



Borders Committee Agenda

Friday, July 25, 2025, 1:30 p.m.

SANDAG Board Room

1011 Union Street, First Floor

San Diego, CA 92101

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1. Call to Order

2. Non-Agenda Public Comments/Member Comments

Members of the public shall have the opportunity to address the Borders Committee on any issue within the jurisdiction of SANDAG that is not on this agenda. Public speakers are limited to three minutes or less per person. Public comments under this agenda item will be limited to five public speakers. If the number of public comments under this agenda item exceeds five, additional public comments will be taken at the end of the agenda. Members and SANDAG staff also may present brief updates and announcements under this agenda item.

3. Consent

3.1 Approval of Meeting Minutes

Francesca Webb, SANDAG

ACTION: APPROVE

The Borders Committee is asked to approve the minutes from its June 27, 2025, meeting.

4. Regional Beach Sand Project III - Phase 1

Courtney Becker, SANDAG, Leslea Meyerhoff, City of San Clemente, and Susan Brodeur, Orange County Parks.

ACTION: INFORMATION

The Borders Committee will be briefed on the draft results of the Feasibility Study and Economic Analysis for the Regional Beach Sand Project III, Phase 1.

5. San Diego Advanced Air Mobility Strategic Implementation Toolkit

Katelyn McCauley, SANDAG

ACTION: INFORMATION

Staff will present the San Diego Advance Air Mobility framework and San Diego Advance Air Mobility Strategic Implementation Toolkit to prepare the San Diego region for the impending technology.

6. Adjournment

The next Borders Committee meeting is scheduled for September 26, 2025, at 1:30 p.m.

July 25, 2025

June 27, 2025, Meeting Minutes

[View Meeting Video](#)

Chair Carolina Chavez (South County) called the Borders Committee meeting to order at 1:30 p.m.

1. Non-Agenda Public Comments/Member Comments

Public Comments: Hernando Duran, Truth, The Original Dra, Blair Beekman, Rudolph McFrazier.

Member Comments: None.

Chief Executive Officer Mario Orso provided an update on agency activities.

Consent

2. Approval of Meeting Minutes

The Borders Committee was asked to approve the minutes from its May 23, 2025, meeting.

Public Comments: The Original Dra.

Action: Upon a motion by Supervisor Joel Anderson (County of San Diego), and a second by Vice Chair Eric Joyce (North County Coastal), the Borders Committee voted to approve the Consent Agenda.

The motion passed.

Yes: Chair Chavez, Vice Chair Joyce, Deputy Mayor Katie Melendez (North County Inland), and Supervisor Joel Anderson (County of San Diego).

No: None.

Abstain: Supervisor Jesus Eduardo Escobar (Imperial County).

Absent: City of San Diego, East County.

Reports

3. Calexico Intermodal Transportation Center

Senior Regional Planner Marisa Mangan, and David Aguirre, Imperial County Transportation Commission, provided an overview of the design and construction of the Calexico Intermodal Transportation Center, a regional mobility hub that will feature bus bays for transit services, Calexico Mobility On-Demand, farm labor buses, taxis, and inter-city or interregional bus services.

Public Comments: Truth, The Original Dra.

Action: Information.

4. United States-Mexico Transborder Pollution Environmental Crisis

Rebeca Boutrous, State of Baja California, and Sally Spener, U.S. International Boundary and Water Commission, provided an overview of recent progress in rehabilitating the San Antonio de los Buenos Wastewater Treatment Plant and the International Wastewater Treatment Plant, with a focus on improving treatment capacity and addressing infrastructure issues that affect the environment and communities on both sides of the border.

Public Comments: Truth, The Original Dra.

Action: Information.

5. Adjournment

The next Borders Committee meeting is scheduled for Friday, Friday, July 25, 2025, at 1:30 p.m.

Chair Chavez adjourned the meeting at 2:50 p.m.

DRAFT

Confirmed Attendance at Borders Committee Meeting

Jurisdiction	Name	Member/ Alternate	Attended
South County	Carolina Chavez, Chair	Member	Yes
	Mitch McKay	Alternate	No
East County	Steve Goble	Member	No
	Lauren Cazares	Alternate	No
City of San Diego	Vivian Moreno	Member	No
	Sean Elo-Rivera	Alternate	No
County of San Diego	Joel Anderson	Member	Yes
	Vacant	Alternate	—
Imperial County	Jesus Eduardo Escobar	Member	Yes
	Luis Plancarte	Alternate	No
North County Coastal	Eric Joyce, Vice Chair	Member	Yes
	Terry Gaasterland	Alternate	No
North County Inland	Katie Melendez	Member	Yes
	Dan O'Donnell	Alternate	No
Riverside County	Colleen Wallace	Member	Yes
	Vacant	Alternate	—
Republic of Mexico	Alicia Kerber-Palma	Member	No
	Gilberto Luna	Alternate	No
Southern California Tribal Chairmen's Association	Raymond Welch	Member	Yes
	Cody Martinez	Alternate	No
Caltrans	Ann Fox	Member	No
	Melina Pereira	Alternate	Yes
San Diego County Water Authority	Steve Casteneda	Member	Yes
	Valentine Macedo, Jr.	Alternate	No
Southern California Association of Governments	David C. Salgado	Member	
	Vacant	Alternate	—
Orange County	Vacant	Member	—
	Vacant	Alternate	—
Association of Planning Groups	Harriet Taylor	Member	No
	Vacant	Alternate	—

July 25, 2025

Regional Beach Sand Project III: Phase 1

Overview

San Diego is internationally recognized for its striking coastline and picturesque beaches, which serve as major drivers of tourism, while also providing essential protection for the region's coastal infrastructure.

