CITY OF REDONDO BEACH
PUBLIC WORKS AND SUSTAINABILITY COMMISSION AGENDA
Monday, October 27, 2025

415 DIAMOND STREET, REDONDO BEACH

CITY COUNCIL CHAMBER

REGULAR MEETING OF THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION - 7:00 PM

ALL PUBLIC MEETINGS HAVE RESUMED IN THE CITY COUNCIL CHAMBER. MEMBERS OF THE PUBLIC MAY PARTICIPATE IN-PERSON, BY ZOOM, EMAIL OR eCOMMENT.

Public Works and Sustainability Commission meetings are broadcast live through Spectrum Cable, Channel 8, and Frontier Communications, Channel 41. Live streams and indexed archives of meetings are available via internet. Visit the City's office website at www.Redondo.org/rbtv.

TO WATCH MEETING LIVE ON CITY'S WEBSITE:
https://redondo.legistar.com/Calendar.aspx
*Click "In Progress" hyperlink under Video section of meeting

TO WATCH MEETING LIVE ON YOUTUBE:
https://www.youtube.com/c/CityofRedondoBeachIT

TO JOIN ZOOM MEETING (FOR PUBLIC COMMENT ONLY):
Register in advance for this meeting:
https://www.zoomgov.com/webinar/register/WN_xApTRflTRT-vkMciBtC09w
After registering, you will receive a confirmation email containing information about joining the meeting.
If you are participating by phone, be sure to provide your phone # when registering. You will be provided a Toll Free number and a Meeting ID to access the meeting. Note; press # to bypass Participant ID. Attendees will be muted until the public participation period is opened. When you are called on to speak, press *6 to unmute your line. Note, comments from the public are limited to 3 minutes per speaker.

eCOMMENT: COMMENTS MAY BE ENTERED DIRECTLY ON WEBSITE AGENDA PAGE:
https://redondo.granicusideas.com/meetings
1) Public comments can be entered before and during the meeting.
2) Select a SPECIFIC AGENDA ITEM to enter your comment;
3) Public will be prompted to Sign-Up to create a free personal account (one-time) and then comments may be added to each Agenda item of interest.
4) Public comments entered into eComment (up to 2200 characters; equal to approximately 3 minutes of oral comments) will become part of the official meeting record.

EMAIL: TO PARTICIPATE BY WRITTEN COMMUNICATION WITH ATTACHED DOCUMENTS BEFORE 3PM DAY OF MEETING:
Written materials that include attachments pertaining to matters listed on the posted agenda

received after the agenda has been published will be added as supplemental materials under the relevant agenda item. Jesse.Reyes@redondo.org

REGULAR MEETING OF THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION - 7:00 PM

A. CALL MEETING TO ORDER

B. ROLL CALL

C. SALUTE TO THE FLAG

D. APPROVE ORDER OF AGENDA

E. BLUE FOLDER ITEMS - ADDITIONAL BACK UP MATERIALS

Blue folder items are additional back up material to administrative reports and/or public comments received after the printing and distribution of the agenda packet for receive and file.

E.1. BLUE FOLDER

F. CONSENT CALENDAR

Business items, except those formally noticed for public hearing, or discussion are assigned to the Consent Calendar. The Commission Members may request that any Consent Calendar item(s) be removed, discussed, and acted upon separately. Items removed from the Consent Calendar will be taken up under the "Excluded Consent Calendar" section below. Those items remaining on the Consent Calendar will be approved in one motion following Oral Communications.

F.1. APPROVE AFFIDAVIT OF POSTING FOR THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING

F.2. APPROVE THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING MINUTES FOR THE SEPTEMBER 22, 2025 REGULAR MEETING

F.3. RECEIVE AND FILE THE MONTHLY UPDATE TO THE CITY'S STRATEGIC PLAN THREE YEAR PRIORITY AREAS AND TEN-MONTH OBJECTIVES ADOPTED BY COUNCIL ON JUNE 10, 2025

F.4. RECEIVE AND FILE STATUS UPDATES ON PROJECTS DISCUSSED AT THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION

G. EXCLUDED CONSENT CALENDAR ITEMS

H. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

This section is intended to provide members of the public with the opportunity to comment on any subject that does not appear on this agenda for action. This section is limited to 30 minutes. Each speaker will be afforded three minutes to address the Commission. Each speaker will be permitted to speak only once. Written requests, if any, will be considered first under this section.

