



CITY OF CARMEL-BY-THE-SEA FOREST AND BEACH COMMISSION AGENDA

Forest and Beach Commissioners Sarah Berling,
Kelly Brezoczky, Tamara Michie, Harry Ross, and
Neal Rutta

All meetings are held in the City Council Chambers
East Side of Monte Verde Street
Between Ocean and 7th Avenues

Regular Meeting
Thursday, November 13, 2025
2:30 PM

Tour 2:00 PM
Meeting 2:30 PM

HYBRID MEETING ATTENDANCE OPTIONS

This meeting will be held in person and via teleconference ("hybrid"). The public is welcome to attend the meeting in person or remotely via Zoom; however, the meeting will proceed as normal even if there are technical difficulties accessing Zoom. The City will do its best to resolve any technical issues as quickly as possible. To view or listen to the meeting from home, you may also watch the live stream on the City's YouTube page at: <https://www.youtube.com/@CityofCarmelbytheSea/streams>. To participate in the meeting via Zoom, copy and paste the link below into your browser.

<https://ci-carmel-ca-us.zoom.us/j/86846676174>

Webinar ID: 868 4667 6174

Passcode: 326560

Join by phone: (253) 215-8782

HOW TO OFFER PUBLIC COMMENT

The public may give public comment at this meeting in person or use the Zoom teleconference module, provided that there is access to Zoom during the meeting. Zoom comments will be taken after the in-person comments. The public can also email comments to yculver@ci.carmel.ca.us. Comments must be received at least 2 hours before the meeting in order to be provided to the legislative body. Comments received after that time and up to the beginning of the meeting will be made part of the record.

TOUR OF INSPECTION

Prior to calling the meeting to order, the Board/Commission will conduct an on-site tour of inspection of the properties listed on the agenda and the public is welcome to join. After the tour is complete, the Board/Commission will begin the meeting in the City Council Chambers no earlier than the time noted on the agenda.

Santa Fe Street 4 Southwest of 4th Avenue, Carmel-by-the-Sea

CALL TO ORDER AND ROLL CALL - CHAMBERS

PLEDGE OF ALLEGIANCE

ANNOUNCEMENTS

PUBLIC APPEARANCES

Members of the public are entitled to speak on matters of municipal concern not on the agenda during Public Appearances. Each person's comments shall be limited to 3 minutes, or as otherwise established by the Chair. Persons are not required to provide their names, however, it is helpful for speakers to state their names so they may be identified in the minutes of the meeting. Under the Brown Act, public comment for matters on the agenda must relate to that agenda item and public comments for matters not on the agenda must relate to the subject matter jurisdiction of this legislative body. If a member of the public attending the meeting remotely violates the Brown Act by failing to comply with these requirements of the Brown Act, then that speaker will be muted.

CONSENT AGENDA

Items on the consent agenda are routine in nature and do not require discussion or independent action. Members of the Commission or the public may ask that any items be considered individually for purposes of Board/Commission discussion and/ or for public comment. Unless that is done, one motion may be used to adopt all recommended actions.

- 1) Public Works October 2025 Directors Report
- 2) Approve Meeting Minutes from October 9, 2025

PUBLIC HEARINGS

- 3) Consider the removal of one Coast live oak tree at Santa Fe Street 4 Southwest of 4th Avenue (Tree Evaluation Permit Application 25-262)

ORDERS OF BUSINESS

Orders of Business are agenda items that require Board or Commission discussion, debate, direction to staff, and/or action.

- 4) Beach Tent Presentation & Discussion

- 5) Carmel Beach Socio-Economic Analysis Report
- 6) Informational Signage Along Carmel Scenic Pathway
- 7) Present Tree Fine Ad-Hoc Committee Initial Implementation Guide
- 8) October 2025 Forester's Report

FUTURE AGENDA ITEMS

ADJOURNMENT

This agenda was posted at City Hall, Monte Verde Street between Ocean Avenue and 7th Avenue, Harrison Memorial Library, located on the NE corner of Ocean Avenue and Lincoln Street, the Carmel-by-the-Sea Post Office, 5th Avenue between Dolores Street and San Carlos Street, and the City's webpage (<http://www.ci.carmel.ca.us>) in accordance with applicable legal requirements.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Forest & Beach Commission regarding any item on this agenda, received after the posting of the agenda will be available at the Public Works Department located on the east side of Junipero Street between Fourth and Fifth Avenues during normal business hours.

SPECIAL NOTICES TO PUBLIC

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office at 831-620-2000 at least 48 hours prior to the meeting to ensure that reasonable arrangements can be made to provide accessibility to the meeting (28CFR 35.102-35.104 ADA Title II).



CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report

November 13, 2025
CONSENT AGENDA

TO: Forest and Beach Commission

SUBMITTED BY: Ken Wysocki, Director of Public Works

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Public Works October 2025 Directors Report

RECOMMENDATION:

Review the Public Works October 2025 Directors Report

BACKGROUND / SUMMARY:

This document is the City of Carmel-by-the-Sea Public Works Director's Report for October 2025, prepared for the Mayor and City Council. It serves as a high-level monthly departmental summary, highlighting ongoing and upcoming activities across Public Works divisions — including environmental programs, facilities and street maintenance, forestry operations, and capital project management.

The report provides a snapshot of departmental progress, coordination efforts, and upcoming council actions, such as project and infrastructure updates, RFP releases, environmental initiatives, and facility maintenance. It functions primarily to inform city leadership of operational status, key milestones, and pending items for Council review or public engagement.

FISCAL IMPACT:

None

ATTACHMENTS:

1. Public Works Director's Report October 2025



CITY OF CARMEL-BY-THE-SEA

Public Works Department October 2025 Report

TO:	Honorable Mayor and City Council Members
SUBMITTED BY:	Ken Wysocki, Public Works Director
SUBMITTED ON:	October 2025

Public Works Director

- RFP for PW/PD Architectural Services to be released the week of November 3rd.
- Council approved the purchase of a new bucket truck for the Forestry team. Expected delivery Summer of 2026.

Environmental Programs

- North Dunes Project:
 - Ice Plant Removal Ongoing: Coordinating all-staff work day and providing additional task orders for contractors to remove plants.
 - Renewing 5-year Coastal Development Permit (CDP 16-315); Forest & Beach Commission review June 2026, Planning Commission review July 2026 and approval expected September 2026.
- Carmel Beach Sea Level Rise/Adaptation Project:
 - Presenting the Socio-Economic Report to Forest & Beach Commission in November 2025.
 - Will conduct a Community Meeting in January 2026.
 - Will present the Adaptation Pathway Report to Planning Commission and Forest & Beach Commission (joint meeting) in January 2026.
- Stormwater:
 - Applied Marine Science has sampled stormwater during the recent storms for ASBS sampling/report. We will receive the results shortly.
 - Monterey Sanctuary Foundation performed dry weather sampling at stormwater outfalls in September.
 - Submitted our RWQCB Annual Report October 2025.
 - Winter stormwater construction inspections have started to ensure BMPs are in place for rainy season.
 - Restaurant stormwater inspections to begin in November 2025; ensuring proper management of grease traps, dumpsters, and wash waters.
- Waste Management:
 - Franchise Agreement MOU (ReGen +Member Agencies) approved by City Council.
 - CalRecycle grant submitted for the refillable water station at Devendorf bathrooms.
- Copper Gutter Policy
 - Copper Gutter Policy review to the City Council in November 2025.

Facility Maintenance

- First Murphy House: getting quotes for dry rot repairs.
- Fire Station upgrade to accommodate a new Fire Truck: currently approved construction contractor was unresponsive, will go to Council in November to approve the next contractor.
- RFP for Citywide Janitorial Services to be released the week of October 20th.
- ADA: Working on design to install a handrail on the steps at Devendorf park along Ocean Ave.

Street Maintenance

- Seeing an increase in dead seals along the beach; teams have been removing per protocol.
- Staff have been installing 16 new stop signs throughout the city as approved by the TSC.
- Removed large pile of fire fuel at MTNP.
- Setting up public sandbag station at Vista Lobos
- Street sweeper in the shop for repairs; expected a 5-7 day turnaround.
- Received sidewalk assessment from Precision Concrete Cutting. Requesting Council approval in November for contracting with Precision to surface-cut 6,572 LF of sidewalks for safety.
- Repairing rock drainage channel along Lincoln & 4th and building a rock lined flow along Santa Fe and 9th.

Project Management for the Capital Improvement Program

- Council approved a Professional Service Contract for Project Management & Construction Management with Ausonio for various CIP facilities projects.

Moffit & Nichols:

- Beach Stairs: Received like for like design documents. Reviewed design and provided recommended edits; anticipate updated drawing by November 20th.
- 4th Ave Outfall Design Concepts: concept sketches will be provided to staff by Nov 10th

Wallace Group Projects:

- Shoreline Infrastructure Repair Projects: provided engineering review of the beach stairs and facilitating the 4th Ave outfall and Sand Ramp design concepts. Will pick up the pace on Shoreline CIP projects.

Additional Capital Improvement Projects:

- City-Wide Conglomerate Paving Project: Sending Notice to Proceed out October 30th, with an anticipated start date of November 10th and estimated completion of March 2026.
- Vista Lobos Panel Upgrade & EV: Project planning is now active; coordinating with PG&E.
- Dolores Street Main Replacement (8th to Ocean): CalAM to install water main. Project has not started yet.
- CAWD (Scenic): will be installing new infrastructure. Work began in the County, and work in Carmel is scheduled for December/January to minimize impact to City.

Forestry, Parks, and Beach

- Forest Master Plan: Held a successful steering committee in October. Staff (and Nikki Nedeff) are working on suggested edits. Will send the committee the updated draft for review before we begin the CEQA process (which will include public input). Additionally will post more information on the city website (e.g. Nikki's draft, etc.)
- Reminder:
- Refer to City Forester's Report.



**CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report**

**November 13, 2025
CONSENT AGENDA**

TO: Forest and Beach Commission

SUBMITTED BY: Yvette Culver, Administrative Coordinator

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Approve Meeting Minutes from October 9, 2025

RECOMMENDATION:

Approve Meeting Minutes from the October 9, 2025, meeting

BACKGROUND / SUMMARY:

FISCAL IMPACT:

ATTACHMENTS:

1. FB Meeting Minutes October 9-2025 -FINAL-JO

**FOREST AND BEACH
REGULAR MEETING
Thursday, October 9, 2025**

CALL TO ORDER AND ROLL CALL

PRESENT: Berling, Brezoczky, Michie, Ross, Rutta
ABSENT: None
STAFF PRESENT: Ken Wysocki, Public Works Director
Justin Ono, City Forester
Rene Aldama, Acting Assistant City Forester
Mary Bilse, Environmental Manager
Yvette Culver, Commission Secretary/Administrative Coordinator
Val Gaino, Environmental Analyst

PLEDGE OF ALLEGIANCE

Chair Michie led the public in the Pledge of Allegiance

ANNOUNCEMENTS

Director Wysocki announced that Javier Hernandez has accepted a position with the City of Hollister as the City Engineer, and we wish him well and thanked him for his time with Carmel.

The city has hired another Project Manager, Shari Carlet. MS. Carlet has a much previous experience working with different with the most recent being the City of Palo Alto as well as Gilroy and San Jose.

The Forest Master Plan timeline has been done over several years which began in late 2021, along with Davey Resource Group who has done a citywide inventory which formed the backbone of this plan. Everything that you have contributed to with our continued engagement and focus on results, we can complete and implement this plan on schedule preserving Carmel's iconic forest for generations to come.

PUBLIC COMMENT

Melanie Billig
Cindy Lloyd
Linda Smith

CONSENT AGENDA

2. Approve the Meeting Minutes of August 7, 2025, meeting

Commissioner Ruta moved to approve the Meeting Minutes for August 7, seconded by Commissioner Ross, and carried by the following roll call vote:

AYES: Berling, Brezoczky, Michie, Ross, Rutta
NOES: None
ABSENT: None
ABSTAIN: None

ORDERS OF BUSINESS

3. Presentation by Denise Duffy & Associates on Year 9 Annual Monitoring Report for the North Dunes Habitat Restoration Project (CDP16-315), Fiscal year 2024-2025.

Environmental Manager Mary Bilse introduced John Wanke, Senior Scientist, with Denise Duffy and Associates. Mr. Wanke presented the staff report of the North Dunes Habitat Restoration Project, Mr. Wanke and Ms. Bilse answered questions of the Commission.

The North Dunes encompass approximately eight acres of Environmentally Sensitive Habitat Area (ESHA), rising from Carmel Beach to an elevation of 100 feet. The area is bounded by Ocean Avenue to the south, San Antonio Avenue to the east, and residential properties off Fourth Avenue to the north. The coastal dune system includes five distinct habitat types that support numerous native species, including two special-status species: the California legless lizard (*Anniella pulchra*) and Tidestrom's lupine (*Lupinus tidestromii*).

Over the years, uncontrolled public access and the spread of non-native invasive species have degraded these important habitats. To address these impacts, the city initiated the North Dunes Habitat Restoration Program in October 2016 under a five-year Coastal Development Permit (CDP 16-315) approved by the California Coastal Commission.

In August 2021, the Planning Commission adopted Resolution 2021-045-PC approving Page 9 of 53 a five-year renewable extension of the CDP, extending the authorization for restoration activities through August 2026.

Restoration work was led by Joey Dorrell-Canepa of Native Solutions from Fiscal Year (FY) 2016-17 through FY 2022-2023. In FY 2023-24, Native Solutions contracted with the City to manage volunteer activities and conduct pesticide applications in the North Dunes area. In August 2023, Denise Duffy & Associates (DD&A) was contracted by the City of Carmel-by-the-Sea to provide environmental planning and natural resource management services for the North Dunes Habitat Restoration Project.

As part of its Professional Services Agreement, DD&A prepared the Year 9 Annual Monitoring Report (Report), which summarizes habitat restoration, maintenance, and monitoring activities conducted during FY 2024-25. The Report also outlines planned activities and deliverables for Year 10 (FY 2025-26).

During Year 9, restoration work was primarily coordinated and implemented by City of Carmel Public Works staff, the City's landscape contractor, Native Solutions, and various volunteer groups. Activities included manual removal of invasive plants, trash removal, and ongoing fence and trail maintenance. City staff conducted Acacia trimming and removal, invasive non-native plant (including ice plant and narrow-leaf ice plant) removal, and proper off-haul and disposal of non-native vegetation.

PUBLIC COMMENT

None

4. Present the Tree Fine Ad-Hoc Committee Scope of Work

Justin Ono, City Forester, presented the Staff Report and answered questions from the Commission.

Forest and Beach Commission Ad-Hoc Committee Scope of Work:

1. Tree Protection Fines

Purpose: Tree Fine Schedule Review and Revision

Create an updated and enforceable Tree Protection Fine Schedule

- Update tree-related codes and fine structures to support proactive forest management and accountability
- Review existing tree removal and damage fines
- Compare with the best regional practices
 - Propose updated fine structures for:
 - Unauthorized tree removal, pruning or topping.
 - Construction tree damage or death ◦
 - Failure to comply with replanting requirements
 - Residential and City owned tree violations
- Include escalation for repeat offender

Deliverables:

- Revised Tree Violation Fine Schedule
- Tree Protection Enforcement Codes

PUBLIC COMMENT

Melanie Billig

5. Receive a Presentation of the August and September 2025 Forester's Report

Mr. Ono introduced Rene Aldama as the Acting Assistant City Forester. Mr. Aldama has many years of forestry experience and is also a certified arborist. He has already helped the Forestry Division immensely, specifically in increasing the pace and scale of our planting and replanting efforts. Please join me in congratulating Rene Aldama on this new role.

Mr. Ono presented the Foresters Report to the Commission for August and September 2025 and answered questions of the Commission.

Forestry, Parks, and Beach Highlights:

Carmel Forest Master Plan (CFMP):

- The first draft of the plan was distributed to the Steering Committee in advance of the public meeting scheduled for the 3rd week of October.

Contractors:

- The first two task orders were issued to Community Tree Service and Topes Tree Service for the removal and pruning of 71 trees.
- Work began on the City's Fire Defense Plan and West Coast Arborists performed fire clearance work along Santa Lucia between Rio and San Antonio.

- Also, for fire defense, Topes Tree Service pruned Mission trails for vehicle clearance and removed multiple dead and hazardous trees.
- Topes also cleaned up poor pruning cuts from a Comcast subcontractor, at various locations Mission, Dolores, Monte Verde 10th and 11th Ave, the costs will be billed to Comcast.
- Landscape Contractor Town & Country began watering of young newly planted trees. • In Devendorf Park, Town and Country installed two new irrigation valves and replaced the irrigation control box with a more modern model.

City Staff and Crews:

- Maintenance Worker Rene Aldama was officially given the role of Acting Assistant City Forester and has been helping administrate the division for the past month.
- City Forestry Crew removed 19 dead, dying, or invasive trees, planted 17 trees, and pruned 76 trees, providing clearance for roads and stop signs, as well as maintaining tree health.
- City Tree Crew continued to pick up logs in the right of way that were left from several large PG&E tree removals

PUBLIC COMMENT

None

DIRECTORS REPORT

6. Public Works Directors Report for September 2025.

Director Wysocki presented the Directors Report and answered questions of the Commission.

PUBLIC COMMENT

Melanie Billig

FURURE AGEND ITEMS

Winter preparation for the beach
Beach signage

ADJOURNMENT

Respectfully submitted,

Yvette Culver, Administrative Coordinator, Commission Clerk

Approved by:

Tamara Michie, Chair



CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report

November 13, 2025
PUBLIC HEARINGS

TO: Forest and Beach Commission

SUBMITTED BY: Justin Ono, City Forester

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Consider the removal of one Coast live oak tree at Santa Fe Street 4 Southwest of 4th Avenue (Tree Evaluation Permit Application 25-262)

RECOMMENDATION:

Per recommendation of structural engineer, approve the removal of one Coast live oak tree.

BACKGROUND / SUMMARY:

The applicant, Mr. Patrick LeMaster submitted a Tree Evaluation Permit Application (**Attachment 1**) to remove one double stemmed 11+13-inch diameter Coast live oak tree on private property due to concerns that the tree is damaging the adjacent house. See **Attachment 2** for the Site Map.

The City Forester assessed the tree and found the tree to be healthy and in relatively good condition, albeit growing at an odd angle and visibly damaging the home's foundation in question. He recommended that the Applicant obtain a Structural Engineer's report, and that the oak be approved for removal only if there are no reasonable long-term architectural or engineering remedies for the situation. In prior situations where an otherwise healthy tree appears to be causing structural damage to an adjacent building, the Commission has authorized removal of the tree without further detailed architectural or engineering evaluations if there are obvious signs of structural damage or the property owner has provided compelling documentation of damage to the building resulting from the adjacent tree.

The Applicant submitted a report from a structural engineer (**Attachment 3**) prepared

by Professional Engineer Derek Bonsper, who concluded the tree damaged the home. He noted that the tree was very close (22-inches) from the home and the building's foundation was visibly damaged by the tree's roots expanding under the house. The Engineer concluded the tree needed to be removed due to the current and future damage to the home caused by the tree's growth.

Carmel Municipal Code Section 17.48.070 authorizes the Forest and Beach Commission to approve the removal of trees that are causing "substantial damage to a building that cannot readily be repaired or alleviated on a long-term basis, through minor reasonable building modifications."

Per Carmel Municipal Code Section 17.48.080:

Tree Density Chart for property of 4,000 square feet		
	# of Upper Canopy	# of Lower Canopy
Recommended:	3	1
Currently:	1	7
If removal(s) is/are approved:	1	6

There appears the density of the site meets recommendation and no replanting is advised at this time.

The Applicant was notified of their opportunity to speak at the Public Hearing.

ENVIRONMENTAL EVALUATION:

This action does not constitute a project within the meaning of the California Environmental Quality Act under Public Resources Code Section 21065. It has no potential to cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and, therefore, does not require environmental review.

FISCAL IMPACT:

Should the tree be approved for removal, all costs will be at the Applicant's expense. Should the Applicant be required to plant an additional tree(s) on the private property, the Applicant will pay the cost of the replacement tree(s).

ATTACHMENTS:

1. Attachment 1 - Tree Evaluation Permit Application and Pictures
2. Attachment 2 - TR 25-262 Site Plan
3. Attachment 3 - Structural Engineer's letter



APPLICATION FOR TREE EVALUATION, PRUNING, OR REMOVAL PERMIT

CITY OF CARMEL-BY-THE-SEA
P.O. BOX "CC"
Carmel-by-the-Sea, CA 93921
(831) 620-2070

Date Received: _____
Fee: \$ _____
Permit ID #: _____

Address of tree/property: _____

Assessor's Parcel Number (APN): _____

Is this application for purposes of construction?* Yes No If yes, associated planning permit ID #: _____

*Applications without construction purposes do not require an arborist's report.

Ownership of tree(s) (select all that apply): Private City Unsure Shared/split

Is the Applicant the... Property Owner Neighbor Tree Company Other: _____

Applicant Information:

Property Owner Information (if different from Applicant):

Name: _____

Name: _____

Mailing Address: _____

Mailing Address: _____

Email: _____

Email: _____

Phone: _____

Phone: _____

The applicant **MUST** note the quantity, size, and species of tree(s) in **EACH** of the following categories:

For Evaluation: _____

For Pruning*: _____

For Removal: _____

*Please include the quantity and estimated size of branches or roots for pruning.

Reason for pruning or removal: _____

Who will be pruning or removing: _____

For evaluations only:

Would you like to be present at the time of evaluation? Yes No

I consent to the City issuing a tree pruning or removal permit based on the result of the evaluation.* _____

*Additional fees may be due for the issuance of a pruning or removal permit.

(Property Owner Initials)

A site plan **MUST** accompany this application. The site plan must:

1. Include the outline of the property and footprint of any structures, label surrounding streets, and include North arrow.
2. Identify location(s) and species of:
 - ...all trees on the private property (if request involves privately-owned trees).
 - ...all trees in the Public Right of Way adjacent to the property (if request involves City-owned trees).
3. Identify the tree(s) requested for evaluation, pruning, or removal.

Optional: Photo of tree(s)

No work is permitted until a permit has been issued to you. The approved permit **MUST** be posted in a conspicuous location in the adjacent public right-of-way prior to beginning work and must remain posted for the entire duration of the work.

Applicant Signature: _____

Date: _____

Property Owner Signature*
(if different from Applicant): _____

Date: _____

*If the tree(s) is/are privately owned, the property owner's signature **MUST** be provided.

INCOMPLETE APPLICATIONS WILL BE REJECTED.