SANDAG has led two regional beach nourishment projects in 2001 and 2012 placing a total of 3.6 million cubic yards of sand on the region's beaches (Attachment 1). At the request of the coastal jurisdictions, SANDAG has developed the necessary steps and funding requirements for a third Regional Beach Sand Project (RBSP III).

SANDAG staff will present a summary of the Feasibility Study and Economic Analysis (i.e., planning studies) and highlight the interregional collaboration between Orange and San Diego counties to advance RBSP III. Additionally, representatives from Orange County will present on their local and regional nourishment efforts.

Action: Information

The Borders Committee will be briefed on the draft results of the Feasibility Study and Economic Analysis for the Regional Beach Sand Project III, Phase 1.

Fiscal Impact:

None. The planning studies for Regional Beach Sand Project III have been funded by the ten participating local jurisdictions. Grants are being sought for future phases.

Schedule/Scope Impact:

The final Feasibility Study and Economic Analysis will be completed and made available August 2025.

Key Considerations

- The planning studies covers all eight coastal cities in the San Diego region and two Orange County cities (San Clemente and Dana Point) that are within the Oceanside littoral cell¹ (Attachment 2). Recognizing SANDAG's success in prior beach nourishment efforts, the Orange County cities requested to participate in RBSP III and are providing their fair share of costs to fund the planning studies.
- A total of 5,853,000 cubic yards (CY) is proposed for RBSP III with 4,303,000 CY to be placed on 15 beaches in San Diego and 1,550,000 CY to be placed on 3 beaches in Orange County. Receiver sites and volumes were based upon previous nourishment efforts and jurisdictional input (Attachment 3). In total, the draft estimate for Construction and Post-Monitoring for RBSP III, including hard and soft costs, and contingency, is \$260 million.
- The Economic Analysis Report prepared for RBSP III follows federal standards. The combined Benefit-Cost Ratio (BCR) for RBSP III was 5.7, which is well above the greater than 1 cost effectiveness requirement.
- SANDAG received over 200 comments on the draft Feasibility Study and Economic Report from the participating coastal cities after a 45-day review period. Over the next few weeks, the project team will work on incorporating the comments received and will finalize the report in August.
- SANDAG has applied to the State of California's Division of Boating and Waterways for a Public Beach Restoration grant requesting \$5,525,000 to fund the next phase of the RBSP III,

¹ A littoral cell is self-contained compartment within which sand circulates. The San Diego region has three littoral cells that stretch from Dana Point to the U.S.- Mexico border and referred to as the Oceanside, Mission Bay and Silver Strand littoral cells

Environmental Permitting and Design. SANDAG is also working to get federal appropriations for the U.S. Army Corps of Engineers to investigate expanding their current nourishment efforts to cover more beaches in San Diego and Orange County and to include them in a cycle of nourishment efforts over the next 50 years.

- In late 2024, the five counties of southern California formed the Southern California Beach Sand Collaborative to collaborate on beach nourishment and shoreline management issues from Point Conception to the U.S.-Mexican border. This group has been meeting quarterly to discuss regional challenges, funding opportunities, best practices and coordinated solutions for beach nourishment and shoreline management across Southern California.
- Southern Orange County is engaged in several collaborative beach nourishment and coastal protection projects, including: the USACE Coastal Storm Damage Reduction project and collaboration with the Orange County Transportation Authority (OCTA) to place sand on beaches adjacent to the coastal rail line to add protection from erosion. Furthermore, the 2025 OCTA Grand Jury Report identified that the lack of a hopper dredge on the West Coast is a significant regional challenge that poses a major barrier to timely and cost-effective beach nourishment initiatives.

Next Steps

The final Feasibility Study and Economic Analysis Report will be provided to participating coastal cities in San Diego and Orange County in August 2025. SANDAG will continue to collaborate with its interregional partners to pursue grant funding opportunities and collaborate on shoreline management efforts.

Antoinette Meier, Senior Director of Regional Planning

- Attachments:
1. Got Sand?
 2. Southern California Littoral Cells
 3. Receiver Sites Locations

SANDAG Infobits

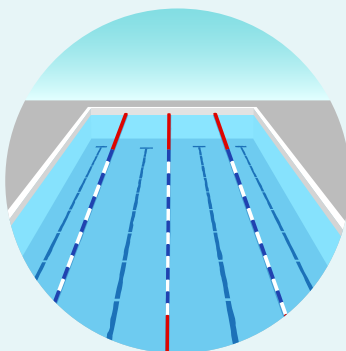
Got Sand? Why Our Beaches Need TLC

July 2020

Did you know?



Coastal erosion, a reduction in sediment from inland waterways, and rising sea levels threaten our region's beaches.



Since 2001, SANDAG has placed approximately **3.6 million cubic yards** of beach quality sand onto our region's beaches. That's enough sand to fill **1,100 Olympic-size swimming pools!**



Sea level rise poses a **threat to our coastal transportation facilities**, including the railroad on top of the Del Mar Bluffs, which could impact the movement of goods and people in our region.