I. ITEMS CONTINUED FROM PREVIOUS AGENDAS

J. ITEMS FOR DISCUSSION PRIOR TO ACTION

J.1. DISCUSSION AND SELECTION OF NEW PUBLIC WORKS AND SUSTAINABILITY CHAIR AND VICE CHAIR

J.2. DISCUSSION OF TRAFFIC SAFETY MEASURES AT THE GRANT AVENUE & BLOSSOM LANE INTERSECTION

J.3. DISCUSSION OF DIAMOND STREET RESTRIPING BETWEEN PCH AND PROSPECT AND RUHS ACCESS IMPROVEMENTS

J.4. DISCUSSION AND POSSIBLE ACTION REGARDING UPCOMING PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING DATES

K. COMMISSION MEMBER ITEMS AND FUTURE COMMISSION AGENDA TOPICS

L. ADJOURNMENT

The next meeting of the Redondo Beach Public Works and Sustainability Commission will be a regular meeting to be held at 7:00 p.m. on November 24, 2025, in the Redondo Beach Council Chambers, at 415 Diamond Street, Redondo Beach, California.

It is the intention of the City of Redondo Beach to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting you will need special assistance beyond what is normally provided, the City will attempt to accommodate you in every reasonable manner. Please contact the City Clerk's Office at (310) 318-0656 at least forty-eight (48) hours prior to the meeting to inform us of your particular needs and to determine if accommodation is feasible. Please advise us at that time if you will need accommodations to attend or participate in meetings on a regular basis.

An agenda packet is available 24 hours at www.redondo.org under the City Clerk.

Administrative Report

E.1., **File #** PWS25-0637 **Meeting Date:** 10/27/2025

TITLE
BLUE FOLDER

Administrative Report

F.1., **File #** PWS25-0638 **Meeting Date:** 10/27/2025

TITLE

APPROVE AFFIDAVIT OF POSTING FOR THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING

PROOF OF POSTING

I, Lauren Sablan, hereby declare, under penalty of perjury, that I am over the age of 18 years and am employed by the City of Redondo Beach, and that the following document:

Agenda Dated October 27, 2025

of the Public Works and Sustainability Commission

(City Council/Board/Commission/Committee)

was posted by me at the following locations (s) on the date and hour noted below:

Posted on: October 24, 2025 (date) at 5:00 pm (hour)

Posted at: DOOR "1" BULLETIN BOARD

and at CITY CLERK'S OFFICE

Lauren Sablan, City Engineer

10/24/2025

Date

Administrative Report

F.2., **File #** PWS25-0639 **Meeting Date:** 10/27/2025

TITLE

APPROVE THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING MINUTES FOR THE SEPTEMBER 22, 2025 REGULAR MEETING

Minutes
Regular Meeting
Public Works and Sustainability Commission – 7 P.M
Monday, September 22, 2025

A. CALL TO ORDER

A Regular Meeting of the Redondo Beach Public Works and Sustainability Commission and Budget and Finance Commission was called to order by Chair Arrata at 7:00 P.M., in the City Hall Council Chambers, 415 Diamond Street, Redondo Beach, California, and teleconference.

B. ROLL CALL

Commissioners Present:	Simpson, Bajaj, Anderson, Nafissi, Beeli, Tsao, Chair Arrata
Commissioners Absent:	None
Officials Present:	Andy Winje, Public Works Director Rob Osborne, Public Works Senior Management Analyst Mark Garlock, City's Arborist, Urban Forester, Park Manager Jesse Reyes, Capital Projects Program Manager

C. SALUTE TO THE FLAG

Commissioner Nafissi led the Commissioners in a salute to the flag.

D. APPROVE ORDER OF AGENDA

Motion by Commissioner Nafissi, seconded by Commissioner Bajaj, to approve the order of the agenda.

Motion carried 7-0 by voice vote.

