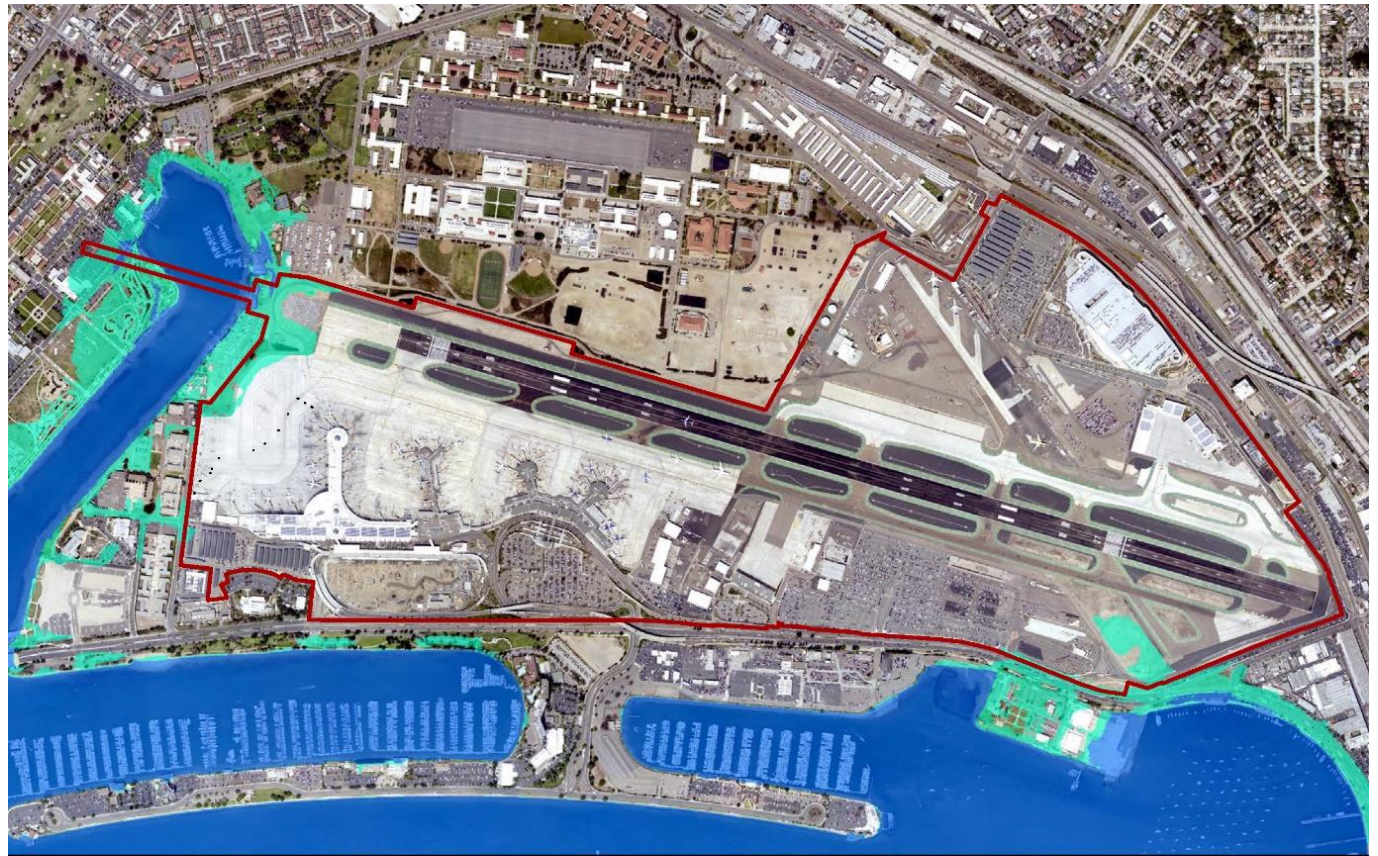
Climate Resilience

Hazards	2050	2100	Source
 Sea Level Rise	1.6 Feet	2.5 Feet 4.9 Feet 	OPC 2018
 Precipitation	No change (SAN Drainage Study)	+0.2" annual increase Less frequent, but slightly heavier rainfall	SAN Drainage Study CAL-Adapt
 Extreme Heat	+5.5 days extreme heat +1 day heat wave duration	+23.5 days extreme heat +3 days heat wave duration	Extreme >89° CAL-Adapt CHAT
Other:			
Wildfire	Some data, still an area of active research		
Wind/Fog	No strong future trends observed in data		

Climate Stressor



Year 2100
50% Probability



Legend

- Airport Boundary
- Maximum High Tide* (Recurring Flooding)
- 100-Year Storm Surge (Rare Flooding)

San Diego International Airport

2.5 ft Sea Level Rise: Year 2100
(50% Probability SLR Meets or Exceeds)