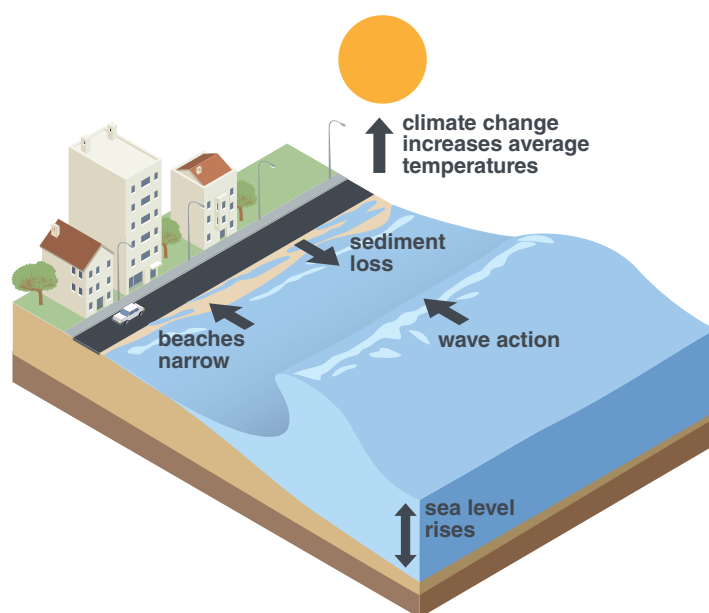
With about 70 miles of coastline, the beaches in the San Diego region are enjoyed by locals and tourists alike. But many people are unaware that policy makers are working to ensure our beaches are maintained and sustainable for years to come.

Why are our beaches at risk? Erosion is a continuous process in which rock, soil, and other materials are worn away and transported by natural forces such as wind and water. California's shorelines are steadily eroding and development has decreased the natural supply of sand that helps to sustain our beaches. Rising sea levels exacerbate this issue and create new threats to the coastline and coastal infrastructure including the second busiest rail corridor in the nation linking San Diego to Los Angeles and San Luis Obispo.

Since the 1980s, the SANDAG Shoreline Preservation Working Group has advised the SANDAG Regional Planning Committee, one of the five SANDAG policy committees that advises the SANDAG Board of Directors.

Thanks to the work of the Shoreline Preservation Working Group, during the last 25 years SANDAG has developed regional sediment management policies, managed an ongoing shoreline monitoring program, and completed several projects to maintain local beaches and coastlines.

Beach Erosion



Key actions include:

- Development of the [Shoreline Preservation Strategy \(1993\)](#) which recommends beach nourishment as the primary shoreline management strategy to address critical erosion areas on the scale of approximately 30 million cubic yards (cy) of sand across the region for initial restoration and nearly 400,000 cy/ year thereafter for maintenance.
- Creation of the [2001 Sand Retention Strategy](#) which concluded that structures that help keep sand on the beach, such as groins, breakwaters, or reefs, have the potential to increase the cost-effectiveness of beach nourishment activities.
- Preparation of yearly beach monitoring reports as part of the [Regional Shoreline Monitoring Program](#). Did you know that most beaches in the San Diego region were at least 20 ft wider prior to the start of the 2015–2016 El Niño than they were before the 1997–1998 El Niño? Wider beaches may have helped to reduce storm impacts in 2015–2016 winter months.
- Implementation of two regional beach sand nourishment projects in [2001](#) and [2012](#) (RBSP I and RBSP II, respectively) that placed a total of 3.6 million cy of sand on badly eroding local beaches.
- Development of the [Regional Transportation Infrastructure Sea Level Rise Assessment and Adaptation Guidance](#) (2020) to examine how sea level rise may impact regional coastal transportation facilities and determine possible ways to adapt to future conditions.