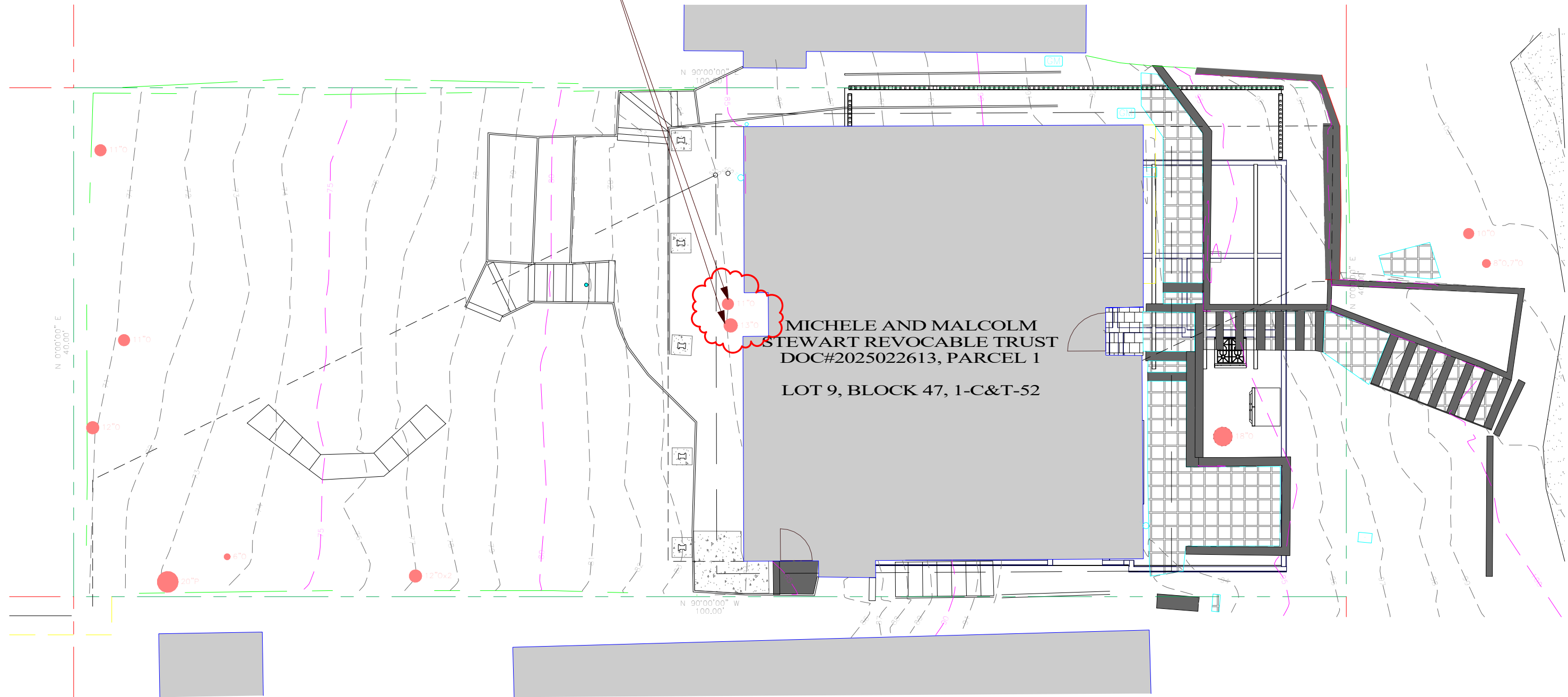








2 STEM OAK TREE
PROPOSED TO BE
REMOVED.



September 22, 2025



Engineering
P.O. Box 831
Carmel Valley, CA 93924
(831)-659-3825 office
(831) 920-7933 cell

Attn: City of Carmel-by-the-Sea
Forestry Division, Department of Public Works

Re: Stewart Residence
Santa Fe, 4 SW of 4th.
Carmel-by-the-Sea, CA 93921

Duckbrew Job #:2025-OFC

We performed a site visit at the address referenced above to observe the possible impact of an oak tree on the foundation of a two-story single-family residence. The tree is approximately 18 inches in diameter and the base of the trunk is 22" away from the foundation. The root system of the tree clearly extends below the foundation of the residence. Upon inspection of the crawl space, we observed two significant cracks in the crawl space slab directly in line with the tree. It is our opinion that the roots have created these cracks by exerting an upward heaving pressure against the slab. We also believe that the tree roots will keep growing both in diameter and length. therefore, jeopardizing the structural integrity of the existing foundation walls and footings. Due to the potential structural damage, we recommend the removal of the tree to preserve the structural integrity of the foundation.

If you have any questions, or comments regarding this letter, please call us at: **(831) 659-3825**, Monday-Friday, 9AM-6PM.

Best regards,

Derek Bonsper, Director of Engineering
Duckbrew Inc., C 56450





CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report

November 13, 2025
ORDERS OF BUSINESS

TO: Forest and Beach Commission

SUBMITTED BY: Valerie Gaino, Environmental Analyst

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Beach Tent Presentation & Discussion

RECOMMENDATION:

Receive information on the use of non-permanent structures or "tents" on Carmel Beach, per Forest and Beach Commission request

BACKGROUND / SUMMARY:

Per Commissioner's request, staff has reviewed and compiled available information pertaining to the use of tents on Carmel Beach.

Relevant Municipal Code Sections

CMC Chapter 12 – Conduct on Public Property

Section 12.32 (Definitions) defines *public property* as:

“Any publicly owned property within the City, and shall include all parks, **beaches**, sidewalks, curbs, and all parts of any public right-of-way devoted to planting, forest or park-like use.”

CMC Section 17.07 – List of Definitions

Defines Non-permanent Structures as:

“Non-permanent structure includes, but are not limited to, seating, perimeter fencing, vendor **tents** or canopies, judging stands, portable toilets, sound or video equipment, stages, platforms, movie or film sets, etc., which do not involve grading or landform alteration for installation.”

There are two additional sections of the CMC that reference the use of tents:

CMC Chapter 12.36.010 – Camping on Public Lands

“It is unlawful for any person to camp, or to place, erect, or maintain any tents, house trailers, mobile homes, campers, or any other camping facilities of any kind whatsoever on any public property of this City. It is unlawful for any person to sleep out of doors on any public property, including City parks and beachlands, between the hours of sunset and sunrise”.

(Ord. 280 C.S. § 1, 1972; Ord. 226 N.S. § 1, 1956; Ord. 72 N.S. § 1, 1947; Code 1975 § 639.6)

CMC Chapter 12.32.060 – Erection of Structures

“It is unlawful to construct or erect any building or structure of whatever kind, whether permanent or temporary in character, any tent or fly or windbreak, or to run or string any rope, cord, or wire into, upon, or across any public property, except on permit issued by the City Council”.

(Ord. 256 C.S. § 3, 1971; Code 1975 § 697.02(a)(4))

General Plan and Coastal Land Use Plan

The General Plan and Coastal Land Use Plan do not specifically reference tents. The closest reference is Policy P4-51, which prohibits overnight camping on the beach.

City Website Information

Information about the beach regulations is provided on the City’s Beach Rules and Beach Events webpages. The Beach Rules page describes campfire prohibitions and several other rules. It does not mention tents or umbrellas. On the Beach Events page you will find the following relevant questions and answers:

[Do I need a permit?](#)

- You will need a permit if you have service providers (i.e. caterer, event/wedding coordinator, officiant, photographer – anyone you are paying to provide a service) regardless of how many people are attending your event.
- You will need a permit if you have more than 75 people.
- You will need a Coastal Development Permit through the Planning Department if you have over 100 people (including all event staff).

[Can I have a tent or an arch?](#)

Tents, canopies, arches or similar structures are considered temporary structures and are not permitted on Carmel beach. If you need shade, please use umbrellas.

City and Police Department Protocol

Leslie Fenton, Communities Activities Executive Assistant, manages event permits. Currently, one 10x10 tent (such as a pop-up or farmer’s market tent) is allowed for permitted events. Larger city events, such as the Surf About and Sandcastle Contest,

may be allowed more than one 10x10 tent.

Police Chief Trayer, consistent with the approach of former Chief Tomasi, has confirmed his commitment to investigating and removing tents or tent-like structures intended for habitual or semi-permanent living. However, the Police Department will not restrict a beach goer's right to use shade structures under the current code interpretation, as the right to shade is recognized as a health and safety matter.

California Coastal Commission

According to a general internet query, the California Coastal Commission's stance is that daytime beach tents are generally allowed, as long as they comply with local regulations. These may include size limits and requirements for visibility to ensure tents do not block public access or coastal views. The Commission's primary mandate is to maximize public access to the coast and protect it for recreational use.

Interpretations of “Tents” and “Umbrellas”

Research on the top beach umbrellas for 2025 yields search results that picture a variety of umbrellas, some of which could be described as tents. See sites:

- <https://www.travelandleisure.com/best-beach-umbrellas-7497881>
- <https://www.nytimes.com/wirecutter/reviews/best-beach-umbrella-is-not-an-umbrella/>

Staff Recommendation:

Staff recommend that the Forest and Beach Commission receive the report and provide comments or direction, if desired, regarding the interpretation and application of City codes and policies related to the use of tents and shade structures on Carmel Beach.

FISCAL IMPACT:

None

ATTACHMENTS:

1. Beach Tent Rules & Regulations Presentation



City of Carmel-by-the-Sea

Beach Tent Rules & Regulations Presentation

Forest and Beach Commission Meeting
November 13th, 2025



Carmel Municipal Code

CONDUCT ON PUBLIC PROPERTY

Chapter 12.32 Definitions

A. For the purpose of this chapter, the term “public property” means any publicly owned property within the City, and shall include all parks, **beaches**, sidewalks, curbs, and all parts of any public right-of-way devoted to planting, forest or park-like use.

17.07 List of Definitions

Nonpermanent Structures. Include, but are not limited to, seating, perimeter fencing, vendor **tents** or canopies, judging stands, portable toilets, sound or video equipment, stages, platforms, movie or film sets, etc., which do not involve grading or landform alteration for installation.



Carmel Municipal Code

12.36.010 Camping on Public Lands.

Public place” means any public property, improved or unimproved, including but not limited to parks, outdoor recreation areas, public parking lots and private parking lots open to the general public, publicly owned drainage culverts and basins, and publicly maintained landscaped areas. “Public place” also includes any public right-of-way, and includes any public streets, sidewalks, alleyways, or passageways that are open to vehicular, bicycle or pedestrian traffic.

12.32.060 Erection of Structures.

It is unlawful to construct or erect any building or structure of whatever kind, whether permanent or temporary in character, any tent or fly or windbreak, or to run or string any rope, cord, or wire into, upon, or across any public property, except on permit issued by the City Council. (Ord. 256 C.S. § 3, 1971; Code 1975 § 697.02(a)(4)).



Beach Event Rules

Community Activities Beach Event Protocol

Do I need a permit?

You will need a permit if you have service providers (i.e. caterer, event/wedding coordinator, officiant, photographer – anyone you are paying to provide a service) regardless of how many people are attending your event.

You will need a permit if you have more than 75 people.

You will need a Coastal Development Permit through the Planning Department if you have over 100 people (including all event staff).

Can I have a tent or an arch?

Tents, canopies, arches or similar structures are considered temporary structures and are not permitted on Carmel beach. If you need shade, please use umbrellas.



Coastal Commission

The California Coastal Commission's stance is that **daytime beach tents are generally allowed**, as long as they comply with local regulations, which may include size limits and requirements for visibility to ensure they don't block public access or views.

However, the Commission's primary mandate is to maximize public access to the coast and protect it for recreational use, so large or permanent tents may be restricted.

Overnight camping is generally prohibited on most beaches, but some state or county beaches allow it with a permit.



Carmel Police Protocol

Carmel Police Department Protocol

- Transient camps
- Intended use: permanency, semi-permanency, temporary shade use
- Right to shade (health & safety)
 - PD: Will remove tent encampments, will not restrict beach goers right to shade.



Umbrella or Tent?





Umbrella or Tent?





Forest & Beach Discussion





CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report

November 13, 2025
ORDERS OF BUSINESS

TO: Forest and Beach Commission

SUBMITTED BY: Valerie Gaino, Environmental Analyst

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Carmel Beach Socio-Economic Analysis Report

RECOMMENDATION:

Receive a presentation by consultants, Integral Consulting Inc., on the Carmel Beach Socioeconomic Analysis Report referencing Carmel Beach Visitor Cell Phone Data and Coastal Hazards and Sea Level Rise Adaptation Survey Results

BACKGROUND / SUMMARY:

The Carmel Beach Socioeconomic Analysis Report is part of the City of Carmel-by-the-Sea Coastal Engineering and Adaptation Project. The report provides an overview and synthesis of two different approaches to understanding the socio-economic conditions, beach visitor demographics, and sea level rise adaptation preferences of the community; the first being the Coastal Hazards and Sea Level Rise Adaptation Survey (Survey), and the second an analysis of the Carmel Beach visitation patterns using a novel cell phone data set to provide broader context for understanding the non-market value of beach recreation.

The presentation will review the key highlights from the results of the Survey that the Forest and Beach Commission and Staff helped refine over several months in 2024/2025. Consultants will also present the results of the cell phone data on visitation patterns collected using Placer.ai. Finally, they will explain the strategy used to give a non-market economic value using a Travel Cost Model (TCM) for a “Day-at-Carmel Beach”.

Understanding these socioeconomic factors helps inform the City on community

preferences for adaptation approaches, and substantiates the need for regional engagement and funding, which will be further refined in Phase 2, Task 4, Adaptation Pathways. In the Adaptation Pathways Report (scheduled to be presented to the City in January 2026), these findings will guide assessment of the feasibility and equitability of different funding and financing options, such as tourism taxes and other creative strategies that can be used to fund adaptation measures.

Prior Action

On January 16th, 2025, Staff presented the revised and final version of the Community Engagement Survey (Coastal Hazards and Sea Level Rise Adaptation Survey).

FISCAL IMPACT:

None

ATTACHMENTS:

- 1. Carmel Socioeconomic Analysis Report_w_Appendicies_Sep_2025_DRAFT

Carmel Beach Socioeconomic Analysis

Visitation Patterns and Recreational Valuation

Prepared for
City of Carmel-by-the-Sea
Public Works
P.O. Box CC
Carmel-by-the-Sea, CA 93921

Prepared by



Integral Consulting Inc.
200 Washington Street
Suite 201
Santa Cruz, CA 95060

September 12, 2025

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ACRONYMS & ABBREVIATIONS

AOI	area of interest
CDP	census designated place
Integral	Integral Consulting Inc.
MRY	Monterey Regional Airport
SFO	San Francisco International Airport
SJC	San Jose Mineta International Airport
TCM	travel cost model

1 INTRODUCTION

This study is part of the City of Carmel-by-the-Sea Coastal Engineering and Adaptation Project, and this report serves to complete the deliverables for Phase 2, Task 3, Socioeconomic Analyses. This report provides an overview and synthesis of two different approaches to understanding the socio-economic conditions and adaptation preferences, a Coastal Adaptation Options Survey, and an analysis of Carmel Beach visitation patterns using a novel cell phone data set to provide broader context for understanding the non-market value of beach recreation. Understanding these socioeconomic factors is intended to inform the City and help to identify community preferences for adaptation approaches, and help substantiate the need for regional engagement and funding, which will be further refined in Phase 2, Task 4, Adaptation Pathways. In that report, these findings will guide assessment of the feasibility and equitability of different funding and financing options, such as tourism taxes or other novel strategies that can be used to fund adaptation measures.

1.1 COASTAL ADAPTATION OPTIONS SURVEY

The City of Carmel-by-the-Sea, in partnership with Integral Consulting Inc. (Integral) and EMC Planning Group, designed and distributed a Coastal Adaptation Options Survey. This survey was designed to gain a better understanding of the recreational uses and visitation patterns of Carmel Beach, as well as information on survey respondent sentiments towards the effectiveness of Carmel Beach maintenance and coastal storm response. Lastly, this survey gauged familiarity with and support for various coastal adaptation strategies at Carmel Beach.

Survey findings are summarized as follows:

1. Among survey takers, the areas of greatest concern are coastal storm-related cliff and dune erosion, damaging coastal access stairs and sand ramps, and loss of the sandy beach area.
2. Survey respondents expressed a preference for nature-based adaptation approaches over hard armoring ones, despite being more familiar with hard armoring approaches.
3. Beach users are more satisfied with the City's typical maintenance of Carmel Beach (e.g., sand management and maintenance at the Del Mar Parking Lot, debris cleanup) than they are with the City's emergency storm response. Survey respondents wrote in suggestions for improved storm response centered around responsiveness to infrastructure improvements, specifically calling attention to improving accessibility and developing a more proactive and structured maintenance program to avoid and more quickly mitigate future damages.

1.2 CARMEL BEACH VISITATION AND NON-MARKET VALUE OF BEACH VISITS

Carmel Beach visitation patterns were informed through mobile location data, also known as advanced cell phone mobility data. This process uses anonymous detections of cell phone locations recorded within various apps and tied to identified areas of interest (AOIs) to estimate visitation.

Device information does not contain any information about the users and is provided to researchers at the aggregate level including total visits to the AOI and by the zip code of the “home” location of the device, meaning the location where it is most typically located between 10:00 p.m. and 6:00 a.m. over the preceding 30-day period.

The visitation information informed the development of a travel cost model (TCM), which uses the relationship between the frequency of visits and the costs and time involved in making those trips to construct a model of trip demand, and estimate the mean value of a beach trip. Multiplying this mean value by an estimate of total visits gives an estimate of the recreational value of a destination, in this case Carmel Beach.

Visitation pattern data findings are summarized as follows:

1. More than 1 million trips are taken to Carmel Beach each year. While a large portion of these visits come from those living nearby, visitors to Carmel were recorded by residents of nearly 7,000 zip codes in the United States¹.
2. Domestic flight travel access is a key indicator of visitors’ origin. Many airport regions with direct or one-stop flights to San Francisco International Airport (SFO) or Monterey Regional Airport (MRY) are associated with a higher number of tourists.
3. The mean value of one beach trip is estimated at approximately \$32 per person per day, interpreted as the amount of money a beachgoer would be willing to pay to recreate on the beach. Overall, we estimate the recreational value of Carmel beach visitation to be almost \$37 million per year.

Given the potential impacts of sea level rise on Carmel Beach, adaptation and management decisions will be necessary, not only to preserve the recreational value of the beach, but also the large public benefit and indirect financial support (tourist spending) that will be preserved through the funding of coastal adaptation projects².

¹ This excludes visits by international tourists.

² These additional values were not estimated in the current study.

2 CARMEL BEACH COASTAL ADAPTATION OPTIONS SURVEY

The City of Carmel-by-the-Sea, in partnership with Integral Consulting and EMC Planning Group, designed and distributed a Coastal Adaptation Options Survey to assess the current recreational use and visitation patterns at Carmel Beach to inform adaptation planning for coastal hazards and sea level rise.

The survey was hosted using the online survey platform Qualtrics³ and designed so that survey takers could easily complete the survey on either a desktop computer or a mobile device. It was made available in both English and Spanish only⁴. A paper version of the survey was also made available at the Carmel Public Library, Public Works, the Post Office, and City Hall. The survey was advertised among community members using multiple platforms, including social media, flyers, and radio (a list of all outlets can be found in Appendix A). Overall, our team received 307 fully completed surveys.⁵ Partially completed surveys provided useful information for another 57 surveys, for a total of up to 364 responses to each survey question.

The survey included a total of 28 questions and collected information about user demographics, beach visitation preferences, and knowledge and opinions on coastal adaptation. Appendix A provides more details on the design of the survey and the types of questions asked, as well as information on survey participation and distribution.

2.1 SURVEY DEMOGRAPHIC INFORMATION

This section provides a brief snapshot of the demographic characteristics of survey takers (note that most of the survey takers were local residents).

The survey sample comprised a wide range of age groups, half of which (50%) were 65 years old and older. This corresponds with the median age in Carmel-by-the-Sea, which is 68.9 years. The survey sample consisted of a higher proportion of female respondents, relative to Census data for the City of Carmel-by-the-Sea and state averages, comprising 60% of the total sample of respondents.

Annual Income

For this survey, 65% of respondents indicated they were from households earning more than \$100,000 a year, with 36% of these individuals indicating that they were from households that

³ <https://www.qualtrics.com/>

⁴ Qualtrics offers the ability have surveys in most languages, however it uses Google Translate as the translation service. Because Google Translate can produce translation errors that can change the wording of a question, the team manually translated the English to Spanish, and Spanish was the only alternative language from which respondents could choose.

⁵ Only 303 responses are included the beach access and recreation analysis

earn more than \$200,000 a year. This aligns with the median household income of Carmel-by-the-Sea, which is \$115,729 a year ([Census](#)). The mobility data corroborates this, which indicated that visitors to Carmel Beach came from zip codes with a household median income of \$103,670 a year.

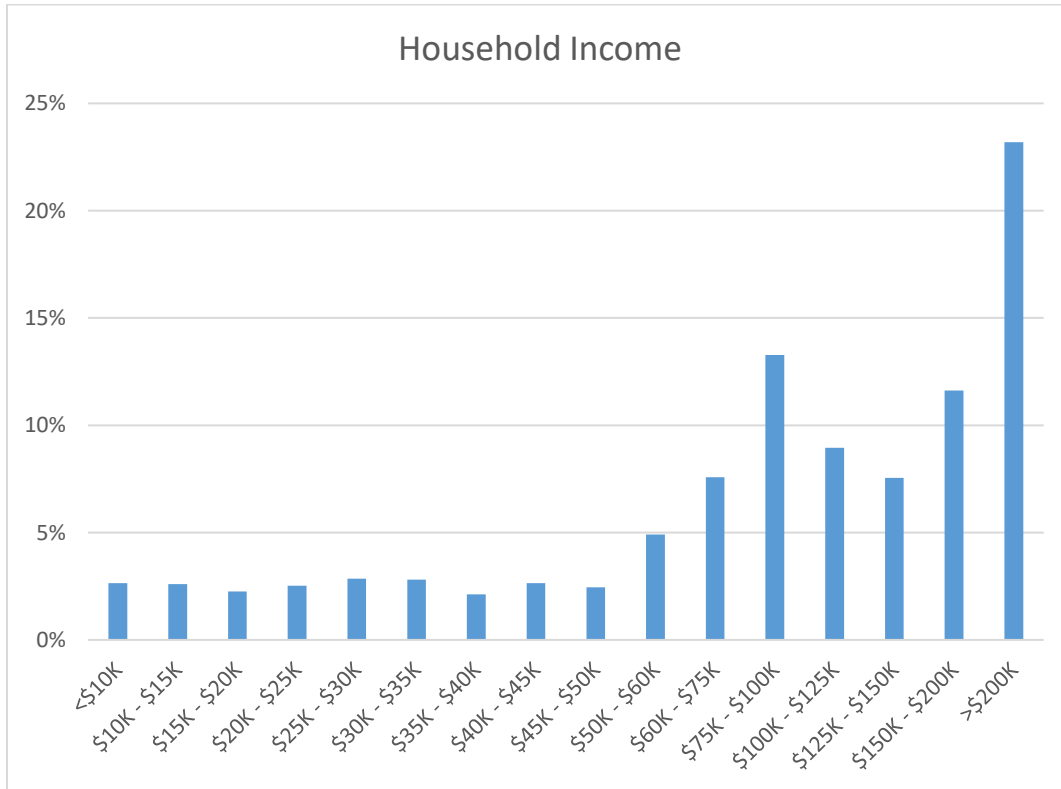


Figure 1. Household Median Income of Visitors to Carmel Beach – Survey Respondents

Race/Ethnicity and Other Socioeconomic Characteristics

Among survey respondents, 81% of respondents identified their race and ethnicity as white alone, 10% preferred not to answer, 5% identified as non-white, and 2% of respondents identified as two or more races. This sample is representative of the race and ethnicity makeup of the City of Carmel, which is 86.6% white, and two or more races represents 6.4% of the City’s demographic. The mobility data show a similar demographic trend among all visitors, and when compared to Californian averages, visitors to Carmel Beach are more likely to be white (1.7 times more likely, 62%), have a graduate degree (1.7 times more likely, 23%), and live in an area where vacant houses are more likely to be vacation homes (2 times more likely, 67%).