0 500 1,000 2,000
Feet






Climate Stressor



Year 2100
5% Probability



Legend

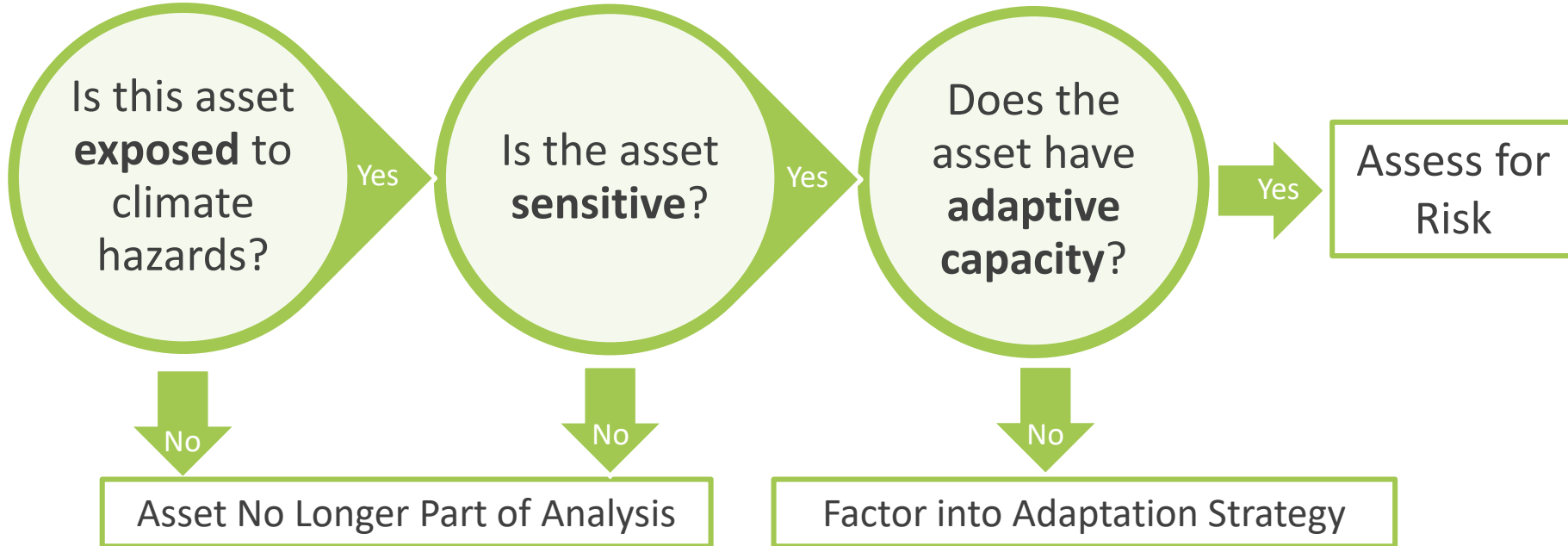
-  Airport Boundary
-  Maximum High Tide* (Recurring Flooding)
-  100-Year Storm Surge (Rare Flooding)

San Diego International Airport
4.9 ft Sea Level Rise: Year 2100
(5% Probability SLR Meets or Exceeds)

0 500 1,000 2,000
Feet



Vulnerability Assessment



Climate Resilience

Vulnerability Profile Example

SCENARIO (SLR)	ASSETS EXPOSED
Year 2030 (0.8 feet)	<ul style="list-style-type: none">Vehicle Service Road (Primary Road) - northwest corner of airport property
Year 2050 (1.6 feet)	<ul style="list-style-type: none">North Harbor Drive (Primary Road)West Laurel Street (Primary Road)
Year 2100 (2.5 feet)	<ul style="list-style-type: none">McCain Road (Primary Road)Spruance at McCain (Primary Road)Taxi Hold LotTerminal Link Road (Primary Road)
Year 2100 (4.9 feet)	<ul style="list-style-type: none">McCain Road (Primary Road)North Harbor Drive (Primary Road)Spruance at McCain (Primary Road)Taxi Hold LotVehicle Service Road (Primary Road)West Laurel Street (Primary Road)Terminal Link Road (Primary Road)

Orange – “Rare flooding” ; Blue – “Recurring Flooding”



Sensitivity: Relatively Low

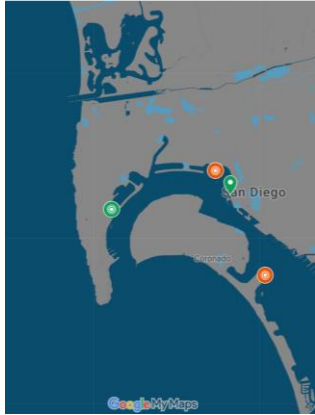
Adaptive Capacity: High

Consequences: Loss of Access

Summary: Protection measures & alternative routes planned

Climate Resilience

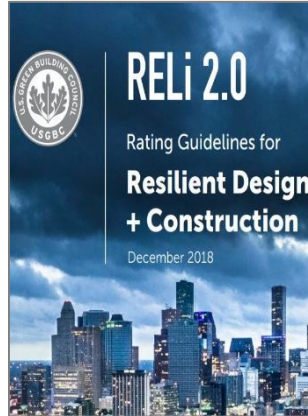
SAN Implementation



**Install SLR Sensors
in San Diego Bay**
[w/ Scripps CCCIA]



**Update Employee
Safety Plan**



**Pilot the USGBC's
New RELi Guidelines**



**Expand Storm Water
Capture & Reuse
System**



**Regional
Coordination**

- KEY ACHIEVEMENTS
- Lead author of regional section for the Fourth California Climate Change Assessment
 - Leveraged \$400,000 to support regional collaboration in preparing for climate change
 - Launched new partnership with SANDAG, The San Diego Foundation and the Tijuana River Estuarine Research Reserve to conduct a Resilience Needs Assessment to identify regional priorities

- **ENERGY EFFICIENCY (EE):** Developing regional capacity for addressing EE
- **COASTAL RESILIENCE:** Convening the Regional Sea Level Rise Working Group, supporting regional leadership and application of research, and conducting a Regional Adaptation Needs Assessment
- **CLIMATE-SMART WATER:** Hosting interdisciplinary climate and water meetings and providing technical support for climate and water-focused planning efforts
- **ADAPTATION PLANNING AND REGIONAL ASSESSMENT:** Providing technical support for local and regional adaptation planning efforts



Thank you



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