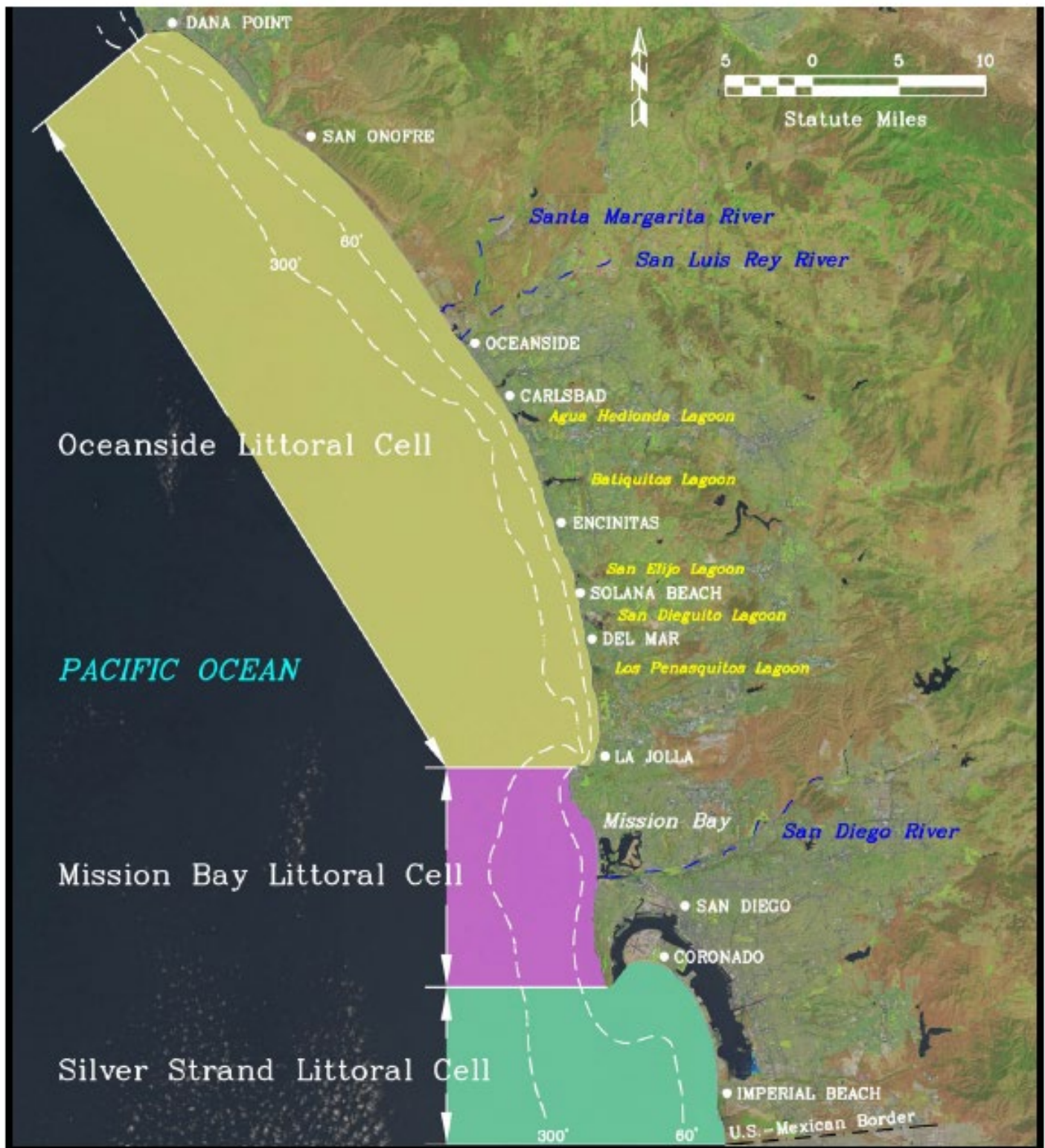
To learn more about the efforts SANDAG and its partners are taking to ensure the region's natural resources are maintained, please visit sandag.org/shoreline

About infobits

SANDAG serves as the region's clearinghouse for information and data. InfoBits publish timely, relevant information informing the public while providing context on complex issues facing the region.