2.1.1 Important Caveats

While this survey provides valuable insights into community perspectives about Carmel Beach, it is important to acknowledge there are biases that may be present in the survey data, and understanding this limitation helps contextualize the results presented in this report.

First, this survey overrepresents local residents' perspectives. This selection bias is due to local residents being more likely to encounter the marketing for the survey, which includes flyers, newspaper ads, local radio, events, and social media, as opposed to visitors and tourists. This skews results toward the perspectives of residents and regular visitors, while capturing proportionally fewer perspectives of tourists who might have different perspectives.

In addition to favoring the perspectives of local residents and frequent visitors, this survey attracted survey takers who have a heightened interest in the future of Carmel Beach. These survey participants likely represent some of the area's more frequent beach users, including visitors who have developed strong opinions and individuals with existing knowledge about coastal management challenges. While these insights are valuable for planning purposes, it may not fully capture the views of all community members, particularly part-time residents and recent arrivals to the area, who are less familiar with Carmel Beach and coastal issues. Furthermore, due to the voluntary nature of this survey, this survey may overrepresent respondents who have more free time and greater motivation to participate. The number of responses from full and part-time residents of the City of Carmel-by-the-Sea represents approximately 4% of the total number of residents, as of the 2020 Census.

The timing regarding when this survey was conducted is important, as it influences how people think about and respond to prompts regarding coastal hazards. For instance, the recent winter storm events of 2022/23 and 2023/24 have brought increased attention and awareness to coastal storm events and the destruction that they can bring to coastal resources, and as a result many survey takers left comments about their concern over the recent closure of the City's coastal access stairways following extreme weather event impacts.

Finally, access to and familiarity with technology, including being able to access a device, connect to the internet, and take the survey, influences who took the survey. These limitations were partially accommodated by making a paper version of the survey available at the Carmel Public Library. Provision of the survey in Spanish also represented an attempt to reduce the impacts of English literacy levels on the ability of interested parties to complete the survey. Respondents who were not sufficiently literate in either English or Spanish may have been unable to complete the survey. The survey was designed for a middle school reading level.

2.2 VISITATION AND RECREATIONAL USE

This section provides a brief overview of survey taker residency status and recreational use preferences.

2.2.1 Residency Status

The survey asked about residency status as a way to understand more about the range perspectives among people who took the survey. Our team grouped residency status into two broad categories for analysis, locals, and tourists. Locals were categorized as those who identified as primarily living in Carmel-by-the-Sea and the greater Carmel area (which includes the nearby unincorporated areas), and tourists were categorized as part-time residents and visitors.⁶

2.2.1.1 Local Residents

Within the survey sample, 87% identified as being local residents, with 57% of respondents being either a full-time or part-time resident of Carmel-by-the-Sea, and 31% of respondents identified as being either full-time or part-time residents of the greater Carmel area. Of those who took the survey, 23% indicated that they owned property in Carmel-by-the-Sea. Of full-time residents, 2% said that they own/operate a business in Carmel-by-the-Sea.

2.2.1.2 Visitors

Among the 307 survey participants who selected a response, 10% selected being a visitor of Carmel-by-the-Sea. Of these visitors, 47% selected that they lived in Monterey County, 9% listed living in Santa Clara County, and the remaining indicated that they visited from other northern California counties including Sonoma, Santa Cruz, Sacramento, San Mateo, Mono, and Fresno. Only 6% of the survey takers indicated they were visiting from counties in southern California and included Los Angeles and San Diego.

Overall, 88% of survey takers indicated that they were California residents, while the remaining 13% came from Texas, Arizona, and Washington State. All survey respondents reported living in the United States.

2.2.2 Recreational Uses

To gain perspective on the recreational activities that visitors engage in while visiting Carmel Beach, the survey included a question asking visitors to rank their top three recreational priorities. Of the 326 participants who selected a recreational activity that they value the most, *Walking along Scenic Road Walkway* and *Walking along Carmel Beach or North Dunes* were the most popular choices, comprising 83% of the sample in aggregate, or 36% and 47%, respectively. When not chosen as the first choice, these two options constituted 56% of all participants second-most favored recreational activity, and 19% ranked as third-most valued (see Figure 2 for a graphical representation of this distribution).

⁶ In this survey, part-time residents were defined as anyone who spends less than 6 months a year in the area.

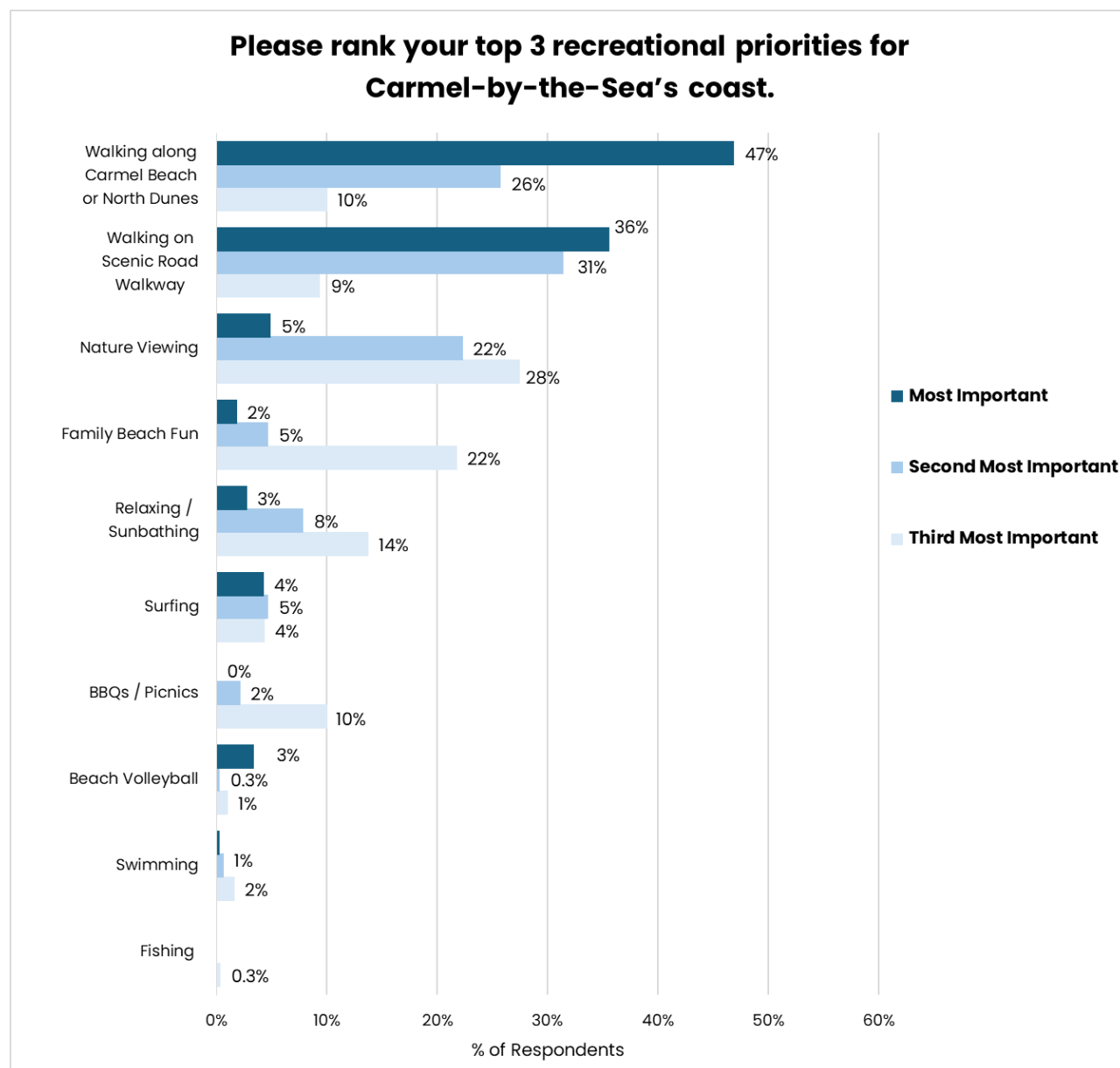


Figure 2. Top Recreational Priorities. For this question, each participant was only able to select one response for each ranking category (i.e., Most Important)

While only 5% of respondents ranked *Nature Viewing* as their primary recreational priority, 22% and 27% of respondents ranked it as the second and third most valued recreational activity, respectively (Figure 2). This frequent second and third choice ranking indicates that while nature viewing may not be the primary activity people associate with Carmel Beach, it is still a highly valued activity and may be undertaken while engaged in walking or passive recreational uses.

These findings should be interpreted within the context of possible survey sampling biases. This survey sample may overrepresent the perspectives of a subset of beach users who value less strenuous activities such as walking on Scenic Road or the beach. The reason for this could be related to socioeconomic or demographic characteristics of those who are more likely to come into contact with promotions for the survey, as well as biases related to those who are more willing to participate in a survey. As a broad generalization, the experience of the research team is that retired beach visitors, sunbathers, and those walking dogs are more likely to be willing to complete intercept surveys or talk with those handing out promotional materials such as postcards. Those who live within walking distance are also assumed to visit more frequently and be more likely to be intercepted. Other beach visitors, including those who engage in more active recreational activities such as swimming, fishing, running, surfing, diving, and playing volleyball, are still an engaged subset of beach users, and these individuals were represented at various community outreach events and meetings. These users are harder to intercept due in part to being mostly located in the water, and due to being engaged in activities that require greater focus.

2.2.3 Beach Access

To better understand the beach access locations that visitors most frequently use, the survey employed a mapped response, asking respondents to “select on the map the location where [they] most frequently access Carmel Beach.” Directly after the prompt, all survey takers were asked to “select on the map the location where [they] most frequently spend time at Carmel Beach.” The results from this prompt are shown in the heat map below (Figure 3), where green indicates less visitation and red indicates more visitation.

Heat Maps Displaying Access and Use of Carmel Beach

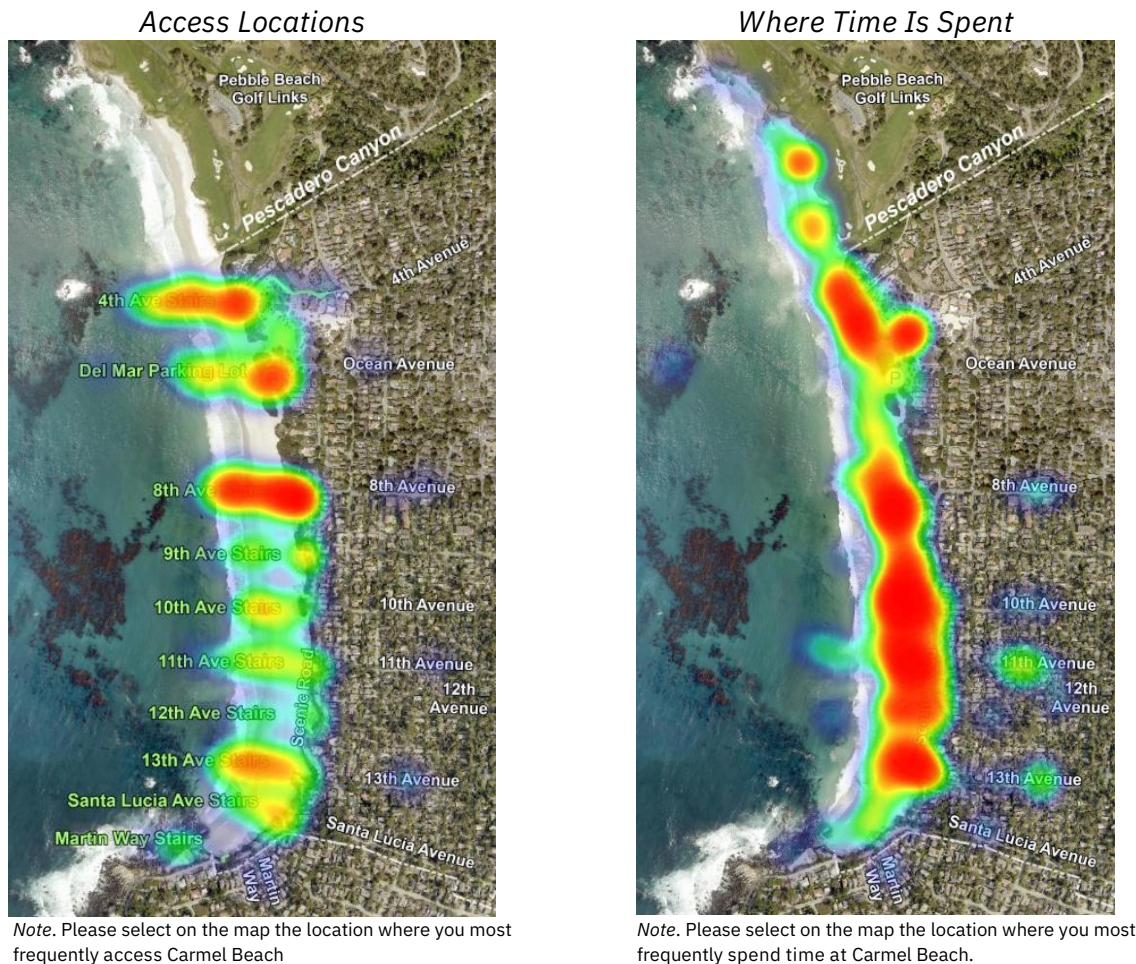


Figure 3. *Left:* Heat Map Displaying the Most Frequented Coastal Access Locations. *Right:* Heat Map Displaying Most Often Visited Locations. Some respondents selected the street or avenue names rather than the actual locations.

The heat map in Figure 3 illustrates that the most frequently used access location to get to the beach is the 8th Avenue stairway, and the second most frequented is the Del Mar Parking Lot and Sand Ramps. In addition, the 4th Avenue Stairs and the 13th Avenue Stairs all were indicated as more frequented coastal access locations. This does not fully align with the data from the mobility data that is detailed in Section 3, which shows that the most frequented access area among all visitors is the Del Mar Parking Lot and Sand Ramps. This indicates that the survey data are more representative of local resident visitation and usage patterns, but the cell phone mobility data provides a holistic measure of total visitation. In the case of Carmel Beach, resident visitation represents approximately 30% of total visits, but the number of visits per resident is more than 10 times that of the typical non-resident visitor. As already noted, the

survey skews toward local residents and frequent visitors, and the 8th Avenue stairway is likely a more popular beach access location for locals.

Once on the beach, the heat maps illustrate that the majority of survey respondents frequently spent time at Carmel Beach between 8th Avenue and Santa Lucia Avenue; however, once again this demonstrates a bias toward the perspectives of local respondents, who tend to spend more time walking and enjoying time in the southern section of the beach. Residents may be actively avoiding the more crowded northern portions of the beach. The mobility data analysis in Section 3 shows that a significant majority of beach users spend their time in the northern and central portions of the beach near the sand ramps at the Del Mar Parking Lot. This likely reflects the availability of parking as much as a clear preference for the northern portion of the beach.

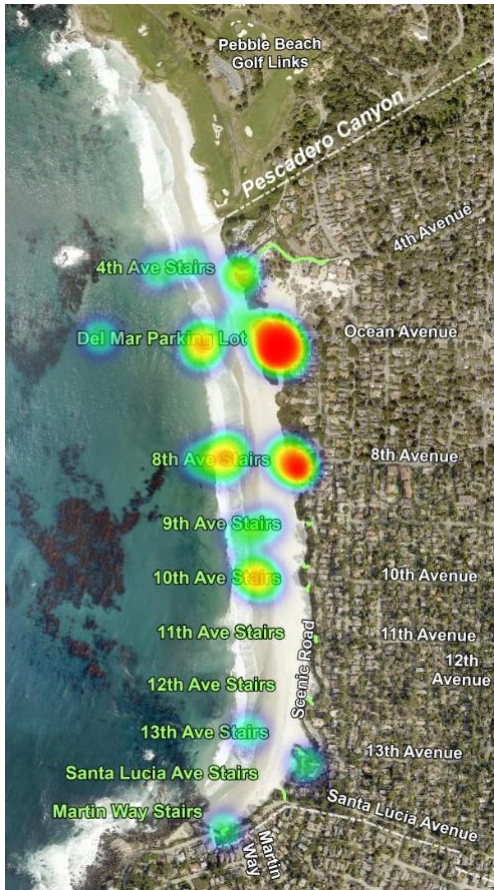
2.2.3.1 Visitors vs. Resident Spatial Preference

Figure 4 below indicates preferences between where visitors and local residents access the beach and spend their time.⁷

⁷ Full-time residents include those who live in the City and nearby unincorporated areas, part-time city residents, and those who indicated that they own property in the city.

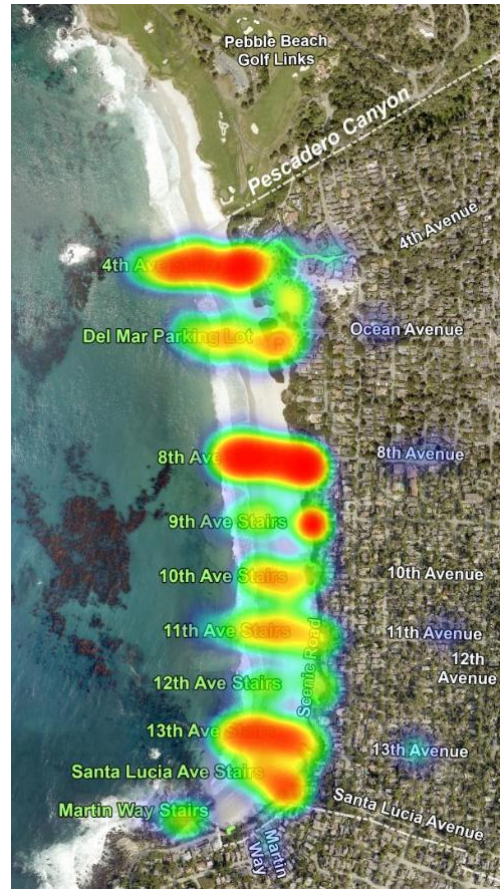
Beach Access Point Locations

Visitors



34 Respondents

Residents



269 Respondents

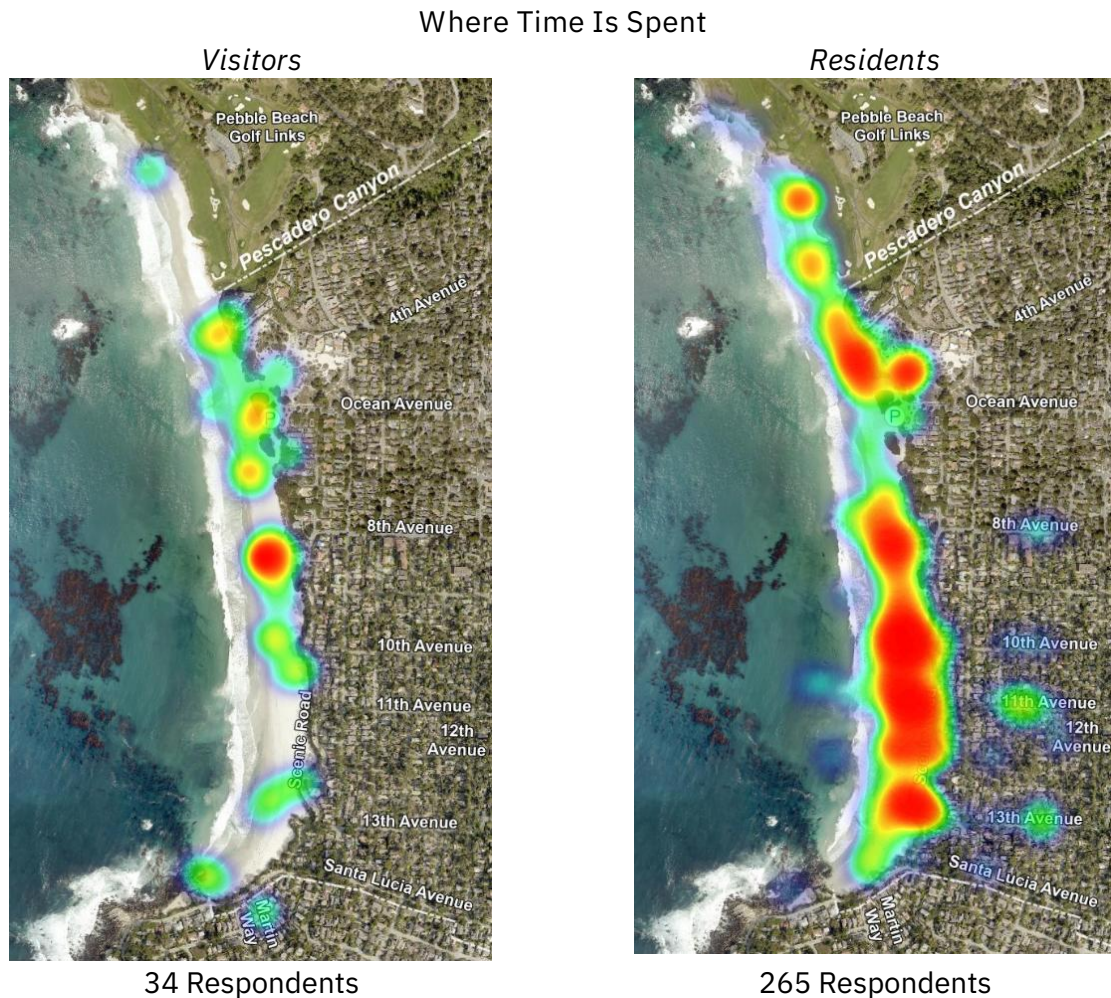


Figure 4. Visitor and Local Resident Beach Visitation Preferences. Full-time residents include those who live in the City and nearby unincorporated areas, part-time city residents, and those who indicated that they own property in the city.

The spatial distribution patterns indicate local resident's preference for the southern (south of 8th Avenue) and northern beach areas including the Volleyball Courts and North Dunes (generally staying away from the Del Mar Parking Lot), and visitors preferences for spending more time near the sand ramps near the Del Mar Parking lot and near 8th Avenue (Figure 4).

2.3 ADAPTATION STRATEGY PREFERENCES

To help inform future adaptation planning efforts, survey respondents were asked to rank their preferred adaptation strategy for mitigating climate-related risks and hazards. A summary of those responses and concerns is presented below.

2.3.1 Storm-Related Impact Concerns

Survey participants were asked what types of storm-related impacts they are most concerned about by ranking the following options:

- Loss of the wide sandy beach
- Damage to stairs and sand ramps (reduction in beach access)
- Erosion of the cliff and dunes resulting in impacts to Scenic Road Walkway and Scenic Road
- Debris washing up on the beach
- Safety concerns with large waves
- Other, where respondents were also given the option to choose if they did not feel that they had enough information to answer the question, as well as an option that allowed them to write-in an answer that was not included among the listed options.