sandag.org

Southern California Littoral Cells



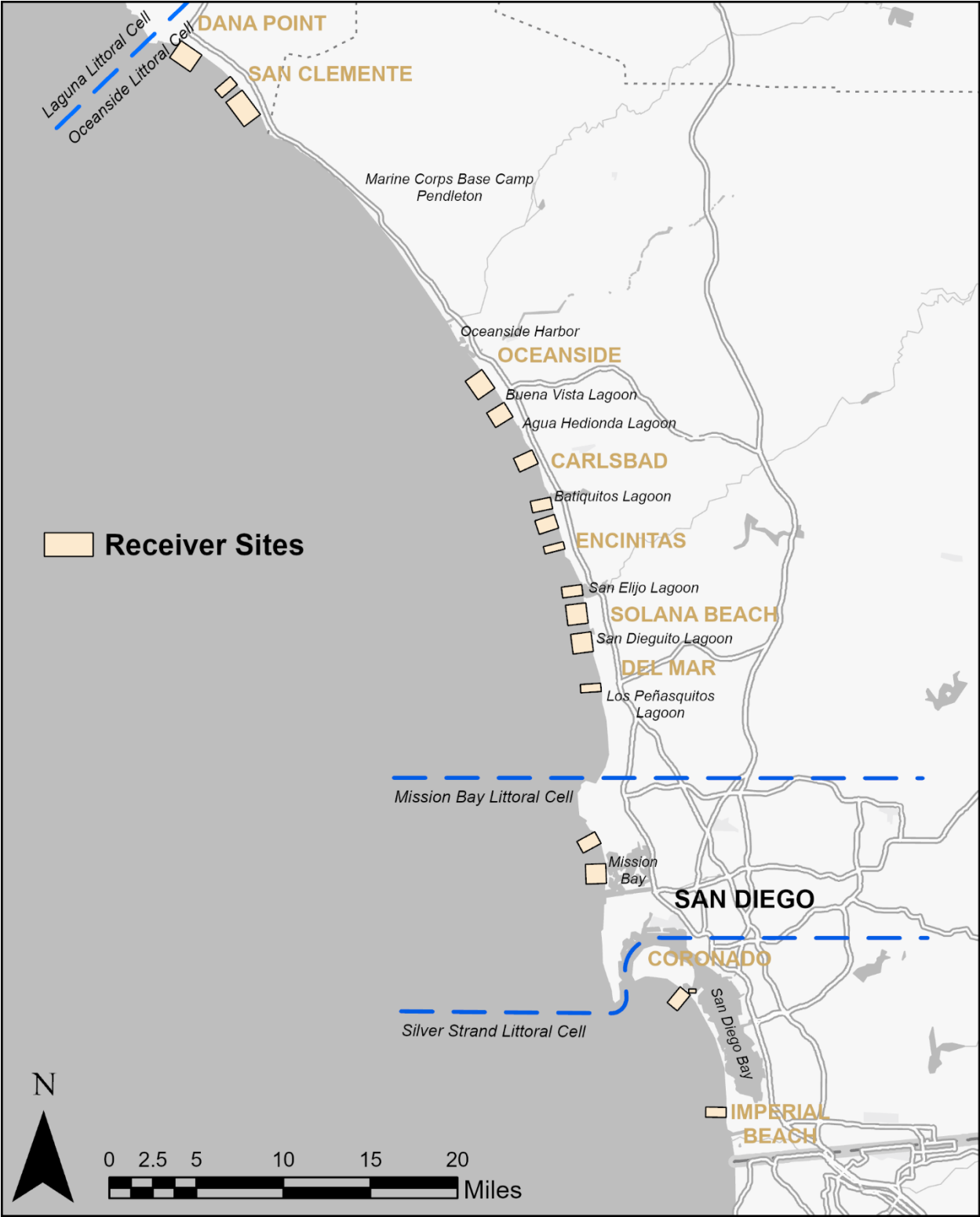


Figure 1-1. Regional Figure



Regional Beach Sand Project III

Phase I – Planning Studies

Borders Committee | Item 4
Courtney Becker, Associate Regional Planner
Leslea Meyerhoff, City of San Clemente
Susan Brodeur, Orange County Park
Friday, July 25, 2025

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Shoreline Preservation Working Group

Since 1980's

Over **22 million visitors** per
year visit the San Diego
region's beach generating over
\$2.4 BILLION per year in
beach spending



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Regional Beach Sand Projects I & II



2001 – Regional Beach Sand Project

- 2.1 million cubic yards of sand
- Cost \$18 million
- Jurisdiction's paid for Planning
- Engineering, Environmental and Construction
 - 60% Federal Funding & 40% State Funding



2012 – Regional Beach Sand Project II

- 1.5 million cubic yards of sand
- Cost \$26 million
- Jurisdiction's paid for Planning
- Engineering, Environmental and Construction
 - 85% State Funding & 15% Local Funding

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Purpose of RBSP III

Regional Shoreline Monitoring Program
est. 1996



Based on the data collected by the Regional Shoreline Monitoring Program

Grandview Street, Leucadia, 2014



Oceanside Blvd, 2014



Grandview Street, Leucadia, 2024



Oceanside Blvd, 2024

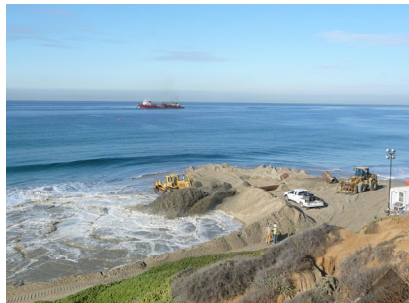


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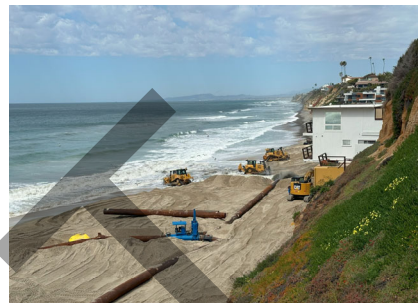
The 3 Stages of RBSP III



Phase I
Planning, Feasibility &
Economic Analysis



Phase II
Engineering & Environmental



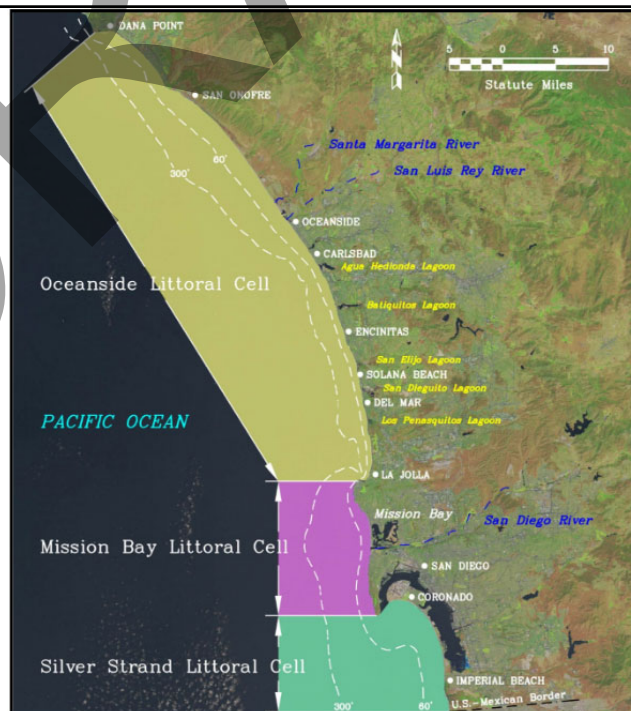
Phase III
Construction & Monitoring

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San Diego and South Orange County Littoral Cells

A littoral cell is self-contained compartment with in which sand circulates.



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Draft Phase I Report Results



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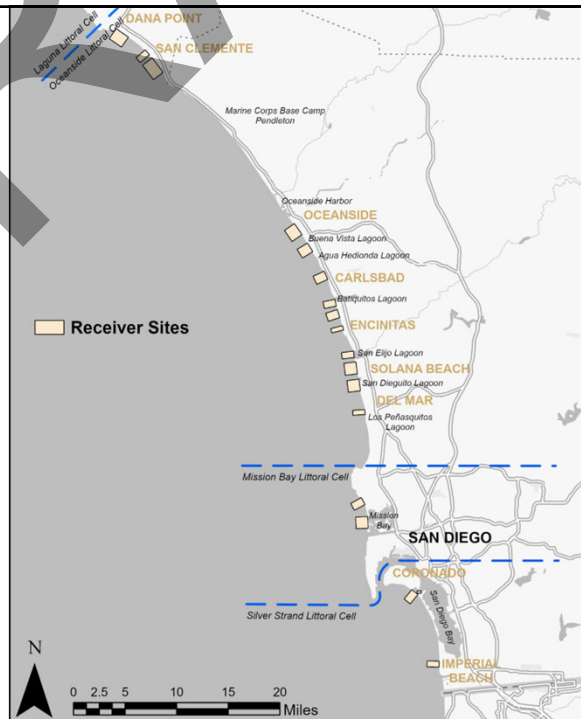
RBSP III Proposed Receiver Sites

San Diego

- 15 Receiver Sites
- 4,303,000 CY

Orange County

- 3 Receiver Sites
- 1,550,000 CY



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Economic Analysis Results

Methodology

- Benefit-Cost Analysis = similar to USACE methodology evaluating economic value of projects by comparing their expected cost and benefits.
- Benefit Cost Ratio (BCR) >1 = Cost Effective

Overall results

- RBSP III BCR = 5.7 (San Diego County BCR = 8.1)
- Nourishing 15 beaches in San Diego will generate **\$1.6 billion** over next **10 years**
- Report concludes, ***“There is a need to maintain San Diego’s beaches to sustain its economy.”***

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Comments - Prevailing Themes

Revisions to proposed footprints for several beaches

To better align with each jurisdiction's shoreline management goals.

Emphasis on RBSP III moving forward as a programmatic project

Perform a programmatic EIR/EIS to reduce costs and streamline environmental clearances.

Consider the impacts to the lagoons that may occur

Lagoon managers should be involved in the design, sand quantity, and placement

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Draft Costs for Construction & Post-Monitoring

Dredge Cost	\$20,400,000
Hard Cost	\$160,186,756
Contingency (35%)	\$63,205,365
Soft Costs	\$5,425,000
Total:	\$260,382,120

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Seeking Grant Funding

DBW Grant for Phase II

- Applied for \$5,252,000
- State Budget FY 2027
- If awarded, 15 % required non-state match

US Army Corps of Engineers (USACE): San Diego & Orange County Investigation – to explore inclusion of all beaches into USACE's existing Coastal Storm Damage Reduction Project's programmatic efforts

- Water Resource Development Act 2024 authorized work
- SANDAG working to include in USACE work plan
- SANDAG provided a Letter of Intent to be the local sponsor
- MOU with participating cities and SANDAG would be required.

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Southern California Beach Sand Collaborative



Comprised of five entities representing:

- Santa Barbara
- Ventura
- Los Angeles
- Orange County
- City of San Clemente
- San Diego County

Mission

- To collaborate and support beach nourishment efforts as a key adaption strategy to address coastal erosion along Southern California's coast

Meeting Frequency

- Meets quarterly

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Next Steps

Address Comments & Finalize Report

June – July 2025

Release the Final Report

August 2025

Continue to Seek Funding for Phase 2

August 2025

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CITY OF SAN CLEMENTE

- City is pleased to be a part of the SANDAG Regional Beach Sand Project III
- City has a critical beach erosion project similar to San Diego County
- Perspective: Regional problems require regional solutions
- Regional collaboration saves significant time, \$\$ and resources for all



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City of San Clemente: Beach Erosion



Cottons Point, San Clemente in 2008 vs. 2021.

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**San
Clemente
& USACE
& State
Parks**

**Beach Sand
Project**

2024



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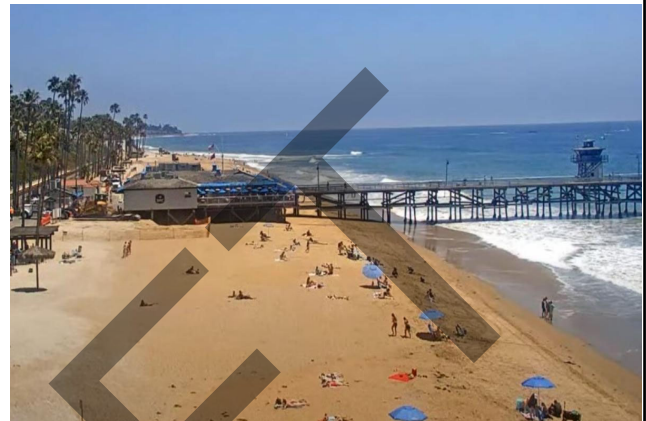


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SAN CLEMENTE & USACE 50-YEAR PROJECT



BEFORE



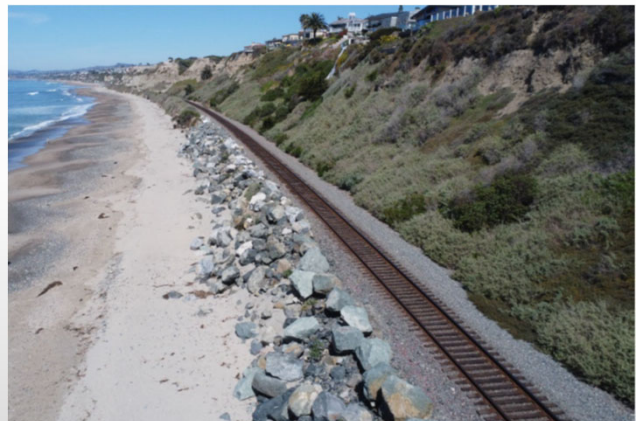
AFTER

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RAILROAD ALONG BACK OF BEACH