Respondents could rank multiple storm-related impacts at the same level of concern, but specific storm-related impacts could only have one level of concern. For example, they were not able to indicate that they were both very concerned and somewhat concerned with *loss of the wide sandy beach*, but could rank both *damage to stairs and sand ramps* and *debris washing up on the beach* under “Very Concerned.”

The survey data show that the most frequently selected “Very Concerned” options were *erosion of the cliff and dunes resulting in impacts to Scenic Road Walkway and Scenic Road*, *damage to stairs and sand ramps*, and *loss of the wide sandy beach*. This finding is in alignment with recreational use preferences indicated in the survey, where 83% of the total sample listed valued *Walking along Scenic Road Walkway* and *Walking along Carmel Beach or North Dunes* the most. This finding also aligns with coastal access preferences and recent storm histories, with residents of the Carmel area frequently using the 8th Avenue beach access location, which recently suffered damage from storms⁸.

These survey data suggest that support for various coastal adaptation strategies may be significantly influenced by how well these approaches preserve or enhance this walking-centered recreational landscape.

⁸ This is also the primary beach access location that the City uses for vehicles

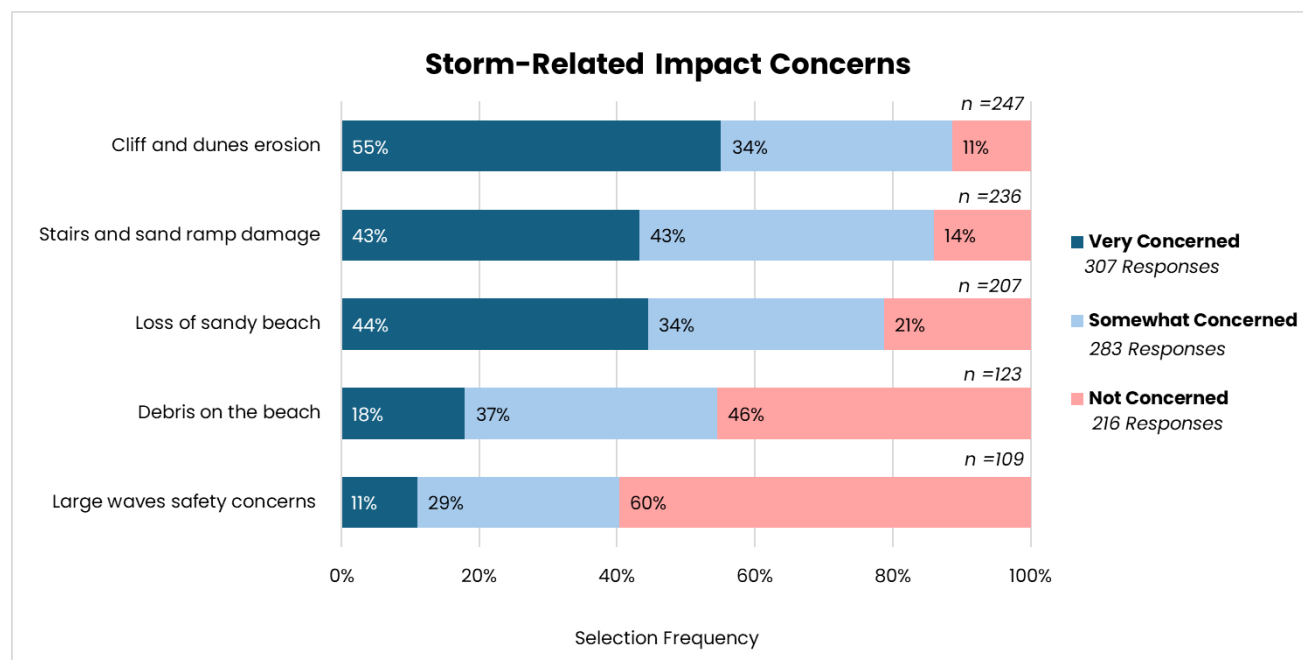


Figure 5. Storm-Related Impact Concerns Are Highest among Categories Related to Coastal Access and Infrastructure

Of the options that survey participants listed as being of least concern, safety concerns with large waves, debris washing up on the beach, and loss of the sandy beach were the three options most likely to be rated with the “Not Concerned” response. This may be reflective of the perspectives of local residents, who have witnessed multiple years of winter beach scour, debris washing up, and large winter storm events, only to see the beach recover, the debris to wash away or be picked up, and for the return of calmer summer waves. In addition to having a higher proportion of “Not Concerned” ratings, these impacts received fewer responses in total, further emphasizing the focus of survey respondents on erosion and damage to access points.

2.3.2 Adaptation Approach Support

The survey asked participants to rank their level of support for various approaches to address coastal hazards at Carmel Beach. On average, most respondents ranked “repair damage as it occurs” and “make incremental changes” about the same, and each received a median ranking of 3 out of 5.

Respondents were also given an “other” option with which they could write about what they feel is critical but not included on the list. Of the sixteen respondents that wrote in an alternative strategy for this option, multiple individuals advocated for moving existing infrastructure inland by implementing a managed retreat plan. Respondents specifically

mentioned “coastal retreat,” “managed retreat,” and “moving infrastructure landward” as preferred strategies. In addition to managed retreat, several respondents noted favoring nature-based solutions and expressing general opposition to more hard armoring strategies.

2.3.3 Adaptation Strategy Support

Each survey respondent was only asked to rank the adaptation strategy options that they listed as having a moderate knowledge of or experience with. This first required identifying which strategies were known to the respondent, and their degree of familiarity. Of these responses, more respondents were likely to indicate moderate familiarity or experience with Vertical Seawalls (28% of responses), Stacked Rock Walls (also known as Riprap Revetments) (27% of responses), Nature-Based Dune Restoration (21% of responses), and Sand Management (19% of responses). The adaptation strategies that were less well-known included Beach Nourishment (13% of responses) and Offshore-Reefs (9% of responses). This pattern reflects historical coastal engineering approaches to erosion, with the less well-known approaches being more recent and thus less frequently applied.

Figure 6 shows the proportion of respondents with some level of familiarity with each of the listed strategies. The blue bars combine two categories of responses, including those with limited experience or knowledge, and those with more experience or knowledge, as described above.

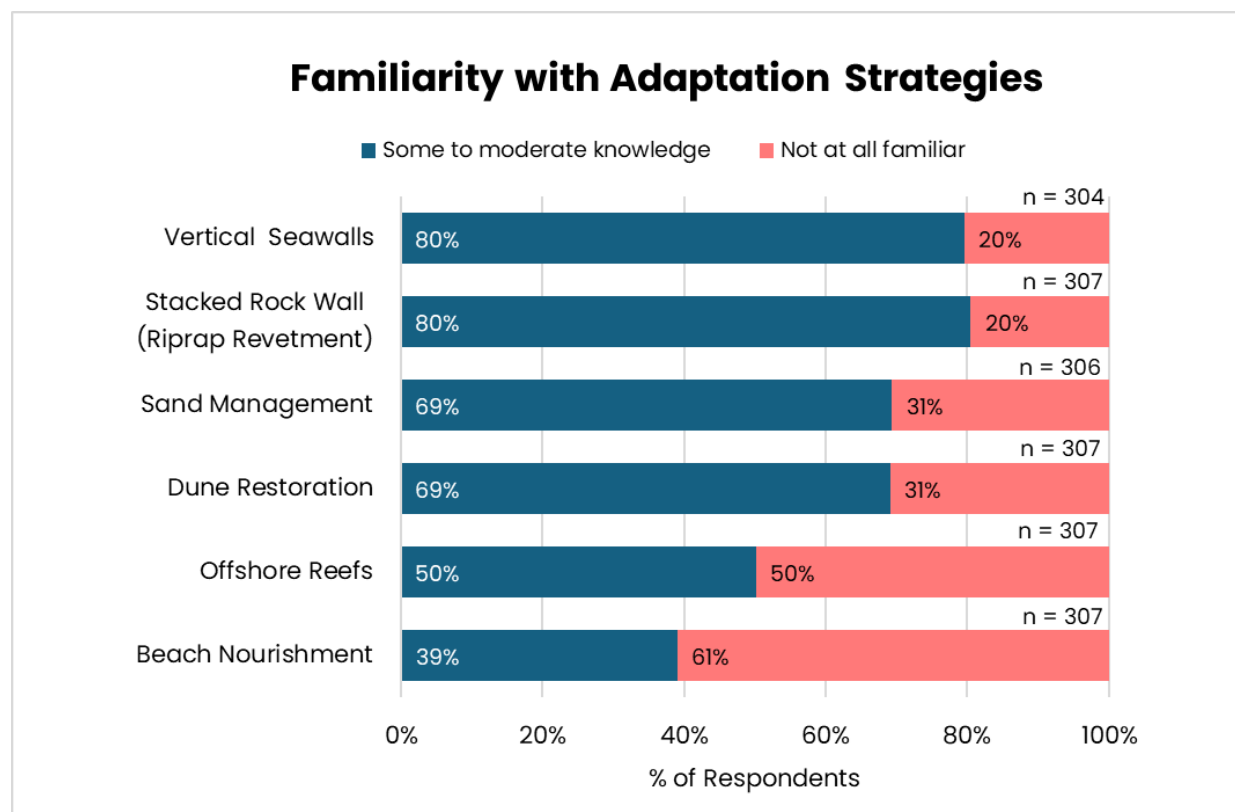


Figure 6. Familiarity with Adaptation Strategies. Results include those with “some” familiarity. N = the number of respondents who ranked this option. All responses are normalized.

Respondents were also asked to rank their order of preference for different adaptation strategies. These rankings included three generic options, and the strategies with which respondents indicated they had moderate familiarity. For example, if a person noted that they had a moderate or detailed knowledge with vertical seawalls and sand management practices, but not with any other strategies listed above, they would be asked to rank five options, consisting of those two alternatives, plus the three generic options. These generic options were:

- Repair damage as it occurs
- Continue to make incremental changes
- Other not listed – Please write in.

This meant that people could be asked to rank between three and nine alternatives. Figure 7 shows the distribution of ranking scores for each of the nongeneric alternatives.

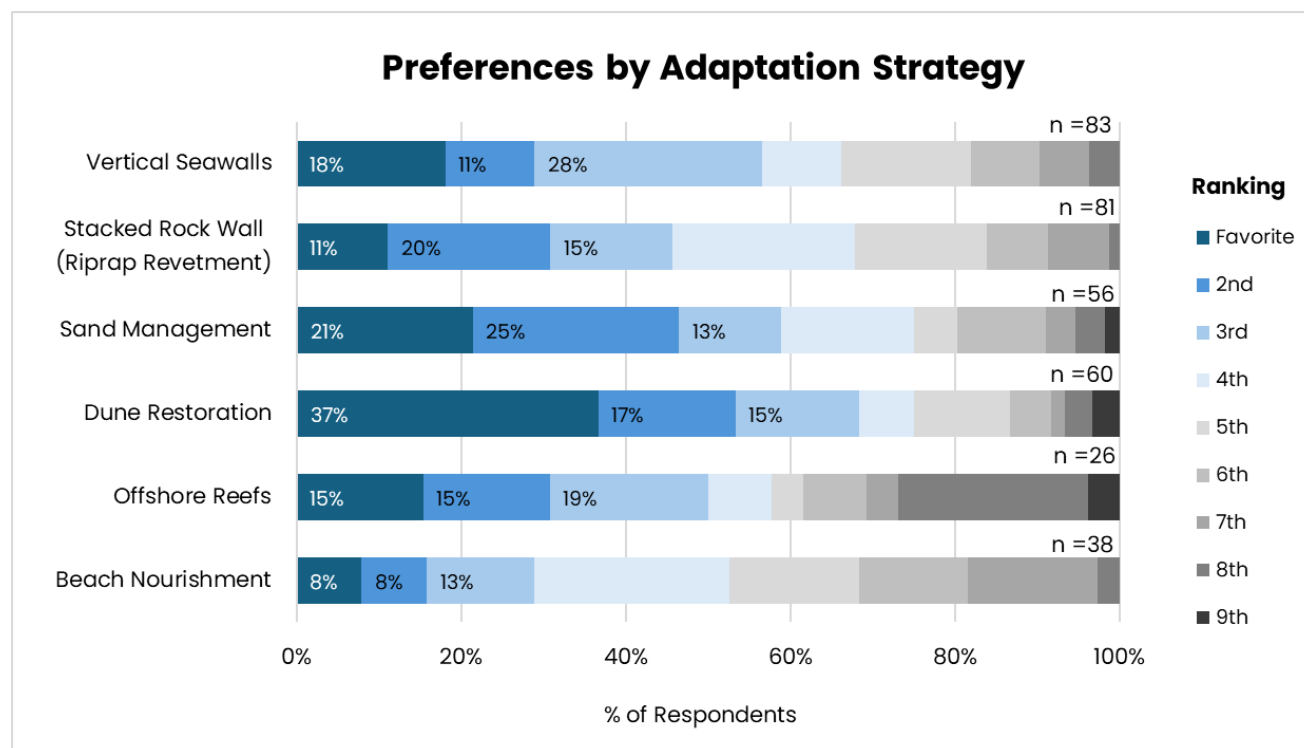


Figure 7. Preferences by Adaptation Strategy. N = the number of respondents who ranked this option. All response percentages are normalized.

2.3.3.1 Familiarity vs. Preferences

Survey respondents demonstrated a preference for nature-based solutions over hard armoring approaches, despite many of these same respondents being more familiar with hard armoring approaches. In other words, while respondents demonstrated greater familiarity with hard armoring solutions, these strategies consistently received lower preference rankings when respondents were aware of alternative approaches.

This pattern could be driven by the nature of the survey question itself. When respondents had limited knowledge of available strategies—knowing only hard armoring options like vertical seawalls and stacked rock walls (riprap revetments)—their rankings reflected only these familiar solutions; however, when respondents possessed broader knowledge that included nature-based solutions like dune restoration, these natural approaches consistently ranked higher in their preferences.

This shows that experience and familiarity with nature-based alternatives fundamentally shifts preference patterns. Respondents who knew about dune restoration, for example, ranked it highly compared to hard armoring options with which they were equally familiar. The one exception is sand nourishment, which was not rated particularly highly by those who indicated

they were familiar with the strategy. For all other “soft” approaches, and for offshore reefs, those approaches were ranked within the top three options by more than 40% of respondents.

2.3.4 Hard Armoring Preferences

Among survey takers, riprap revetments were less popular than seawalls. An explanation for this was not prompted in the survey, but it could be due to a number of reasons, including:

- Aesthetics—Seawalls, especially the golden granite walls at Carmel Beach, may look nicer.
- Space on the beach—Due to their sloping design, riprap revetments take up more of the sandy beach width than a vertical wall.
- Perceived hazards—Riprap revetments may be seen as having the potential to be more dangerous, as loose rock or exposed rock may pose a hazard to beach visitors.
- Access—Moving laterally across a revetment is challenging for those with reduced mobility. Depending on height and the location of stairs, seawalls may provide greater perceived accessibility.

2.3.5 Nature-Based Solution Preferences

Overall, smaller-scale nature-based strategies were the most popular adaptation options with survey respondents, with sand management and dune restoration being the two most popular. More large-scale “engineering with nature” options, such as beach nourishment and offshore reefs, were consistently ranked as less popular.

2.3.5.1 Beach Nourishment

Survey data suggests beach nourishment is an unpopular strategy. This could be due to the following factors:

- Familiarity—There are very few examples of beach nourishment in Northern California, and respondents indicated that they knew the least about this strategy. Different responses would be expected in Southern California, Florida, Gulf Coast states or the barrier islands of the eastern United States, where large scale nourishment is more common.
- Aesthetics—Impacts on sand quality and the overall aesthetics of the beach sand consistently came up in community meetings, as well as numerous comments left by survey takers. Beach nourishment could be seen as a threat to this highly valued characteristic, making importing sand unpopular or expensive.
- Impacts on habitat—Nature viewing ranked highly as a recreational priority, and concern with dune and offshore habitat was often mentioned as a priority in outreach

meetings and events. A large-scale beach nourishment project could be seen as a threat to existing habitat areas.

2.3.5.2 Offshore Reefs

While offshore reefs were a more popular strategy than beach nourishment, they did not gain a lot of support. This could be due to the following:

- Familiarity—Respondents were unfamiliar with this strategy and there are not many nearby implementations of this strategy.
- Aesthetics—Walking along Scenic Road and the beach and enjoying the view are highly valued activities, and concerns around views of the ocean changing could be seen as a concern.
- Impacts on habitat—Nature viewing ranked highly as a recreational priority, and uncertainty over what changes an offshore reef may bring could make this strategy less popular.

2.3.6 Strategy Timeline Preferences

Respondents who indicated a moderate to detailed knowledge of at least one coastal adaptation strategy were presented with three distinct implementation timelines to gauge when to approach adaptation. The options ranged from taking immediate action to a more patient approach, and choices included the following:

- Extensively research options and decide on an approach as soon as feasible (Research Options Now).
- Wait 5–10 years to reevaluate both the situation and potential solutions (Wait 5–10 years).
- Adopt a hands-off approach by doing nothing and letting nature take its course (Do nothing).

The results revealed a strong preference for timely, research-informed action. The results also indicate that both a delayed “5–10 year” and a hands-off “do nothing” approach proved highly unpopular, indicating that well-informed and near-term actions are preferred. These results suggest that respondents are willing to support studies that further explore viability and cost assessment of options to adapt to coastal hazards and sea level rise.

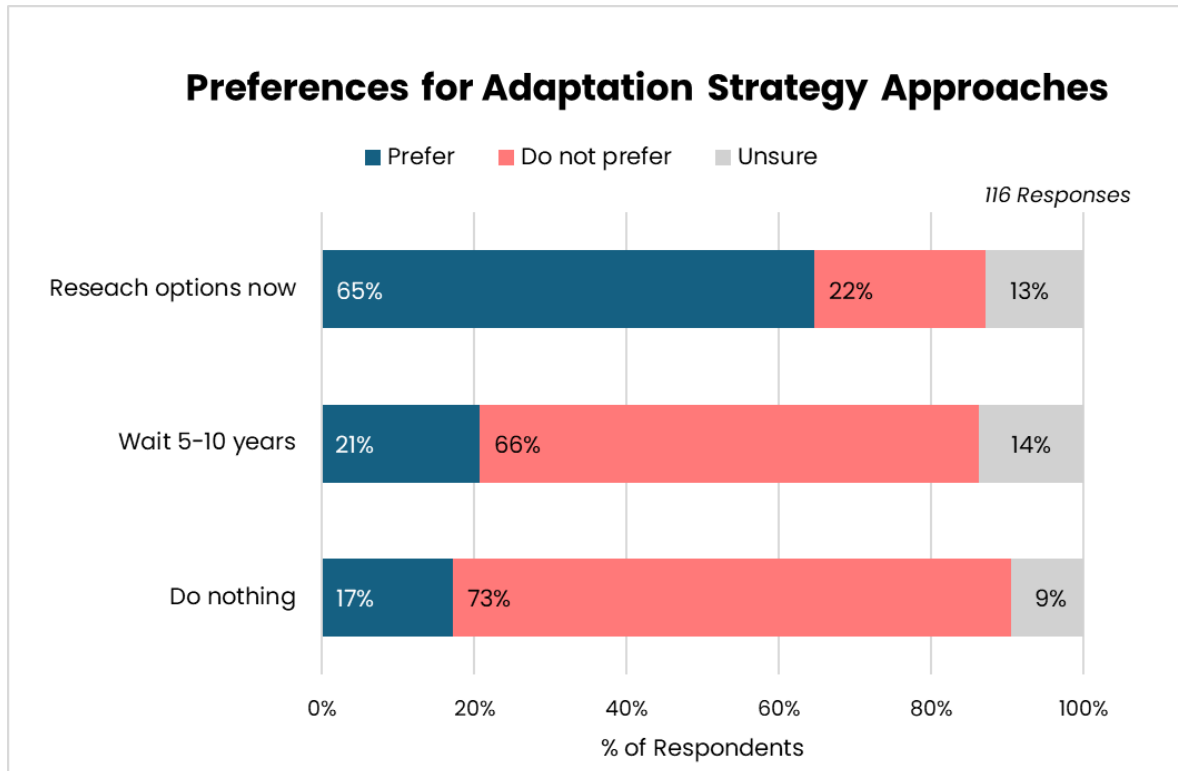


Figure 8. Preferences for Adaptation Strategy Approaches (note that options listed have been abridged for legibility)

2.3.7 Beach Maintenance and Storm Response Satisfaction

Respondents were asked to rate their level of satisfaction with how the City of Carmel-by-the-Sea currently maintains Carmel Beach. What is notable is that respondents appeared to be more satisfied with the City’s maintenance of the beach than they were with the City’s current storm response.

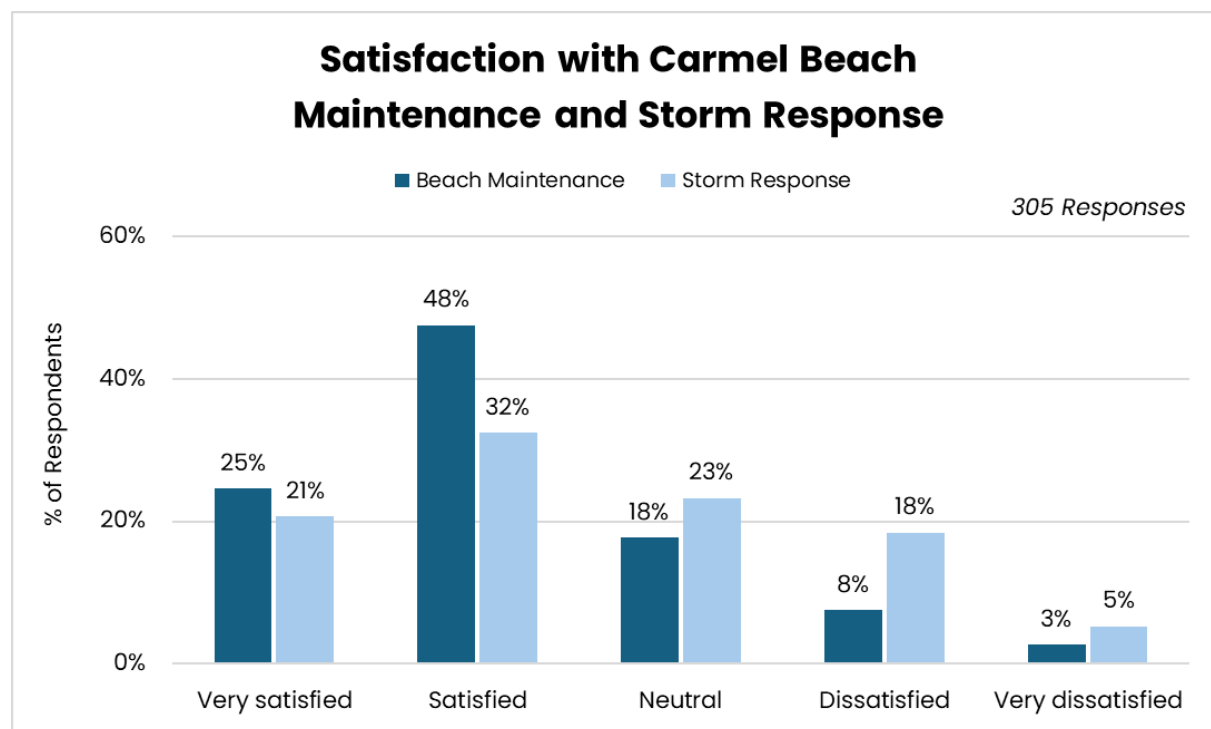


Figure 9. Satisfaction with the City’s Beach Maintenance and Storm Response

Respondents who selected Dissatisfied and Very Dissatisfied were asked about how they would like to see the City change its practices. Of these responses, suggestions centered around infrastructure improvements, specifically with respect to fixing and improving beach access in a timelier manner after storm events and developing a more proactive and structured maintenance program.