- City is working with OCTA to bring in sand to stabilize tracks
- OCTA railroad is a DOD Strategic Defense Rail Corridor
- Connects to NCTD railroad in San Diego County
- OCTA will bring in 540,00 Cubic Yards of sand
- Place in the northern and southern parts of San Clemente
- Long term solution is sand and sand retention structures

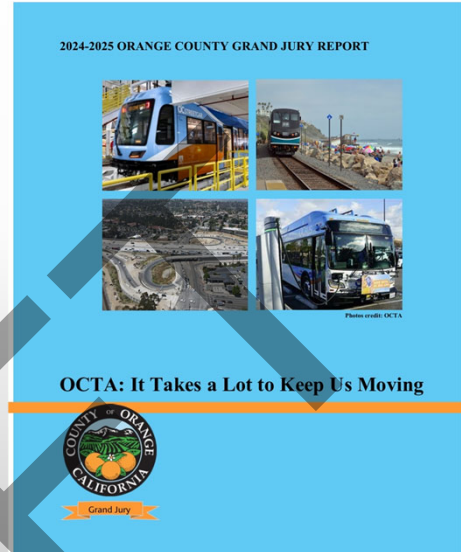


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2025 ORANGE COUNTY GRAND JURY REPORT

- Report Findings: Page 11
- Only one dredger on the West Coast
- Problematic for beach nourishment
 - Cost and Schedule Implications
- OC Grand Jury Report looked at OCTA sand project
- Dredge availability constrains San Diego County and all of Southern California
- Presents a challenge for all of us working to restore public beaches in California



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Project Manager: Courtney Becker



Email: courtney.becker@sandag.org

Phone: (619) 619-6942



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July 25, 2025

San Diego Advanced Air Mobility Strategic Implementation Toolkit

Overview

Advanced Air Mobility (AAM) is a rapidly emerging transportation industry that uses new types of aircrafts – like Electric Vertical Takeoff and Landing vehicles and Small Uncrewed Aerial Systems, commonly known as drones – to move people, goods, and emergency services quickly and efficiently. While the federal government oversees AAM regulations, local and regional planning is critical to make sure the technology supports community needs, integrates with the existing transportation system, and avoids unintended negative impacts.

Action: Information

Staff will present the San Diego Advance Air Mobility framework and San Diego Advance Air Mobility Strategic Implementation Toolkit to prepare the San Diego region for the impending technology.

Fiscal Impact:

None.

Schedule/Scope Impact:

None.

In 2023, SANDAG, in partnership with the San Diego County Regional Airport Authority, launched an effort funded through a Caltrans Planning Grant to develop the San Diego Regional AAM Strategic Implementation Toolkit. At the June 21, 2024 Transportation, Borders, and Regional Planning Committee Joint Session, staff presented an overview of AAM, and the guiding principles developed for this effort. The Toolkit was recently finalized, providing practical strategies for local governments, agencies, and stakeholders to help our region prepare for AAM in a coordinated, community-centered way.

Key Considerations

The Toolkit was created to support communities with preparing for AAM and assessing opportunities for AAM. It identifies operational considerations and use-cases such as addressing accessibility and supply chain gaps for remote and rural areas including Tribal Nations.

The Toolkit emphasizes safety, efficiency, community needs, sustainability, regulatory compliance, and seamless integration with other transportation modes. Some highlights of the Toolkit include:

- **Market and Industry Repository** – A “living” central resource to help planners and technical staff understand current trends, technologies, regulations, and data.
- **Case studies (Ch. 3)** – Explores AAM implementation potential at Brown Field Airport, the Viejas Reservation, and National City to understand how use-cases might serve different types of communities. Provides a replicable and adaptable methodology for evaluating AAM sites and use-cases.
- **Physical Infrastructure (Ch. 4)** – Provides use cases and design standards for AAM infrastructure to help engineers, planners, and technical staff understand the required infrastructure and space to support AAM.
- **Regional AAM Implementation Framework (Ch. 5)** – Step-by-step guidance for local agencies on how to plan for AAM infrastructure, understand regulatory needs, and coordinate with key stakeholders.
- **Outreach and Messaging Tools (Appendix D)** – Strategies to help agencies engage and educate the public about AAM initiatives.

The toolkit highlights considerations for respecting Tribal sovereignty and ensuring Tribes are active participants in AAM siting and routing. The Toolkit also highlights how AAM could benefit Tribal communities through improved cargo delivery and transportation access in rural areas. Appendix E, the AAM Industry & Market Assessment Report, features initial considerations for binational cross-border AAM services, including the extensive coordination and regulatory support that would be needed to support this potential use-case. The tools and key takeaways from this effort provide the groundwork for exploring future interregional, tribal, and border related AAM services.

Next Steps

The Toolkit will be shared with Policy Advisory Committees, working groups, and regional partners. SANDAG will also continue to track AAM industry trends and support the region's readiness for this emerging transportation technology.

Antoinette Meier, Senior Director of Regional Planning



Advanced Air Mobility

Borders Committee | Item 5
Katelyn McCauley, Senior Regional Planner
July 25, 2025



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What is Advanced Air Mobility?

Advanced Air Mobility (AAM) uses new types of aircraft and infrastructure – like electric air taxis and drones – to move people goods and emergency services quickly through the air

Early Deployments:

- Innovate/LA 28
- State of New York
- Choctaw Nation of Oklahoma
- San Diego UAS Integration Pilot Program



Source: Joby Aviation



Source: San Diego Integration Pilot Program – Uber Elevate

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What is the AAM Strategic Implementation Toolkit?