The most frequent area of concern centered on improving beach access stairs and pathways. An overwhelming majority of these respondents expressed frustration with the slow staircase repair timeline. Numerous responses made urgent calls for faster beach stair repairs, and to take a more proactive or structured approach to maintenance to avoid future damage. Multiple respondents also suggested improving and rebuilding beach access infrastructure so that it is more resilient to future winter storms, as well as partaking in more proactive storm planning and readiness by dedicating funding for repairs and maintenance.

3 CARMEL BEACH VISITATION AND NON-MARKET BEACH VALUE

Integral conducted an analysis of the visitation patterns at Carmel Beach and characterized the benefits these visitors have to the City and wider community. This analysis relied on beach visitation data sourced from Placer.ai⁹, a location intelligence company, and used this and other visitor information to inform the application of an economic valuation method known as the travel cost model, or TCM. This is a non-market valuation method, which uses either survey data or observed visitation behavior to estimate the value of recreational resources. Valuing locations like beaches requires non-market methods because there's no direct entry fee or ticket price, making it difficult to quantify the value of a beach visit. In discussions about publicly funded projects, the costs are usually presented in tangible dollar amounts, but the public benefits are harder to assess. This is because most of the benefits are non-market goods and services, which don't have straightforward monetary values.

TCMs rely on the observation that most visits to a natural resource (in this case Carmel Beach) are by those who live nearby. As one moves further away from Carmel Beach, costs and time involved in making a visit increase, so visitors are inclined to make fewer visits. Economists use the relationship between the costs of a visit and the number of visits taken in a given period (i.e., a season or a year) to construct a demand curve, and thereby estimate the value of a beach visit. This can be multiplied by an estimate of total visitations to derive a total value of recreational use for the period. This is a measure of the aggregate utility or well-being that visitors get from those visits. It does not include monetary expenditures on things such as food and beverages, which contribute to local economic activity.

More information on the methods used to develop the TCM can be found in Appendix B.

3.1 VISITATION DATA

The first step in a successful TCM is to obtain visitation data. This study utilized mobility data from Placer.ai, available at the zip code or census designated place (CDP)¹⁰ level, and combined this with average demographic data for those zip codes, sourced from the 2020 U.S. Census Bureau and 2023 American Community Survey. Mobility data, also known as advanced cell-phone data, is a novel data source that provides anonymous aggregated location information from mobile phone users' application data. It relies upon location reports made by the phone to the cell phone providers or cell towers. These data are stripped of all individually identifiable information and are delivered as aggregated and anonymized data showing the destination and origin at a location level, so that the end user is only able to see how many people came from "X" location (typically a zip code or CDP) and went to "Y" location. In this

⁹ <https://www.placer.ai/>

¹⁰ A CDP is a concentration of population defined by the United States Census Bureau for statistical purposes only

case, the destination locations are AOIs that were created to explore visitation to different parts of Carmel Beach (Figure 9). An example of this is the ability to see the number of trips that originated in the City of San Jose and arrived in Carmel-by-the-Sea.¹¹

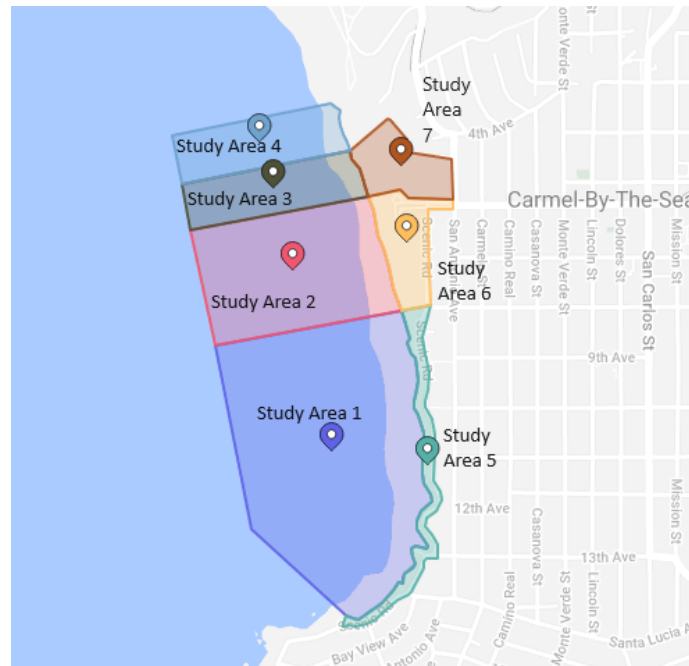


Figure 10. Beach Visitation Study Areas or AOIs. This study did not look at visits north of Study Area 4, as this beach area falls outside of the City limits.

Mobility data differ from typical survey data (e.g., phone or mail surveys), in that surveys indicate “stated” preferences, whereas the mobility data indicate “revealed” preference. Stated preference often relies on one’s memory of beach trips and visitation habits, which can be more unreliable over the course of a year. Revealed preference data such as the mobility data are typically preferred given their lack of subjectivity and recall bias in this regard. Mobility data also capture a higher proportion of the total number of visitors. In theory, the aggregate values provided by mobility data providers are close to the total number of visits or visitors. In practice, they are estimated from a subsample of cell phones that were actually detected in a given area, and then scaled using population data from the US Census.

Total beach visitation numbers are estimated from actual cell phone detections and do not equal the total number of cell phones that were detected at the beach. Due to factors such as what mobile phone applications people use, what location service opt-ins are elected or rejected, or whether a visitor chooses to bring their cell phone with them to beach or leave it in

¹¹ It is not possible to see any location information for areas with fewer than 50 devices. Also, home and office location information has been obfuscated, meaning that it has been deliberately made inexact before it is provided to data users.

the car or at home, the mobility data cannot capture each and every person at Carmel Beach. For example, surfers would likely leave a cell phone in the car, which would limit the detection of this type of recreational user to a parking area, rather than their locations in the water. This is also undesirable for personal privacy reasons. Instead, Placer.ai tracks at a national level how many devices they are capturing relative to the number of people they believe to be in an area. Using proprietary information, Placer.ai then adjusts the number of mobile devices it captures from an origin-destination pair (e.g., San Jose-Carmel) and combines it with Census-level demographic information, to arrive at a “count estimate,” which Placer.ai believes is an estimate of how many people made that trip over the course of a given period.

3.1.1 Privacy Concerns with Mobility Data

The mobility data are anonymous sources of information and pose no risk of individual identification. Mobility data provides an additional layer of privacy alongside de-identification in that the origin, destination, and day of visitation are all aggregated to the total population level. This is standard practice to alleviate challenges that might arise in scenarios where the counts of origin, destination, or day of visit are extremely low. For instance, a beachgoer from a remote area visiting the beach in Carmel on a rainy day might very well be the only one with a mobile device from that origin in the area on that day, but because of de-identification and aggregation, there is no ability to pinpoint the end device user/beachgoer.

3.1.2 Important Caveats

Visitation data can often be misleading if taken out of context. For mobility data, a visit is counted as a beach trip if a mobile device spent any time within the defined area of interest, which in this case includes all the areas from Scenic Road to the beach, including the Del Mar Parking Lot and the North Dunes. Visitation counts are meant to be used to analyze the valuation of Carmel Beach, but it is unknown how many of these visitors came to the study area only for the beach, or if they came for other reasons such as parking and then walking downtown without visiting the beach. These limitations highlight the importance of ground truthing beach recreational activities, and future work could involve developing a beach monitoring system that can count the number of people in water or out of water, or driving vs walking Scenic Road.

3.2 ANNUAL VISITATION

The mobility data estimates that recreators took approximately 1,150,000 trips to Carmel Beach in 2024, representing 701,000 unique visitors. The numbers were consistent and similar in 2023. Visits from more than 6,594 U.S. zip codes of origin recorded at least one trip to Carmel Beach in 2024, and these came from as close as Carmel, to as far east as Maine and Florida. Figure 9 shows the pattern of distribution of detected cell phones, and the number of

visits they are estimated to represent. The pattern closely matches the location of airports with direct flights to SFO, MRY, and San Jose Mineta International (SJC) airports.

This level of visitation indicates the popularity and importance of Carmel Beach as a regionally important destination. For comparison, the Golden Gate National Recreational Area in San Francisco received 17.2 million yearly visitors in 2024 according to Placer.ai, and Yosemite National Park received more than 4.1 million yearly visitors¹². Estimated visitation to the Santa Cruz Wharf is up to 2 million visits per year¹³, while Waikiki Beach, Hawaii, sees more than 4 million annual visitors.¹⁴

¹² <https://www.nps.gov/subjects/socialscience/visitor-use-statistics-dashboard.htm>

¹³ <https://www.visitcalifornia.com/experience/santa-cruz-wharf/>

¹⁴ <https://www.gohawaii.com/islands/oahu/things-to-do/beaches/waikiki-beach>



Figure 11. Visitation Origin and Estimates of Total Annual Visits from across the U.S.

3.3 VISITORS

An important distinction in the mobility data is the difference between total beach “visits” relative to total beach “visitors.” Many times, they are used synonymously as a proxy for changes in crowd numbers or recreation trends, but their interpretations differ. Visits are the larger of the two metrics, and this is the total number of beach trips taken to Carmel Beach, irrespective of the person taking them. On the other hand, visitors are the total number of people that visited Carmel Beach, without regard to the number of times they visited. In this case, the over one-million annual *visits* to Carmel Beach in 2024 came from around 701,000 unique *visitors*. This implies that some portion of the population recreated at Carmel Beach more than once throughout the year, but that many visits were taken by relatively infrequent visitors, as the average number of visits is slightly over 1.6 visits per year.

While 80% of visitors took only one trip throughout the year, there is a strong contingent of locals who visited multiple times, some of whom made more than 30 visits a year. Multiple visits in a year are strongly correlated with distance, as the majority of these beach visitors live within 30 miles of Carmel Beach. When approaching a traveling distance of 50 miles or more, the type of visitor is predominantly a single trip per year tourist rather than a local resident.

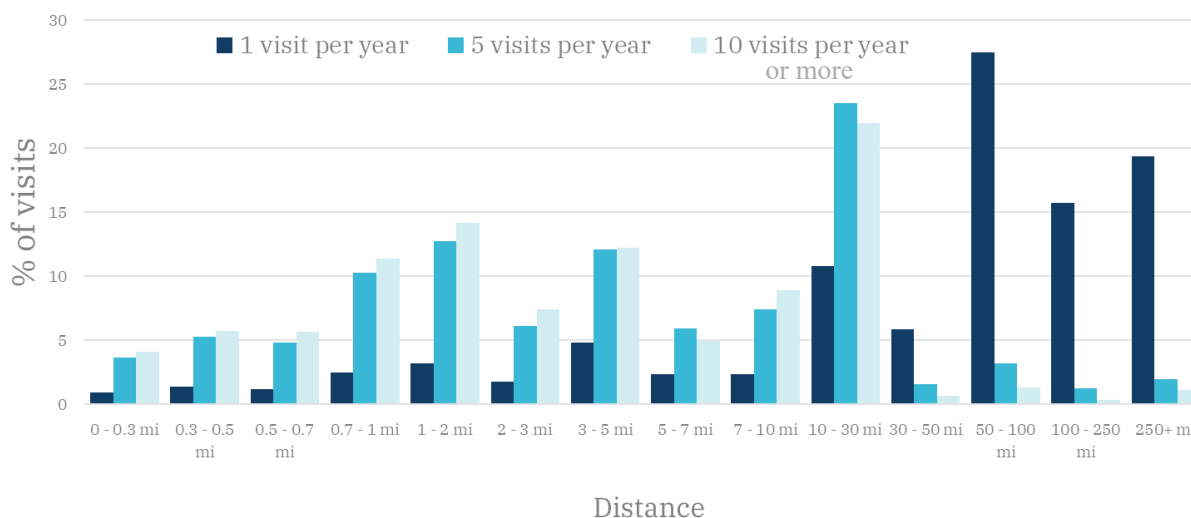


Figure 12. Carmel Beach Visitors by Distance of Origin

These data indicate that approximately 80% of beach visits are by non-residents, representing approximately 920,000 visits, and 20% are from local visits, representing approximately 230,000 visits. Approximately 99.5% of total visitors are from non-residents, representing approximately 698,000 people.

3.3.1 Visit Timing

Visitation trends are in line with what is expected of a beach town, showing that crowds were highest during the midday hours, and weekends experienced more traffic than weekdays (Figure 13 and Figure 14). This also likely reflects the local weather, where the marine layer can lead to lower temperatures in the early morning. The higher number of visits on Mondays, relative to other weekdays, likely reflects the distribution of public holidays. Labor Day is a particularly busy holiday in Carmel.

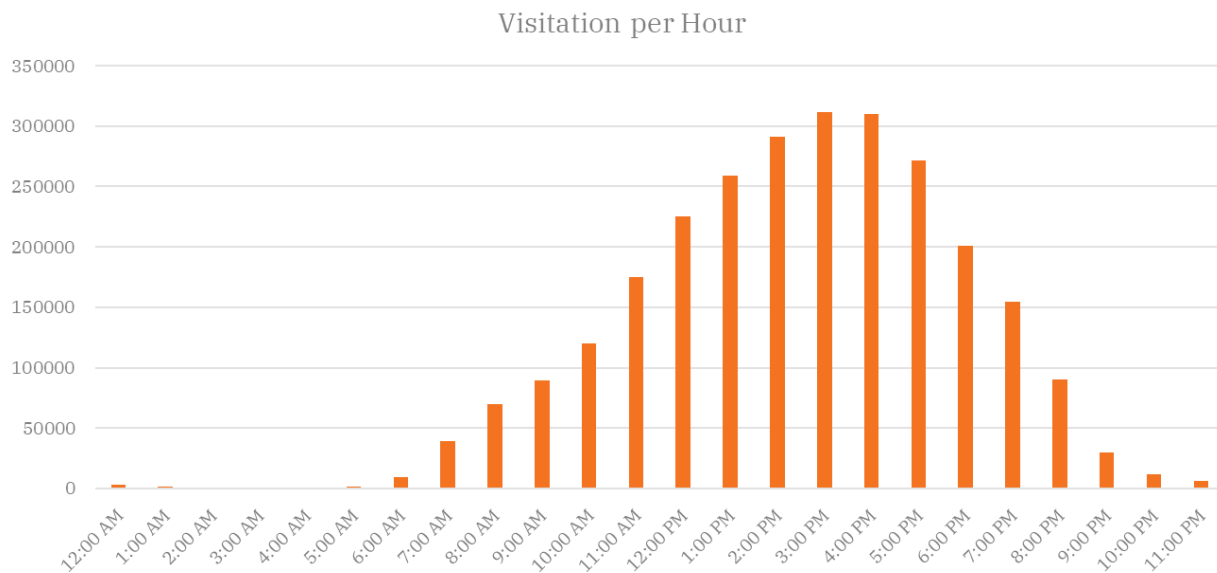


Figure 13. Carmel Beach Visitors by Time of Day

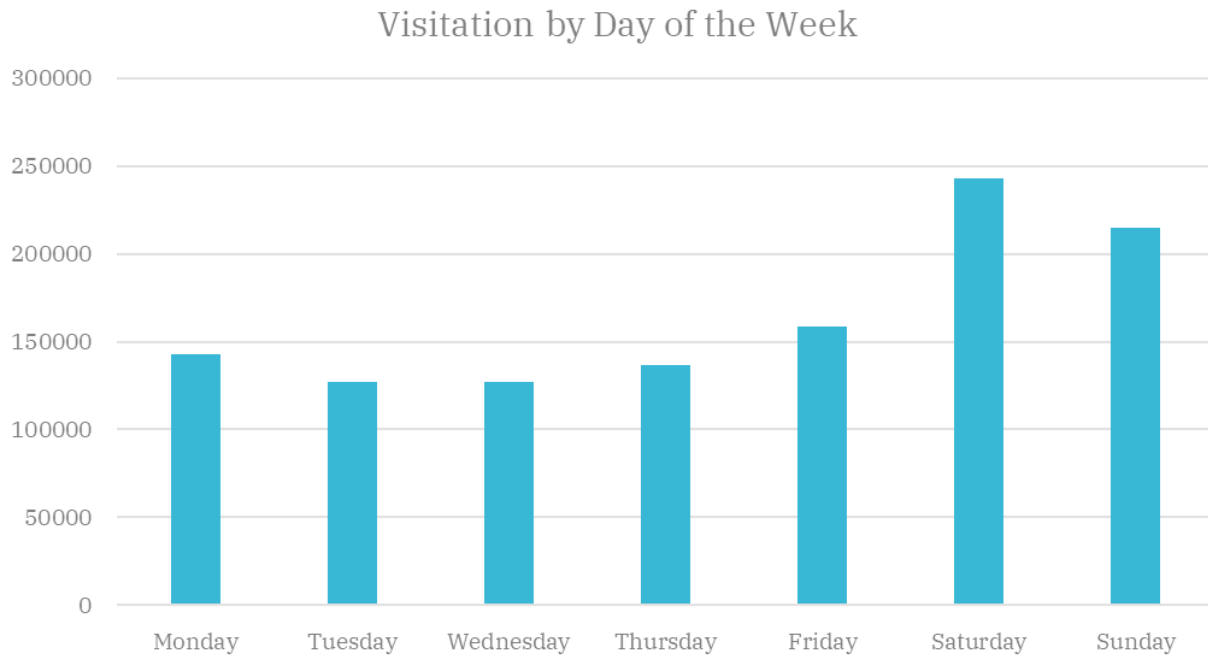


Figure 14. Carmel Beach Visitors by Day of Week

3.3.2 State-wide

More than 85% of all Carmel Beach visits were Californians. Of all California residents, 332,000 beach visits came from Carmel or nearby cities and towns located no more than a half hour car ride away. Given these numbers, it is unsurprising that the top 10 zip codes of home origin are from Monterey County (Figure 15, Figure 17, and Figure 16). These visitors take advantage of the proximity and lower overall travel cost. Other major clusters of California visitors come from the Bay Area, specifically Santa Clara County, and the more proximate Central Valley counties including Stanislaus, Merced, Fresno, and Tulare (Figure 17, and Figure 16). Other counties that have high visitation include Los Angeles, San Luis Obispo, Sacramento, El Dorado, and Nevada counties (Figure 16). The Carmel Chamber of Commerce and the Carmel Visitors Center publications corroborate this localized or regional visitation preference. They found that more than 95% of visitors came from the San Francisco Bay area, Monterey Bay area, Los Angeles, and the Central Valley.

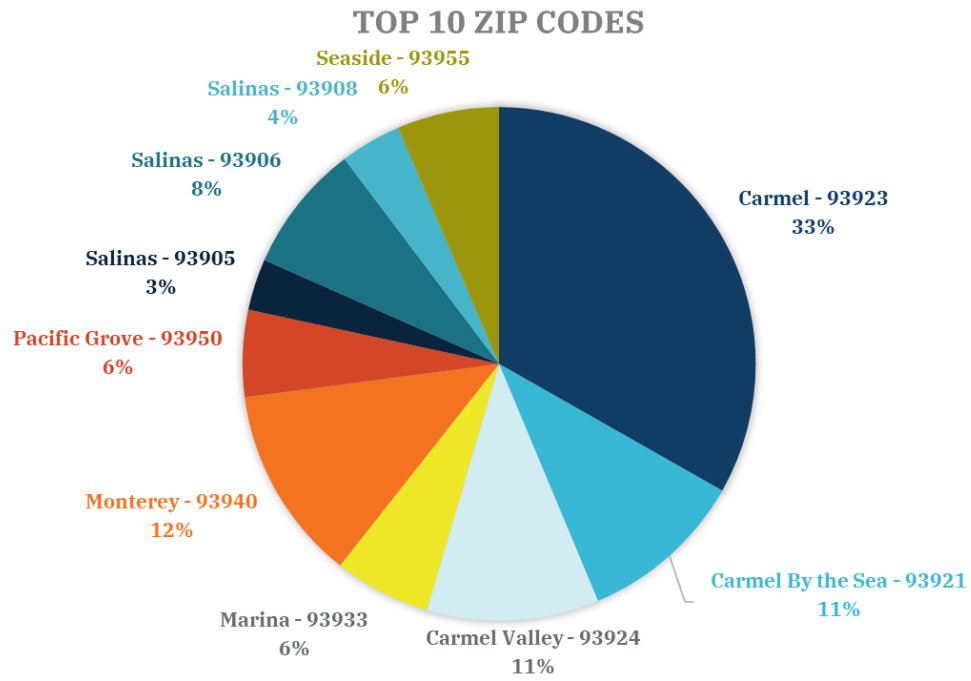


Figure 15. Top 10 Zip Codes for Carmel Beach Visits

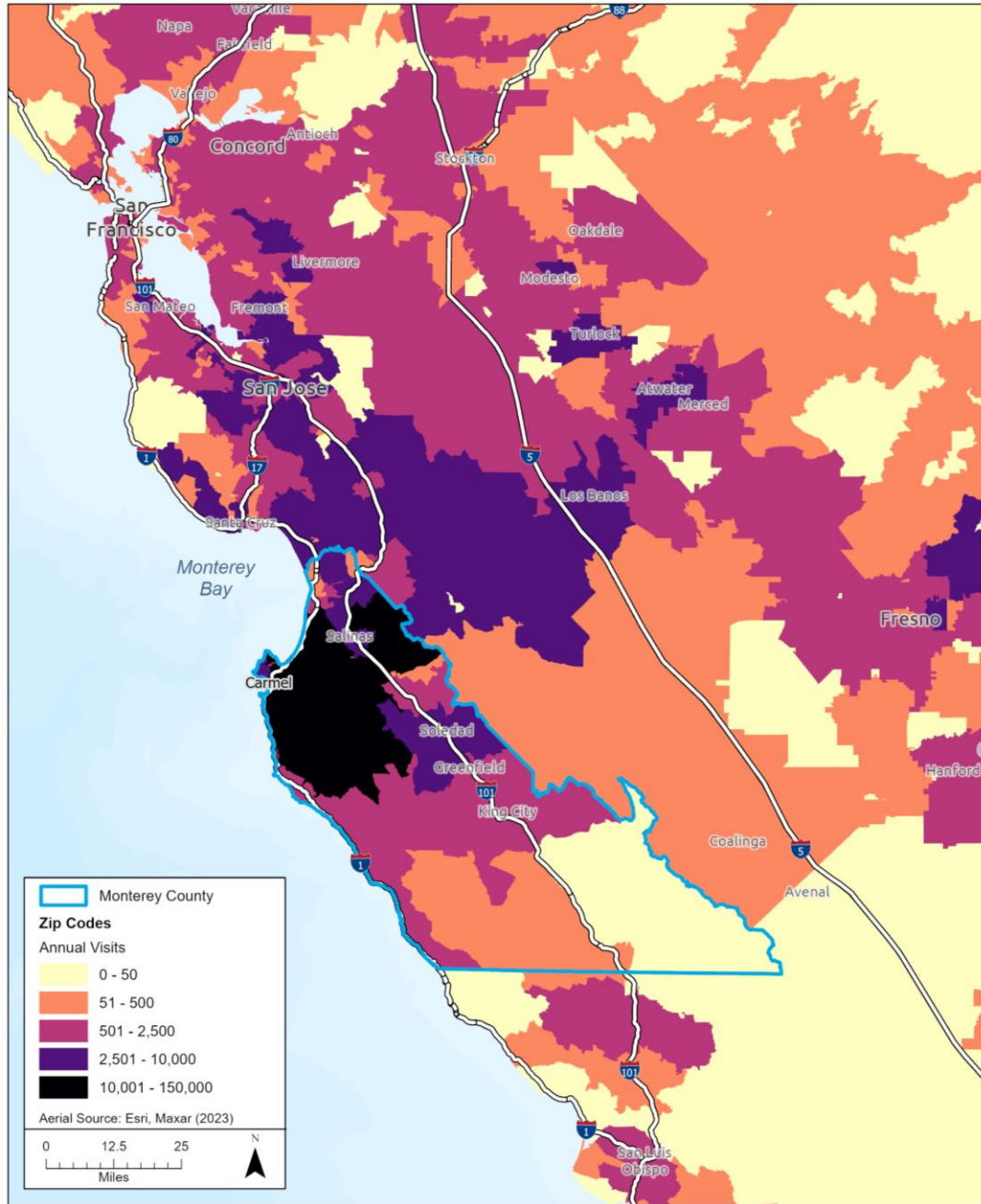


Figure 16. Carmel Beach Annual Visitation within the Nearby Monterey Bay, San Francisco Bay, and Central Valley Regions

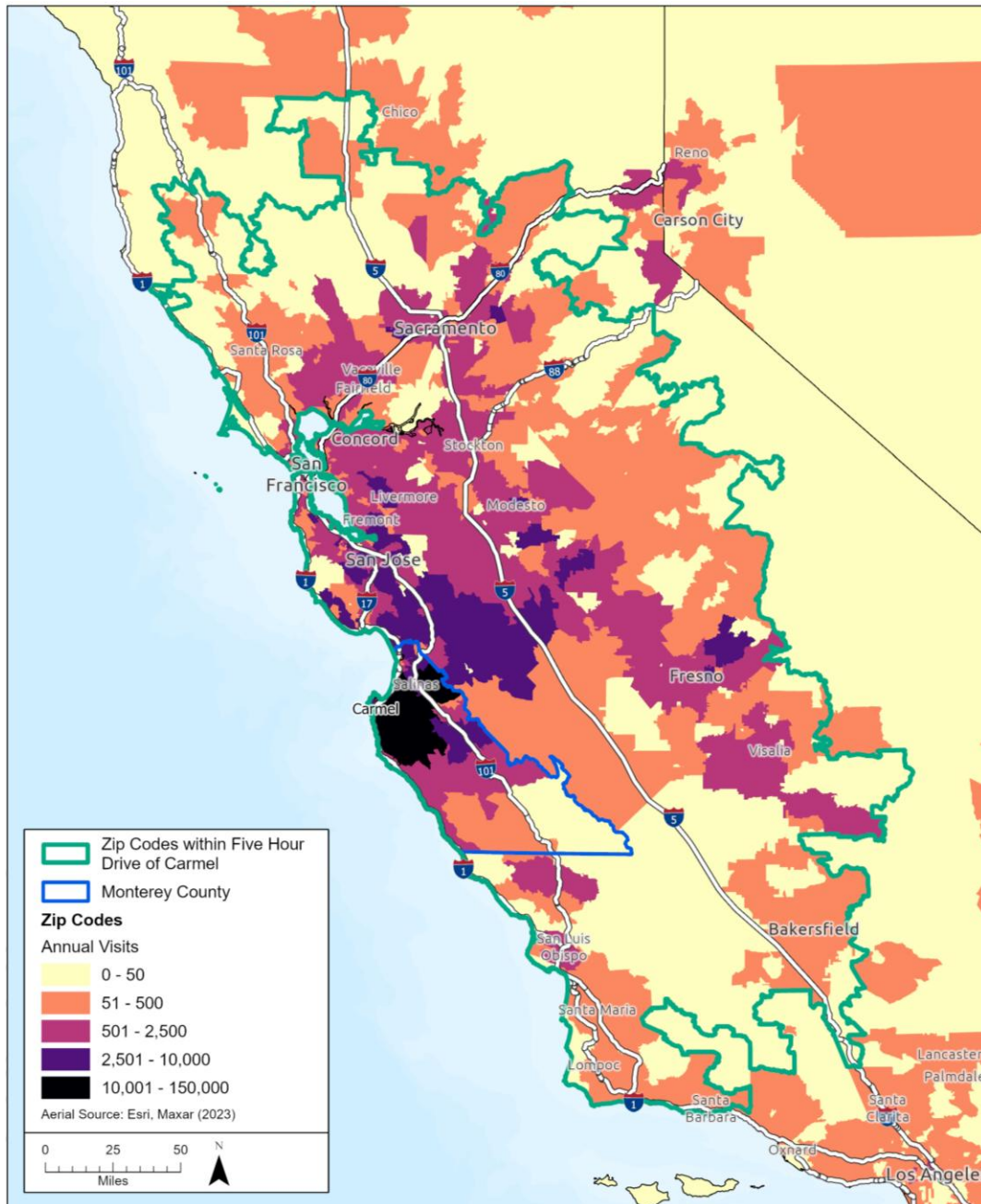


Figure 17. Carmel Beach Annual Visitation within a 5-Hour Drive

3.3.3 Country-wide

While visits predominantly come from nearby county residents, and to a greater extent Californians, there are still visitors from all 50 states in the country. Outside of California, trip

frequency by state is in line with overall population and where direct flights between MRY and other nearby airports (SJC, SFO) that have direct flights. Texas, Florida, New York, and Illinois round out the top five for home origins of visitors, and New York/Newark, Seattle, and Dallas/Fort Worth represented the top cities for home origins of visitors (Table 1). Many non-Californian visitors come from these states given the efficient air travel.

Table 1. Estimated number of yearly visitors from U.S. cities outside of California

Urban Area Name	Estimated Number of Yearly Visitors
New York / Newark, NY / NJ / CT	7,317
Seattle / Tacoma, WA	5,464
Dallas / Fort Worth / Arlington, TX	5,139
Phoenix / Mesa, AZ	4,761
Chicago, IL / IN	4,502
Washington, DC, VA / MD	3,337
Denver / Aurora, CO	3,267
Las Vegas / Henderson, NV	2,754
Houston, TX	2,666
Minneapolis / St. Paul, MN / WI	2,509

Figure 18 highlights the extensive network of domestic air travel across the county that can support a diverse geographic distribution of potential visitors to MRY. The mobility data home origins are in line with what *Visit Carmel* finds in its “Fly Market” website, which tracks impressions and clicks. Top visits to the site come from major cities such as Dallas, Seattle, and Denver, which all boast direct flights to SFO and MRY. While not the majority of visitors, out-of-state travelers are an important subset to examine, given that overnight visitors are found to generate significantly higher spending than single day trip visitors.¹⁵ The spending of these visitors is exacerbated when beaches are located close to shopping and dining facilities, which Carmel offers in abundance.

¹⁵ King, P. 2002. Economic Analysis of Beach Spending and the Recreational Benefits of Beaches in the City of San Clemente. Report prepared for the City of San Clemente; King et al., 2025. Beach Tourism and Local Economies: A micro-level study of visitor spending in Southern California. *Shore and Beach*, 93:3-11.

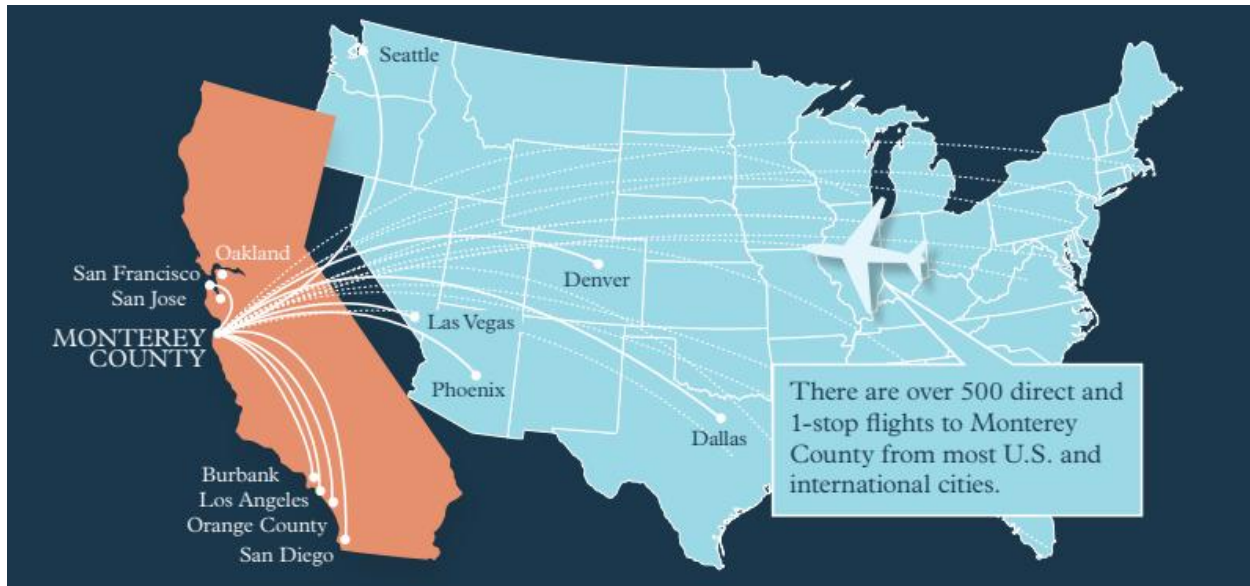


Figure 18. Direct and Indirect Flights to Monterey County Airport. Solid lines indicate direct flight routes.

The Monterey Chamber of Commerce and visitor center publications also report that nearly 10% of visitors came from outside the country. Visitors on flights from China, Canada, Brazil, France, U.K., and Australia all fly to SFO, and numerous ground transportation options are available to get to Carmel including rental cars and chartered bus tours.

3.3.4 Demographics

The mobility data did not represent information on individual demographics; however, this study did utilize the U.S. Census to look at the demographic makeup of the zip codes from which the detected visitors hail. Around 75% of visitors came from zip codes that were mostly white and skewed towards an older population with a median age over 65 years. The median household income in these zip codes was often more than \$150,000/yr. These demographics are consistent when looking at different distance bands: those living within a half-hour of Carmel, California, residents, or country wide.

3.4 VISITATION PATTERNS

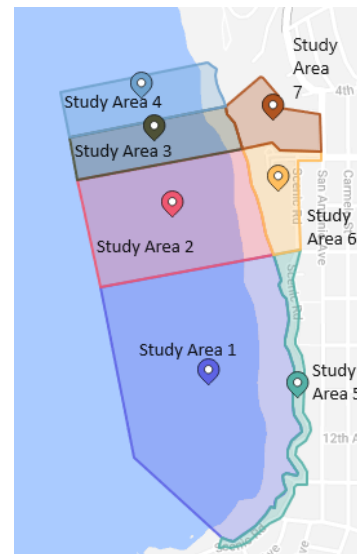
A deeper dive into the mobility data reveals visitation where people travel from and go to while they are at Carmel Beach. There is an even split between vehicles that access the beach driving south on N. San Antonio Avenue (2,400 cars per day), likely coming from 17-Mile Drive, and cars that enter driving down Ocean Avenue (2,800 cars per day), likely from Highway 1.

About 1,000 cars a day access Scenic Road at 8th Avenue, and fewer enter Scenic Road further south of 8th Avenue. There is higher vehicle activity at the Del Mar Parking Lot, and along Scenic Road down to the intersection with 13th Avenue. Six hundred and fifty cars per day were recorded as driving down Scenic Road south of 13th Avenue.

For a more granular look into where people spend their time once they enter the study area, this study splits the Carmel Beach area into eight smaller zones (Figure 10), and Table 2 displays visits by study area zone. Unsurprisingly, the Del Mar beach parking lot off Ocean Avenue is the most frequented location by a large margin. However, the Scenic Road walkway sees very high activity, especially from a smaller set of visitors, which could imply that these are residents who recreate on the walkway as part of their daily or weekly routines. This finding was corroborated by the Coastal Adaptation Option Survey, which also noted local’s preferences for walking along Scenic Road and the beach and frequenting the southern end of Carmel Beach.

Table 2. Carmel Beach yearly visitation within each of the study area sections

Study Area	Visits	Visitors	Visits/ person
1. South Beach	111.2k	84.7k	1.31
2. Central Beach	153.4k	138.4k	1.11
3. North Beach Sand Ramps	59.8k	54.1k	1.11
4. North Beach	24.2k	20.7k	1.17
5. Scenic Road Walkway	431.5k	226.3k	1.91
6. Del Mar Parking Lot	545.7k	422.9k	1.29
7. North Dunes and Volleyball Courts	53.5k	41.4k	1.29



It is not possible to add the subtotals together, as the confidentiality obfuscations and geographic uncertainty about device locations result in some double-counting of devices near the AOI boundaries. These figures should be considered in relative terms, and highlight that more than a third of visits occur in Sub Area 6 near the Del Mar parking lot. They also highlight the importance of the Scenic Road walkway, which accounted for around 20% of visits.

3.5 TRAVEL COST MODEL RESULTS

The TCM indicates that Carmel beachgoers value their visit to the beach at approximately \$32 per trip, using conservative modeling approaches¹⁶. It can be thought of as the price that people would be willing to pay if they were required to pay for the right to visit the beach.

For comparison, in 2002, a study by coastal economist Philip King found that San Clemente, CA beach trips were valued at \$30.58¹⁷, and in a separate 2002 study found that a trip in the high season to Carpinteria, CA's beach was valued at \$23.38¹⁸. Inflated to today's dollar value, this equates to nearly \$42 to \$55 of value per trip. Without adjusting for inflation, which is not as impactful to recreation activities over time, the results are very consistent¹⁹.

The use of cell phone data results in detection of less frequent visitors that would likely be missed (or choose not to answer) using normal survey distribution methods. This can change the shape of the demand curve, and result in lower estimates of the daily or trip value. This is offset by the higher visit estimate, though it is not possible to know with certainty whether these effects fully balance out.

Multiplying the per-trip value estimate by the estimated yearly trip count of 1,149,179,²⁰ this yields a total value of the beach at \$36.8 million per year. While this dollar figure is not represented in tax revenues or fiscal budgets as standard market goods, it is a figure that can be used to understand the unpriced recreational value that Carmel Beach provides to the area.

Understanding and using this value is important, as incorporating beach user wellbeing and willingness to pay into decision making can justify the costs of adaptation projects that might otherwise not be considered economically viable. When debating the approval of publicly funded projects, it is often the case that the costs of projects are communicated in tangible dollar amounts, but the value associated with the public benefit is murky, as the majority of benefits are non-market goods and services. While the City has a responsibility to its residents to continue to provide these beach recreational opportunities and amenities, given the large state-wide and regional draw of Carmel Beach, this may justify other regional and statewide funding sources.

¹⁶ Second homeowners (Carmel is their non-primary home), are excluded from the TCM

¹⁷ King, P. 2002. Economic Analysis of Beach Spending and the Recreational Benefits of Beaches in the City of San Clemente. Report prepared for the City of San Clemente.

¹⁸ King, P. 2002. Economic Analysis of Beach Spending and the Recreational Benefits of Beaches in the City of Carpinteria. Report prepared for the City of Carpinteria.

¹⁹ A comprehensive review of TCM studies analyzing the benefits of beach recreation found that most studies with comparable methodology and analysis were completed before 2010. The methodology and analysis of studies thereafter are not directly comparable to this study.

²⁰ Estimated number of yearly visitors in 2024 from Placer.ai

The results of the TCM attempts to provide an objective (but incomplete) measure of public value, so that costs of beach management and adaptation projects can be compared in a cost/benefit framework within the City's broader economic context.

3.5.1 What This Means for Adaptation

Carmel Beach provides recreational opportunities that are a significant attraction for residents and tourists alike. While the beauty of the area is seen as highly valuable, the results of the TCM put a number on just how valuable the coast is to Carmel Beach users, and understanding the benefit of these amenities can help the City make decisions about adaptation in the face of sea level rise and climate change. Given the number of visits that originate outside the City limits, it also highlights the regional importance of the location as an economic draw, and provides a means to campaign more effectively for regional, state, and national funding sources to implement coastal adaptation.

The limitations associated with both the Coastal Adaptation Options Survey and the Beach Visitation and Non-Market Value Analysis highlight a need to include monitoring of recreational activity types and activity hot spots to identify key locations and uses not captured in these analyses. Some examples of other recreational activities could include surfing, fishing, volleyball, and dog walking, which also have varying levels of willingness to pay for their specific recreational activities.

Ensuring that beach access and recreation can continue into the future is directly tied to economic activity, as well as the quality of life and other intangible benefits that the beach brings to the City. Early investment in coastal adaptation measures will help preserve these benefits and bring significant return on investment in the future by avoiding some of these losses associated with sea level rise. For example, if continued beach scouring leads to decreased beach widths and increased coastal erosion, then visitation could drop significantly. Expenditures associated with increasing beach sand management (and as indicated by the Adaptation Options Survey the less popular option of more substantial beach nourishment) could have significant yearly returns on investment. In one year, there will be enough visits (more than 1.1 million) and visitors (more than 700,000) who value beach access (at \$32 a visit) that the public benefit could exceed the cost of multiple sand management projects.

Additionally, without these adaptation measures, Carmel Beach would be expected to experience lower levels of real market expenditures in the lodging establishments, restaurants, and stores in the City, as well as secondary impacts on coastal property markets. While those considerations were not accounted for in this study, a study by King et. al. (2025)²¹ looked into market expenditures, and found that on average visitors spend roughly \$51 per beach trip in

²¹ King, Philip & Jenkins, Sarah & King, Sharmila & Reineman, Dan & Castro Sotomayor, Jose & Lester, Charles & Patsch, Kiki. (2025). Beach tourism and local economies: A micro-level study of visitor spending in southern California. *Shore & Beach*. 93. 3-17. 10.34237/1009321. Available at: http://asbpa.org/wp-content/uploads/2025/06/king_93_2_color.pdf

Santa Barbara and Ventura counties, with higher spending at urban beaches near amenities such as restaurants and shopping, such as at Carmel Beach. Though this is taxable sales spending and not a willingness to pay value, it also directly highlights the importance of beaches for local economies.

In summary, without adaptation measures, the City could see significant impacts associated with sea level rise including a reduction in property values and associated ad valorem²² tax revenues. These reductions in revenues could limit the ability of the City to finance emergency or critical infrastructure upgrades in the future, highlighting the benefits of proactive intervention.

²² A tax that it is proportional to the value of the underlying asset

Appendix A

Survey Design and Results

SURVEY DESIGN

To better understand how community members and visitors currently use Carmel Beach and to gauge their perspectives on future climate adaptation planning, the survey was organized into five distinct sections: Introduction, Existing Conditions, Adaptation Preferences, Demographics, and Outreach Follow-Up.

SURVEY STRUCTURE AND FLOW

The survey instrument opened with an introduction that informs participants of the study's purpose, scope, and area of concern. This opening section established the research context by introducing the survey objectives, study area, and research team, and provided direction to the project website for additional information.

Following the "Introduction" section, survey respondents were taken to the "Existing Conditions" section. Designed to gather information on the current visitation and use patterns at Carmel Beach, this section consisted of nine questions that gauged how frequently people visit Carmel Beach, what recreational activities they engaged in, and which aspects of their beach experience mattered most. Three components of the respondents' beach experience were presented in the survey: recreational opportunities available to visitors, components of the natural environment that enhance the visitor experience, and visitor amenities and facilities that support their activities.

To better understand where visitors most frequently access and use Carmel Beach, the survey included two map-based questions, allowing respondents to indicate on a map their preferred coastal access point and the areas where they most frequently spent time during their visit.

The "Adaptation Goals" section of the survey transitioned towards gathering information on respondents' current awareness of coastal erosion and hazard impacts. This section operates on a tiered knowledge approach, first assessing respondents' familiarity with various adaptation techniques using a three-level scale ranging from "not at all familiar" to "moderate to detailed knowledge" or "prior experience." The adaptation strategy options presented ranged from nature-based to traditional engineered solutions.

Respondents who indicated moderate to detailed knowledge of specific strategies were then invited to express their level of support for those strategies. In addition, all

participants, regardless of their technical knowledge, evaluated broader management philosophies, including “Repair damage as it occurs,” “Continue to make incremental changes,” and an open-ended “Other” option prompting respondent input.

This section then asked about respondents’ preferences regarding the timeline for implementing various strategies. Last, it assessed current satisfaction levels with existing Carmel Beach maintenance practices, with follow-up opportunities for respondents who reported being dissatisfied to provide specific suggestions for improvement through open-ended responses.

The survey concluded with a “Demographics and Outreach Follow-Up” section. The demographic section collects socioeconomic information that informs the survey data analysis and validates the travel cost model, while also helping determine to what extent the survey sample represents the diverse perspectives and experiences of all beach visitors.

The Outreach Follow-Up component captures important methodological information regarding how participants learned of the survey, providing insights into the effectiveness of different communication channels. It also identifies respondents interested in continued engagement through in-person or virtual community meetings and learning sessions focused on sea level rise and coastal erosion planning for Carmel Beach. To protect participant privacy while enabling future outreach, email addresses were collected through a separate, anonymous survey system that prevents linking contact information to individual responses.

SURVEY PARTICIPATION

The survey received 366 total responses, and 307 completed the survey in full (Figure A-1). Of the total survey sample, 84% completed all assigned survey questions. Of the remaining sample, 3% completed between 99% and 50% of the survey, and 4% completed 49% and 15%. The remaining 9% of the sample completed less than 15% of assigned survey questions.