A practical guide to help stakeholders proactively plan for AAM technology, emphasizing:

- Safety
- Efficiency
- Regulatory Compliance
- Community Needs



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Market and Industry Repository

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Industry Assessment

Advanced Air Mobility in San Diego

A review of publications in the AAM Industry from OEMs and existing use cases through to industry guidance and regulations.

A “living”, searchable hub

- Industry reports, technical studies, etc.
- Organized by focus area
- Planners and technical staff

[View Document List](#)

Information by Focus Area

- Community Engagement
- Environment & Sustainability
- Infrastructure
- Commercial
- Regulatory
- Safety
- Technology
- Transport Connectivity
- Workforce Development

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Guiding Principles (Chapter 1)

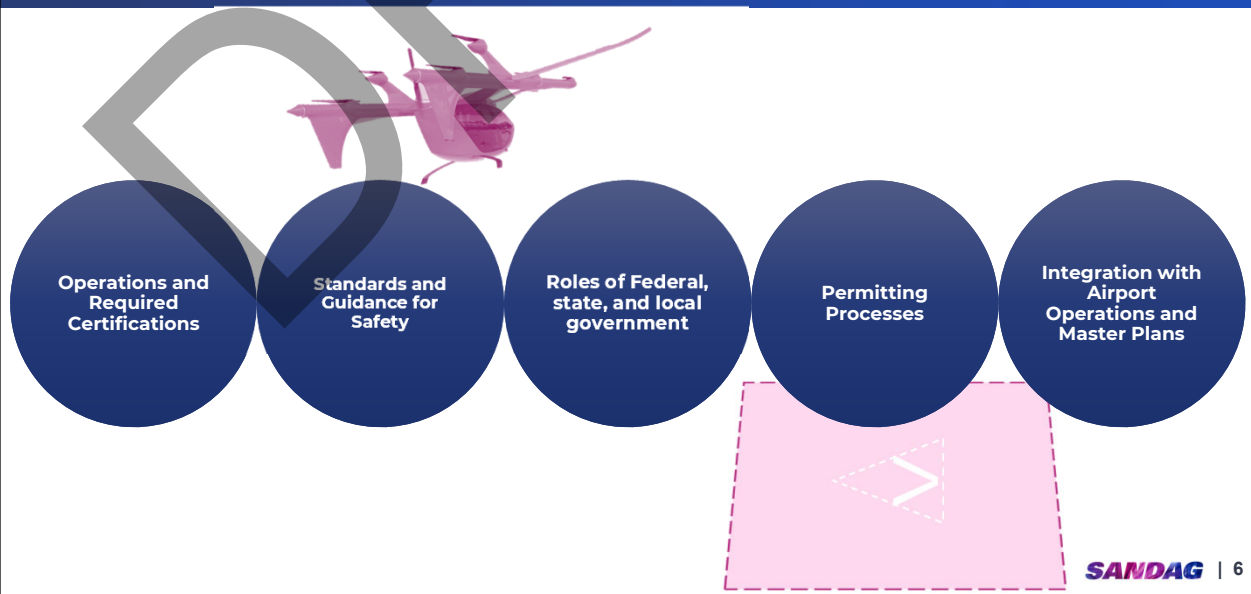
- Developed by a cross-sector Collaborative:
 - Local and Regional Planners
 - Transportation Agencies
 - Tribal Governments
 - Regulatory and Permitting Agencies
 - Industry and Academic Experts
 - Community Based Organizations
 - Public Safety and Emergency Services



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Policy Framework & Strategy (Chapter 2)



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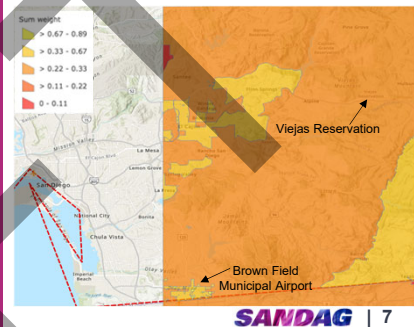
Case Study and Analysis (Chapter 3)

Explores implementation in different types of communities

- Methodology for evaluating potential AAM sites and use cases
 - Quantitative data
 - Inputs from stakeholders
 - Site-specific conditions
- Replicable and adaptable for any jurisdiction or geography in the region
- Different site types support different use cases

Cargo Delivery Use Case

- **Brown Field Airport** | Existing warehouses and infrastructure
- **Viejas Reservation** | Connectivity to tribal and rural regions
- **National City** | Port and rail network enabling multi-modal connectivity



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AAM: Physical Infrastructure (Chapter 4)



Vertiports, Vertistops, and Vertihubs are infrastructure concepts designed to accommodate vertical take-off and landing (VTOL) vehicles.

A “**Vertihub**” would accommodate aircraft as a middle-mile component connecting to last-mile services on the ground.

Chapter 4 of the Implementation Toolkit includes **use cases** and **design standards** for AAM infrastructure.

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Implementation Considerations (Chapter 5)

Long-term vision
for San Diego AAM
integration

Government,
Industry, Academic,
and Community
Stakeholders

Regulatory Needs,
operational risks,
and mitigation

Market Growth
and Economic
Impacts

Phased
Implementation
Roadmap

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Potential Use Case

Remote and rural areas, including Tribal Nations, face **accessibility challenges, longer travel times,** and in some cases, **supply chain gaps.**



AAM and UAS offer an **opportunity to address some of these gaps**, from expanded access to healthcare to goods movement.



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Questions?

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