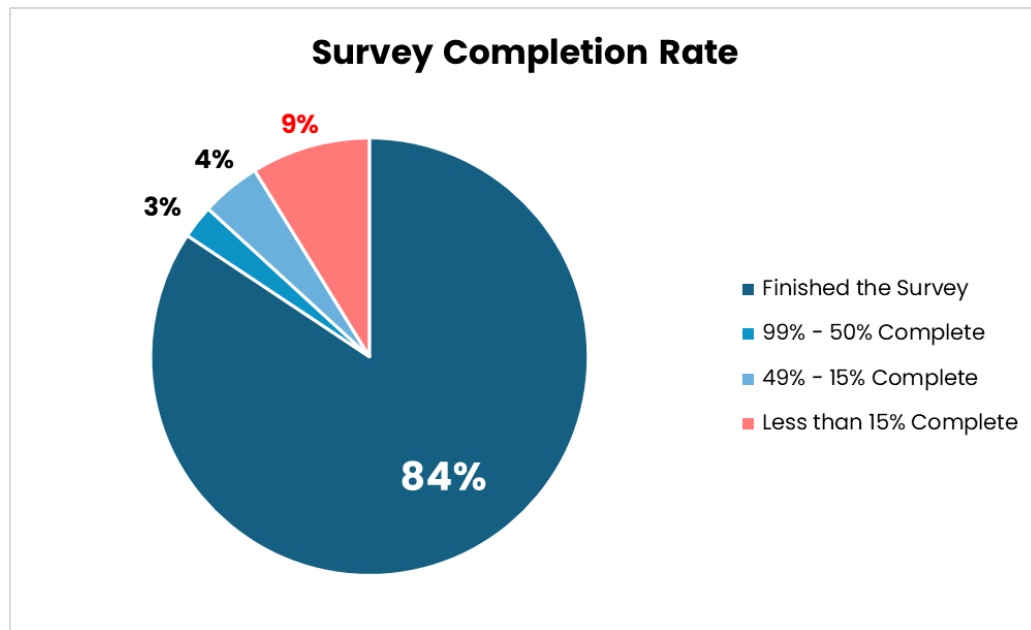


Figure A-1. Survey Completion Rates

OUTREACH AND SURVEY DISTRIBUTION

The survey was distributed through multiple outreach channels throughout a 6-month period beginning on February 14 and ending on July 31, 2025. The survey was distributed via the City’s Friday Newsletter, email, flyers and postcards, radio promotion, newspaper advertisements, and a presentation to the Carmel High School Environmental Club (Figure A-2).

Email distribution was the method that collected the majority of responses at 72% of the total survey sample. Email distribution targeted 23 different local organizations, including Carmel Unified School District, Monterey Bay National Marine Sanctuary, Pebble Beach Company, Carmel Rotary Club, and many more. These emails were distributed on multiple occasions, including to follow up with respondents who indicated interest in upcoming community workshops and community organizations, with relevant logistics for attending. Email distribution also included the City’s Friday Newsletter, which reaches 1,273 residents. Information about how to take the survey was included in five Friday Newsletter’s.

In addition to the high email responsiveness, radio advertising was the second-most successful outreach channel, accounting for 15% of the total survey sample. In partnership with EMC Planning Group, the City of Carmel-by-the-Sea recorded a 30-second advertisement encouraging listeners to take the survey at carmelsealevelrise.com on station KRML 94.7 FM. This ad was broadcast for four times per day for approximately 4.5 months, from March 12 through July 31, 2025. In addition to this advertisement, EMC Planning Group and City of Carmel-by-the-Sea staff discussed the project, upcoming

community workshops, and the survey during a 15-minute live segment “Pub Talk” with KRML radio hosts at Alvarado Street Brewery, one of KRML’s most listened-to hours. In addition to live listeners, 50 viewers tuned into the Instagram live stream.

Postcards were also posted and distributed at different locations around Carmel-by-the-Sea, generating 9% of survey responses. The locations included five hotels, Carmel Surf Shop, Midtown Surf Shop. The outreach team also passed out postcards at various community events, including the Carmel-by-the-Sea Farmer’s Market, Earth and Arbor Day, and the annual Carmel Surfabout. In addition to posting/distributing the postcards at local businesses and community events, the outreach team also handed them out at Carmel Beach on February 21, 2025 and May 30, 2025. Lastly, the outreach team presented the project to the Carmel High School Environmental Club on February 24, 2025, and encouraged club members to share and take the survey.

Another distribution medium used by the outreach team was advertising the survey in the Carmel Pinecone, the City’s local newspaper, accounting for 3% of survey respondents. This came in the form of a quarter-page advertisement over a 5-month period (on February 28, May 9, and June 27, 2025).

Finally, the outreach team printed and displayed physical flyers around the City in locations that receive heavy foot traffic, such as Bruno’s Market & Deli, the post office, the library, and city hall, gathering 1% of the total responses within the survey sample.

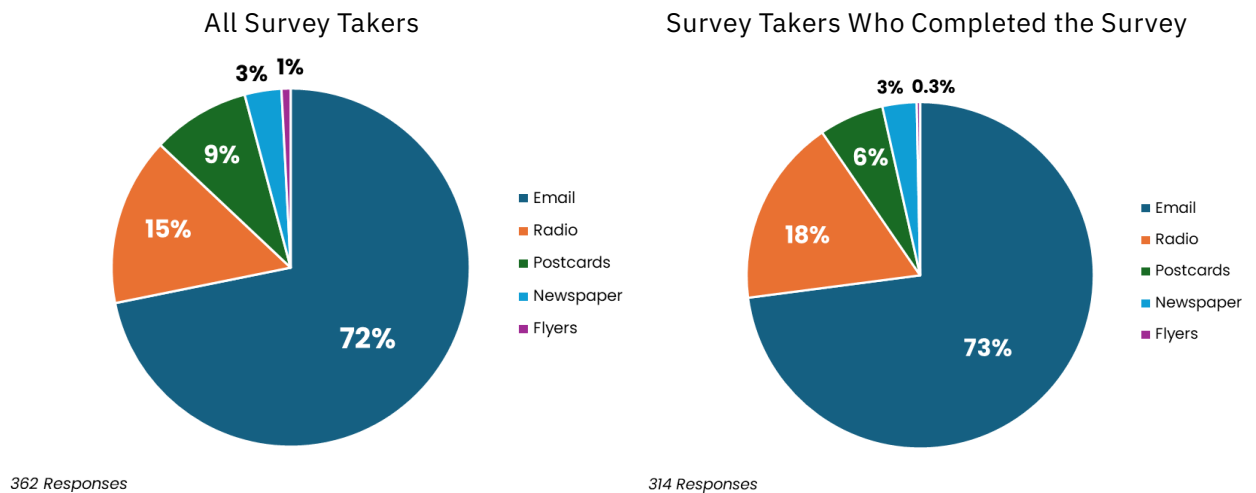


Figure A-2. Survey Engagement Medium by All Survey Takers and Survey Takers Who Completed the Survey

Table A-1, below, lists the date, source, and details of each outreach event, and the various means to promote the survey.

Table A-1. Engagement Date and Activity

Date	Source	Details
February 14, 2025	Email	<p><i>About:</i> An email was sent to the following groups notifying them about the survey and encouraging them to share it with their network.</p> <p><i>Distribution List Information:</i> Distribution List Information: Carmel Unified School District, Monterey Bay National Marine Sanctuary, Carmel Area Wastewater District, Marine Sanctuary Foundation, Marine Protected Areas Alliance Big Sur Land Trust, Pebble Beach Company, Surfrider Foundation of Monterey County, Landwatch Monterey, Carmel Chamber of Commerce, Carmel Foundation, Friends of Carmel Forest, Carmel Rotary Club, Friends of Mission Trails Nature Preserve, Carmel Garden Club, Visit Carmel, Carmel Residents Association, Carmel Restaurant Association, Carmel Beach Volleyball Club, Save the Whales, Audubon Society, members of the Monterey Regional Stormwater Management Program, Members ReGen technical advisory committee, Carmel Forest and Beach Commissioners</p>
February 14 and 21, 2025	Newsletter	Posted in Carmel’s online Friday Newsletter
February 20, 2025	Outreach	Outreach Booth at Thursday Carmel Farmer’s Market
February 21, 2025	Flyer	Flyers posted at Bruno's Market, Post Office, Library, and City Hall
February 21, 2025	Postcard	Five hotels in Carmel-by-the-Sea, Carmel Surf Shop, Midtown Surf Shop, and handed out at Carmel Beach
February 24, 2025	Outreach	On February 24, 2025, staff members from EMC Planning Group and the City of Carmel presented the project to the Carmel High School Environmental Club and passed out postcards with a QR code to the survey to the club.
February 28, May 9, and June 27, 2025	Newspaper	Quarter-page advertisement placed in the local newspaper, the Carmel Pine Cone

Table A-1. Engagement Date and Activity

Date	Source	Details
March 12– July 31, 2025	Radio	EMC Planning and City of Carmel staff members recorded a 30-second advertisement discussing Carmel Beach and encouraging listeners to take the survey at carmelsealevelrise.com Channel: KRML 94.7 FM
April 18, 2025	Radio	<i>KRML Pub Talk, about the interview:</i> On April 18, 2025, EMC Planning and City of Carmel Staff discussed the sea level rise adaptation planning project, the upcoming community workshop on May 15, 2025, and the survey during a 15-minute live segment with KRML Radio Hosts at Alvarado Street Brewery. The Pub Talk is one of KRML’s most listened-to hours. Fifty viewers tuned into the Instagram live stream and as of 10 a.m. on April 18, 2025, 338 people had viewed the show reel on Instagram.
April 26, 2025	Outreach	Outreach was conducted during Carmel’s third annual Earth and Arbor Day.
April 30, 2025	Email	<i>About:</i> An email was sent to 87 survey respondents who indicated interest in a community workshop and community organizations, notifying them about the date and location of the community workshop on 5/15/25. <i>Distribution List Information:</i> Carmel Unified School District, Monterey Bay National Marine Sanctuary, Carmel Area Wastewater District, Marine Sanctuary Foundation, Marine Protected Areas Alliance Big Sur Land Trust, Pebble Beach Company, Surfrider Foundation of Monterey County, Landwatch Monterey, Carmel Chamber of Commerce, Carmel Foundation, Friends of Carmel Forest, Carmel Rotary Club, Friends of Mission Trails Nature Preserve, Carmel Garden Club, Visit Carmel, Carmel Residents Association, Carmel Restaurant Association, Carmel Beach Volleyball Club, Save the Whales, Audubon Society, and the 87 respondents to the Sea Level Rise & Coastal Hazards Community Meeting Interest Form 2025 (Carmel-by-the-Sea).
May 1, 2025	Flyer	Flyers for survey and community meeting poster at Post Office, City Hall, Library

Table A-1. Engagement Date and Activity

Date	Source	Details
May 2, 2025	Newsletter	Posted in Carmel’s online Friday Newsletter
May 9, 2025	Newsletter	Posted in Carmel’s online Friday Newsletter
May 9, 2025	Newspaper	Quarter-page advertisement placed in the local newspaper, the Carmel Pine Cone
May 15, 2025	Outreach	Outreach done at the Community Meeting/Workshop in Carmel City Hall Chambers from 5 to 7 p.m. A presentation and workshop was led by Integral Consulting, EMC Planning, and supported by City of Carmel Staff.
May 30, 2025	Postcard	Distributed postcards at Carmel Beach main parking lot
June 7, 2025	Flyer	Posted at the Carmel Surf About (long running annual surf contest)
June 7, 2025	Postcard	Distributed at the Carmel Surf About (long running annual surf contest)
June 7, 2025	Outreach	Carmel Surf About: Spoke with the MCs and attendees about the project and motivated surf community to get involved
June 27, 2025	Postcard	Distributed at various city locations
June 27, 2025	Newsletter	Posted in Carmel’s online Friday Newsletter



Appendix B Travel Cost Model Methods

Travel cost models are useful in estimating nonmarket values of recreation in the environment. Their use cases range from recreation loss from a beach closure due to an oil spill, to benefit-cost analyses determining the value of environmental improvements such as water quality or increased fishing access¹. This study implemented a travel cost model using mobility data to estimate recreational values of Carmel Beach. Overnight trips and air travel can obfuscate the beach recreation portion of trip expenses, so we focused our analysis on those with a primary home origin within a 5-hour driving distance from Carmel. At an individual trip level, this value is translated into a dollar amount that can be interpreted as the amount of money a beachgoer would be willing to pay to recreate on the beach, understanding that this is not an actual value recreators pay at a beach kiosk to gain access.

The model is as follows:

$$annual\ visits_i = dist_opp_cost_i + pct_male_i + pct_white_i + median_house_income_i + median_age_i + \varepsilon_i$$

Where: *annual visits_i* is the number of trips taken in 2024 from people living in zip code “i.”

And where: *dist_opp_cost_i* is the “distance opportunity cost” for people in zip code “i.”

This is first calculated by obtaining the driving distance (or walking, if close enough) in hours from county “i” to Carmel Beach. Next, this study developed an opportunity cost of spending that time traveling to the beach. That is, the potential cost incurred if an individual chooses to forgo something else and instead elects to travel to the beach. The study team followed standard practice, which makes the simple assumption that a recreator, in order to spend time traveling to the beach, adjusts their behavior for the fact that it is not always possible to trade time or labor for increased wages, and that there may be some negative aspects of a trip, for example, being stuck in holiday traffic. It is common to use an hourly value that represents one-third² wage rate, which we implement here as well. With income available only at the zip-code-year level, we take the median annual household income and divide it by 2,000 (total yearly median working hours) and multiply that by one-third. This rate, multiplied by the number of hours spent

¹ Parsons, G.R. (2003). The Travel Cost Model. In: Champ, P.A., Boyle, K.J., Brown, T.C. (eds) A Primer on Nonmarket Valuation. The Economics of Non-Market Goods and Resources, vol 3. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0826-6_9

² A full 40-hour week equates to a possible 2,080 hours of labor per year. Using a slightly lower figure is a minor adjustment to allow for those who work part time.

traveling to the beach is considered the “travel cost.” In theory, we expect that with equal incomes, the farther away from Carmel someone lives, annual trips should decrease.

We next have a series of zip-code demographics to help control for zip-code-specific characteristics that might impact trip frequencies and decisions to recreate at Carmel Beach. Gender, ethnicity, age and income have all been identified as factors that influence participation in recreation, so parameters that include these statistics are included.

For example, the variable, pct_male_i is the percent of males in zip-code “ i ”, pct_white_i is the percentage of the population in zip-code “ i ” that identifies as white, $median_age_i$ is the median age of the population in the zip code, and $median_house_income_i$ is the median household income. Note that because we only have zip-code-level data, this does not imply that people are partially male or white, but that this is the percentage of that zip code having those characteristics.

These demographic controls help to isolate the travel cost effect from other exogenous variables that might influence travel decisions. We also have an error term ε_i that is used to capture any variability or “noise” in the data that is not explained by the variables we used.

The results of the Travel Cost Model are shown below in Table B-1. In general, the column ‘Coefficient’ is used to interpret the direction and correlation of the impact of a variable increase on annual trips. For example, a positive number in this column suggests that as ‘ x ’ increases along with annual trips. A negative value suggests that as ‘ x ’ increases, annual trips decreases. Consider the value of travel cost ($dist_opp_cost$) which is equal to -0.031 . This suggests that as the distance of a zip code from Carmel Beach increases, the number of trips to Carmel Beach from this zip code decreases. Additionally, the negative reciprocal of this coefficient also gives us the dollar amount for consumer surplus, i.e., the value of a beach trip and the value recreators would be willing to pay to access the shore³. $1/(-0.031)$ equates to \$32.01 which we round to \$32. Note that while this dollar amount was obtained using zip codes from a 5-hour drive radius, we apply it as an average to all visitors when estimating the total social beach value from all visitors.

³ For a deeper mathematical discussion on this calculation, see Parsons (2003)

Table B-1. Travel Cost Model Variables and Results

Annual Visits (annual_visits_2024)	Coefficient	Std. Err.	95% conf.	Interval
Travel Cost (dist_opp_cost)	-0.031	0.003	-0.036	-0.023
Percent Male (pct_male)	-8.729	2.017	-12.682	-4.776
Median Age (median_age)	-0.030	0.010	-0.049	-0.011
Percent White (pct_white)	-0.217	0.321	-0.846	0.413
Median Household Income (median_house_inc)	1.8 E-5	1.1 E-5	1.2 E-5	2.1 E-5

Note: The Travel Cost Model is based on 2024 visits using a negative binomial regression with robust standard errors. Constant results omitted for brevity. N=613 zip codes within a 5-hr travel time via car.





CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report

November 13, 2025
ORDERS OF BUSINESS

TO: Forest and Beach Commission

SUBMITTED BY: Mary Bilse, Environmental Programs Manager

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Informational Signage Along Carmel Scenic Pathway

RECOMMENDATION:

Review and approve the proposed informational signage along the Carmel Scenic Pathway for consistency with the City's Local Coastal Land Use Plan and Shoreline Management Plan.

BACKGROUND / SUMMARY:

Carmel Cares, a local volunteer organization, is proposing to enhance public information and safety signage along the Carmel Scenic Pathway. The proposal includes installing new informational sign posts at twelve (12) locations along the pathway, as well as additional signs at bluff access points and pedestrian walk-throughs. The signs would be constructed of high-pressure laminate material and are intended to provide clear, attractive, and consistent messaging to pathway users regarding appropriate use and safety, while maintaining the natural aesthetic and material character of the area.

Proposed Signage

Sign #1 — Informational Sign Posts

Twelve informational sign posts are proposed at various locations along the Scenic Pathway (**Attachment No. 1 – Site Map**). Each post will be constructed of reclaimed redwood measuring 8 inches by 8 inches and standing 43 inches above ground. Posts will be installed along the pathway only, in areas wide enough to accommodate them without impeding pedestrian movement. No signs will be placed off the pathway or

within vegetated areas.

Messages will include: "Pedestrians Only," "Dogs on Pathway Must Be on Leash," "Pick Up After Your Dog," "Please Do Not Feed Wildlife," "No Smoking on Pathway or Beach," and directional information such as "Stairways" or "Restroom ___ ft."



Sign #2 — California Coastal Trail Emblem

Each informational sign post will also display a California Coastal Trail emblem at the top, recognizing the Scenic Pathway as part of the statewide Coastal Trail network.



Sign #3 — Bluff Area Signs

Up to ten bluff area signs are proposed to discourage informal access and minimize erosion in areas where visitors have created trails along the bluffs. These signs will read “Walking on Slopes Prohibited – Please Use Stairs” and will be mounted on 6-inch by 6-inch reclaimed redwood posts with 8-inch by 8-inch sign panels. The intent is to direct pedestrians to designated stairways and prevent further damage to sensitive bluff slopes.



Sign #4 — Walk-Through Safety Signs

Eight safety signs, measuring 8 inches by 8 inches, are proposed for the four pedestrian walk-throughs connecting San Antonio Avenue to Scenic Road at Ninth, Tenth, Eleventh, and Twelfth Avenues. One sign will be located at the top and one at the bottom of each walk-through. The signs will read “Caution: Slippery When Wet” and are intended to alert pedestrians of potentially slippery conditions during foggy or rainy weather.

Because the adjacent fences are on private property, the final placement of these signs has not yet been determined. Carmel Cares will coordinate with the Planning and Public Works Departments to identify appropriate locations for sign installation.



Sign #5 — No Smoking Fence Post Signs

Smaller “No Smoking” signs, measuring approximately 4.5 inches by 4.5 inches, will be mounted on existing vertical fence posts near benches where smoking activity has been observed. The Scenic Pathway currently contains 36 benches, and Carmel Cares anticipates installing approximately 15 signs adjacent to selected benches. The initial installations are proposed for benches located south of Thirteenth Avenue. These small signs will reinforce the City’s existing “No Smoking on Pathway or Beach” regulations and help discourage smoking in high-use areas.



Sign #6 — Recycling Cart Access Sign

One “Access to Recycling Cart” sign, measuring 12 inches by 6.5 inches, is proposed for installation on the stone wall adjacent to the waste containers near Eighth Avenue to identify the location of the recycling cart access point.



Next Steps

Because the proposed signage is located within the Coastal Zone and adjacent to sensitive bluff and shoreline areas, the project must be reviewed for consistency with the City's Coastal Land Use Plan (CLUP) and Shoreline Management Plan.

Upon approval by the Forest and Beach Commission, Carmel Cares will be authorized to fabricate and install the approved signage.

Regulatory Considerations

Municipal Code Compliance

Installation of the proposed signage is subject to the requirements of the Carmel Municipal Code. Section 12.32.140 ("Signs") prohibits posting or displaying any sign without City approval. Section 12.32.165 ("Beach Use Restrictions") authorizes the City to designate specific access paths, prohibit traversal outside those paths, and requires signage to inform the public of such restrictions.

Shoreline Management Plan and Local Coastal Program

The City's certified Local Coastal Program (LCP) incorporates the Shoreline Management Plan, which establishes design and policy guidelines for signage within the coastal zone. The plan emphasizes minimal and consistent signage, preservation of scenic views, and the use of materials that complement the coastal environment, such as reclaimed redwood and other non-rusting materials.

Section 4.2.6 (Signage) of the Shoreline Management Plan provides guidelines regarding signage along the Scenic Pathway to ensure signs enhance the coastal experience without detracting from the natural viewshed. The following excerpt from Section 4.2.6 (Signage) of the Shoreline Management Plan is provided for reference:

Signs provide information for shoreline visitors. They identify traffic and parking regulations, give directions to nearby beach accesses, warn of hazardous conditions, and inform about City ordinances regarding alcohol use, beach fires and fragile slope protection.

Of all the topics dealt with by the Carmel Beach Rehabilitation Task Force, signage was the subject of the most intense deliberations. The final design was a compromise between notifying beach visitors and pertinent information and not causing them to be overwhelmed or the unique coastal viewshed to be disrupted.

The number of signs along the Pathway was limited by consolidating information at selected locations (e.g. signs on trash/recycling container enclosures and on "access" sign posts). All informational signs were of muted earth tones to sustain the integrity of the landscape design. To avoid unsightly rust, non-metal signs and fasteners were used. When signs were legally required to be made of metal (e.g. traffic and parking signs), they were enclosed within a wooden frame.

One type of sign purposely stands out from the others. The signs that warn of hazardous surf conditions are standard dark brown with bright yellow lettering and made of metal. They were designed by a consortium of Monterey Bay municipalities, in conjunction with the California Department of Parks and Recreation and the U.S. Coast Guard. They are placed mid-level on each beach accessway and are double-sided to be seen from both the beach and the bluff.

Over the years, the number and types of signs have gradually increased. Sign colors and locations have expanded beyond the original design and intent. At some locations, signs are now competing with the natural viewshed.

Signage is a critical part of Carmel's shoreline management program. To ensure that signs enhance, rather than detract from, the City's coastal resources, adopted policies require that signs:

- provide information in a clear, accurate and concise manner;*
- are visible to the public without detracting from protected coastal viewsheds;*
- are consistent in design style, use of color and materials;*
- are efficiently used, limiting overall numbers and avoiding a cluttered appearance; and*
- reflect the aesthetic sensitivities of the Carmel community.*

Review and Approval

The Forest and Beach Commission serves as the approving body for this project. The Commission will review the proposed signage for consistency with the Shoreline Management Plan and Local Coastal Program. If the Commission finds the signage to be consistent, the project may proceed with installation.

Environmental Evaluation

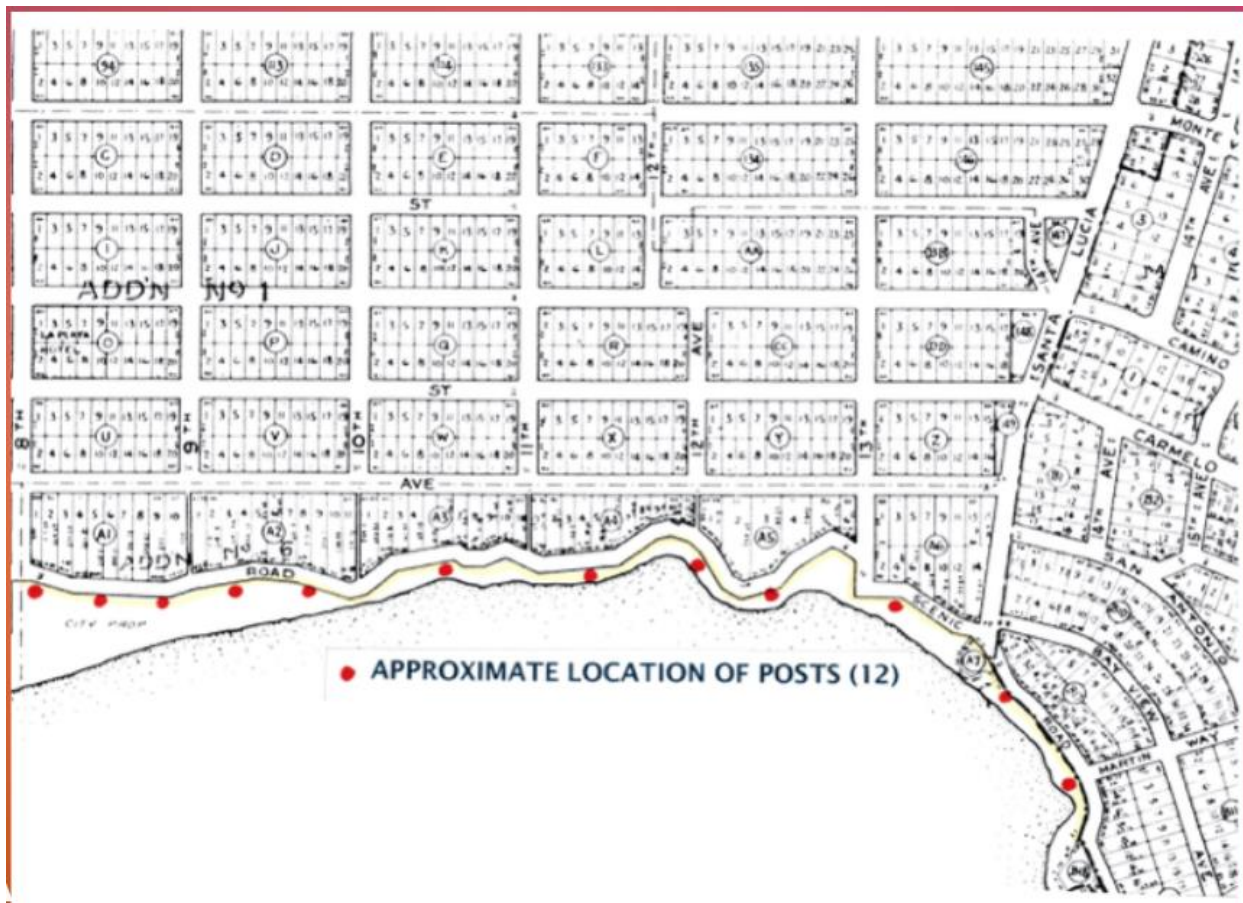
The project is categorically exempt from environmental review under the California Environmental Quality Act (CEQA) pursuant to Section 15301 (Existing Facilities) and Section 15311 (Accessory Structures – On-Premise Signs), as the proposal involves the installation of minor signage within existing improved areas. The City will file a Notice of Exemption upon Forest and Beach Commission approval.

FISCAL IMPACT:

There is no fiscal impact to the City for the proposed signs, as Carmel Cares is fully funding this project.

ATTACHMENTS:

1. Site Map Informational Sign Posts





**CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report**

**November 13, 2025
ORDERS OF BUSINESS**

TO: Forest and Beach Commission

SUBMITTED BY: Justin Ono, City Forester

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: Present Tree Fine Ad-Hoc Committee Initial Implementation Guide

RECOMMENDATION:

Receive the Forest and Beach Commission Tree Fine Ad-Hoc Committee
Initial Implementation Guide

BACKGROUND / SUMMARY:

FISCAL IMPACT:

None at this time

ATTACHMENTS:

1. Carmel-by-the-Sea Tree Protection Fine Implementation Guide - TM

Carmel-by-the-Sea Tree Protection Fine Implementation Guide

Forest & Beach Commission Discussion items:

Infraction Type	Example Scenario	Recommended Fine Range	Notes for Staff Implementation
Level 1 – Minor / First-Time Infraction	<ul style="list-style-type: none"> • Contractor/Homeowner trims a tree without permit but no lasting harm. • Contractor parks equipment over root zone once, no damage observed. 	\$100–\$1,000	Issue written warning or fine. Document site photos.
Level 2 – Administrative / Repeat Violation	<ul style="list-style-type: none"> • Repeat unpermitted pruning or root disturbance. • Failure to comply with tree protection fencing or conditions during construction. 	\$1,000–\$5,000	Require re-inspection and proof of compliance. Stop work order until resolved.
Level 3 – Significant Negligence or Unauthorized Removal (Small Tree)	<ul style="list-style-type: none"> • Unauthorized removal of tree under 12” diameter. • Heavy root cutting causing tree decline. • Unauthorized removal of “non-protected” but city-managed tree. 	\$2,000–\$10,000 per tree	Include cost recovery for staff/inspection time. Add replanting requirement. Stop work order.
Level 4 – Protected Tree Violation (Medium Size)	<ul style="list-style-type: none"> • Removal of protected tree 12”–24” diameter without permit. • Damage during grading or construction that endangers survival. 	\$5,000–\$50,000 per tree	Require 2–4× replacement ratio; charge appraisal value if larger. Stop work order.
Level 5 – Major / Willful Removal (Large or Significant Tree)	<ul style="list-style-type: none"> • Intentional removal or topping of significant tree over 24” diameter. • Multiple protected trees removed to clear development site. 	\$10,000–\$75,000 per tree	Treat as civil penalty. Stop work order. Consider suspension on permits.
Level 6 – Egregious / Intentional Violations	<ul style="list-style-type: none"> • Contractor/Homeowner knowingly removes or destroys multiple protected or significant trees. • False statements to staff, concealment, or non-cooperation. 	\$20,000–\$100,000 per tree	Apply maximum penalties and civil recovery (e.g., 3× tree value). Refer for misdemeanor prosecution if warranted. Stop work order. Consider suspension on permits.

Implementation Tips for Staff

1. Use discretion but document everything — photos, measurements, and permit history.
2. Base fine on both severity and intent — higher fines for willful conduct or repeat offenders.
3. Always pair fines with corrective action — replacement, restoration, or mitigation.
4. Escalate penalties if:
 - Multiple trees affected
 - Tree is protected or significant
 - Occurs during construction or grading
5. Use value-based or per-inch formula when exact diameter or appraisal data are available

Additional considerations for discussion:

Value-Based Violations (Alternative Approach)	<ul style="list-style-type: none"> Tree removal with known appraised value (ISA or arborist report). 	100%–300% of appraised value	Useful when value is established. Apply 200% for negligence, 300% for willful removal.
Per-Inch Diameter Fee (Simplified Option)	<ul style="list-style-type: none"> Used where appraisal not feasible. 	\$100–\$250 per inch of diameter	Recommended for quick enforcement on small or medium-sized trees.
Damage Without Removal	<ul style="list-style-type: none"> Heavy pruning, trunk wounding, soil compaction. 	3× cost of damage or \$500 minimum	Always require corrective measures and reinspection.
Failure to Replace or Replant	<ul style="list-style-type: none"> Violator fails to meet replacement requirement. 	\$1,000 per missing tree or \$250/in-lieu fee per inch	Add to tree replacement fund.
Repeat or Professional Violator	<ul style="list-style-type: none"> Tree service company or developer with multiple offenses. 	License suspension/revocation + increased fine	Suspend business license after 2nd violation; revoke after 3rd.
Stop Work / Permit Suspension	<ul style="list-style-type: none"> Active site continues work despite notice of violation. 	Immediate stop work order + \$5,000–\$100,000 fine	Require security deposit and mitigation plan before resuming work.

Municipal codes provide a range of remedies to enforce compliance with local laws and ordinances, typically categorized into administrative, criminal, and civil approaches.

<p>Administrative remedies are often the first step and include warnings and notices, office conferences, administrative citations, abatements, permit and license revocations, and administrative hearings. These tools allow cities to address violations informally and efficiently, with the goal of achieving compliance without resorting to formal legal proceedings.</p>	<p>Example: issuing a "stop work" order to halt a construction house remodel due to removing a tree without a permit would be considered an administrative remedy.</p>
<p>Criminal remedies are used when violations pose a serious threat to public health, safety, or welfare, or involve repeat offenders. Criminal enforcement can result in misdemeanor convictions, fines, jail time, and probation, serving as a deterrent.</p>	<p>Example: removing a significant public tree without a permit, or poisoning a tree could be considered a misdemeanor.</p>
<p>Civil remedies are typically used when violations are substantial and other enforcement methods have failed. Cities may file civil actions to obtain injunctions, recover damages, or assess civil penalties.</p>	<p>Example: removing a significant public tree without a permit, or poisoning a tree could be considered a misdemeanor.</p>



**CITY OF CARMEL-BY-THE-SEA
Forest and Beach Commission
Staff Report**

**November 13, 2025
ORDERS OF BUSINESS**

TO: Forest and Beach Commission

SUBMITTED BY: Justin Ono, City Forester

APPROVED BY: Ken Wysocki, Public Works Director

SUBJECT: October 2025 Forester's Report

RECOMMENDATION:

Receive a Presentation of the October 2025 Forester's Report

BACKGROUND / SUMMARY:

FISCAL IMPACT:

none at this time

ATTACHMENTS:

1. Oct Foresters Report for Nov 13 Mtg



CITY OF CARMEL-BY-THE-SEA

Monthly Report

City Forester's Report

TO: Forest and Beach Commissioners
FROM: Justin Ono, City Forester
SUBJECT: October 2025 Forester's Report

Forestry, Parks, and Beach Highlights:

Carmel Forest Master Plan (CFMP):

- A public meeting was held October 21, 2025, to review the first draft from Staff. Feedback was received from the steering committee and the public, and edits are being finalized for a draft to be sent for environmental review. This review stage includes public input.

Contractors:

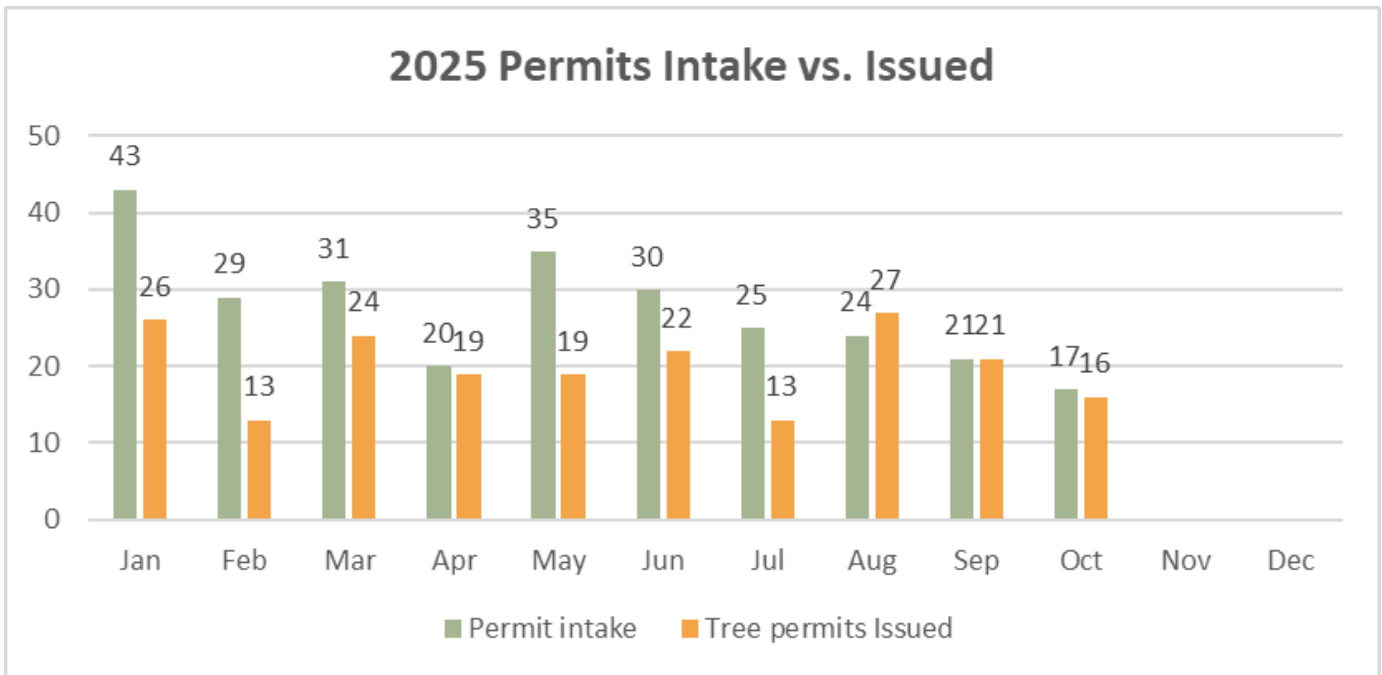
- During the month of October, Tope's Tree Service continued work at Mission Trails Nature Preserve, removing fire fuel, clearing overgrown vegetation, and creating a turnaround for large vehicles along the Serra Trail.
- Our contractors continued to work through our removal and pruning task orders, removing a total of 23 trees and pruning 29 trees. Following removals, stumps are USA and marked for stump grinding.
- Town & Country has been watering young newly planted trees. One more month is planned before we stop watering for the winter.

City Staff and Crews:

- City Forestry Crew removed 3 dead, dying, or invasive trees, planted 21 trees, and pruned 37 trees providing clearance for roads and stop signs, as well as maintaining tree health.
- City Tree Crew continued to pick up logs in the right of way that were left from several large PG&E tree removals.
- The City Crew fixed an irrigation leak at Vista Lobos, new Hire Luis Contreras' extensive irrigation knowledge will be invaluable to the team going forward allowing the division the ability to go beyond basic fixes and install and replace larger systems.

Permit Information

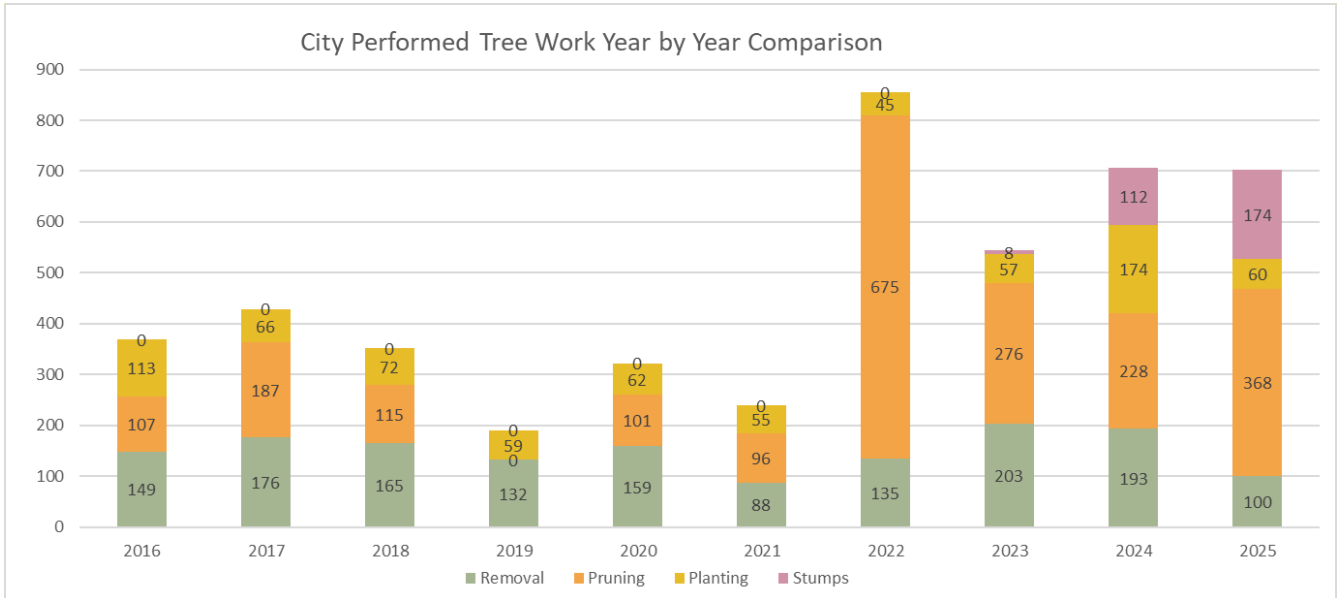
2025 Permitted removals, pruning, and required planting												
	Tree permits received	Tree permits Issued	Site Inspections Performed	Total Prunings	Total Removals	Removal of Upper	Removal of Lower	Required to Plant Upper	Required to Plant Lower	No room for new tree	Meets Density Rec.	Total Number of Trees Required
January	43	26	9	10	18	12	6	7	9	0	2	16
February	29	13	8	15	15	9	6	6	8	0	0	14
March	31	24	8	21	9	3	6	0	2	0	7	2
April	20	19	3	21	17	10	7	8	6	1	1	14
May	35	19	7	17	19	8	11	11	11	0	0	22
June	24	22	6	15	22	9	13	14	18	0	0	32
July	25	13	6	4	15	8	7	15	10	0	0	25
August	24	27	8	19	21	9	12	2	1	1	3	3
September	21	21	4	25	30	14	16	4	6	1	0	10
October	17	16	6	9	22	7	15	2	5	0	2	7
November												
December												
2024 Totals	269	200	65	156	188	89	99	69	76	3	15	145



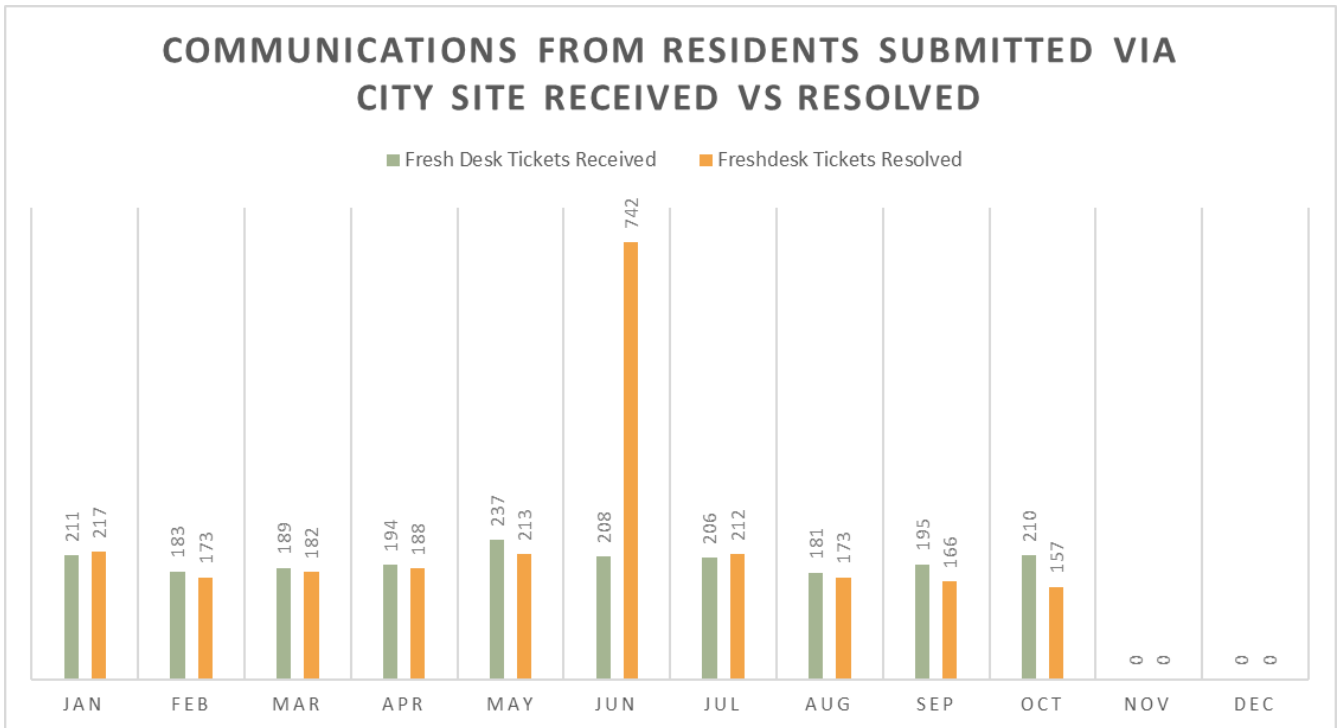
Historic permitted removals and required planting		
	Re-planting of upper	Re-planting of lower
2013	31	29
2014	35	20
2017	15	28
2018	1	18
2019	53	63
2020	70	28
2021	81	54
2022	48	37
2023	164	72
2024	118	113
2025*	69	76
*Year to date		

Historic permitted removals and required planting								
Year	Permitted removals	Removal of upper	Removal of lower	Replanting Required	Replanting of upper	Replanting of lower	Replanting %	Applications processed
2021	204	81	123	135	81	54	66.18%	213
2022	149	82	67	85	48	37	57.05%	155
2023	324	211	113	223	164	72	68.83%	336
2024	231	110	121	231	118	113	100.00%	391
2025	188	89	99	145	69	76	77.13%	269

City Forestry, Parks, and Beach Activities



Calendar year to date – Includes stumps removed by City crew as well as on call tree contractors.



*Numbers only represent correspondences received via the City’s website and do not include live calls, voicemails, drop-in visitors, and emails sent directly to employees from residents, nor return calls and emails from staff. Spike in last months resolutions due to large scale data cleanup.

Tree Inventory and Deferred Maintenance 'Catch Up' Status

The 3-Year "Catch Up Plan":

Year 1 of the anticipated 3-year plan to catch up on deferred maintenance was a resounding success. The following chart provided at the previous month's Foresters Report reflects outcomes relative to goals for Fiscal Year 2024/25. Staff is currently updating our goals for this new Fiscal Year 2025-26 in light of our newly approved FY 25-26 budget of \$981,500, as well as cleaning data in our software to ensure we start out with the most accurate information possible. We will continue to provide monthly updates to our plans in each subsequent Forester's Report.

Year 1 of Forestry 3-Year Catch-Up Plan

	Trees in Dead or Very Poor condition	Stumps
2024 Inventory	321	664
FY 24/25 Goal	128	221
FY 24/25 YTD	147	386