E. BLUE FOLDER ITEMS - ADDITIONAL BACK UP MATERIALS

E.1. BLUE FOLDER

Capital Projects Program Manager Reyes reported no Blue Folder Items but one email requesting that Herondo Park be named after the late Mayor Bill Brand would be entered into the record.

Motion by Commissioner Nafissi, seconded by Commissioner Tsao, to receive and file the email received for the record.

Motion carried 7-0 by voice vote.

F. CONSENT CALENDAR

F.1. APPROVE AFFIDAVIT OF POSTING FOR THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING

F.2. APPROVE THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING MINUTES FOR THE AUGUST 25, 2025 REGULAR MEETING

Capital Projects Program Manager Reyes reported no hands raised on Zoom and no eComments.

Motion by Commissioner Bajaj, seconded by Commissioner Simpson, to approve the Consent Calendar.

Motion carried 7-0 by voice vote.

G. EXCLUDED CONSENT CALENDAR ITEMS - None

H. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

H.1. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

Jim Mueller questioned why there are not more businesses and people spending time in the Artesia corridor and stated it is because the public and pedestrian space along the boulevard feels cramped, noisy, and dangerous; described the negative atmosphere of the area and gave suggestions to improve the area such as: discouraging through traffic, make it more pedestrian friendly, reduce the speed limit and the timing of the crosswalks, require new build plans have greater setbacks along Artesia; suggested to pay for the changes the City could apply for state grant programs for traffic calming and improvement projects and asked that the Commission request staff to study these issues and recommend changes to improve the Artesia corridor.

Lara Duke reported on September 30th at 3:00 p.m. the groundbreaking of the nature park off of Herondo and PCH will take place and recommended that the park be names after the late Mayor Bill Brand; spoke about Mayor Light and the late Mayor Bill Brand's efforts in making the nature park; hoped that the park would eventually expand to the sea along the 190th and be lined with trees; spoke more of Bill Brand's vision in bringing back the area to its native state.

Capital Projects Program Manager Reyes reported no other cards, no hands raised on Zoom, and one eComment in support of naming the park after the late Mayor Bill Brand.

I. ITEMS CONTINUED FROM PREVIOUS AGENDAS - None

J. ITEMS FOR DISCUSSION PRIOR TO ACTION

J.1. DISCUSSION PRIOR TO ACTION DISCUSSION ON STRATEGIES FOR INCREASING THE CITY'S TREE CANOPY

Public Works Director Winje noted he is joined by Mark Garlock, the City's Arborist, Urban Forester, Park Manager, to talk about increasing the City's tree canopy; presented a

PowerPoint and started by providing some background regarding the item referenced the Strategic Plan, the City Tree Protection Ordinance and listed the benefits of trees; stated that Rob Osborne, Public Works Senior Management Analyst, was also there that evening if they had any questions regarding the history (noted he is retiring soon); provided information on the City's urban forest including statistics, species, age and noted there are over 11,300 City owned trees; noted they have more mature trees and need to focus on the numbers for younger trees; reported the average life of a street tree is 7 years; provided information on the City's canopy coverage and stated data is available on USDA and USFS; noted RB is below state average but on average with other beach cities; spoke of the quality of the data provided and felt it would be an advantage to do a specific study for Redondo Beach to see where they could increase their canopy coverage based on their terrain and temperature; spoke about goals and timelines and focusing on what is achievable; stated PW puts trees into two categories: ones they take care of and ones they don't take care of, the ones they take care of are City owned trees; explained the Tree Protection Ordinance, the approved species list, their standard of care policy manual, and the planting programs; reported the City aims to plant 100 trees every year, not all are new trees some are replacement trees; stated the City encourages private citizens and corporations to plant trees but it is not addressed in the municipal code; spoke about ways to improve the tree canopy regarding privately owned trees such as in development or establishing conditions, preservation requirements, and developing necessary partnerships since 75% of the area is private property; asked that the Commission help staff with their presentation to City Council which will happen in a month or so; provided a strategic approaches towards improving the City's tree canopy: 1) an Urban Forest Management Plan which is a long term, comprehensive approach, about 2 to 4 decades, and provided details regarding that plan, 2) a Priority Plan which gateway cities developed which is more of a 5 to 10 year short-term plan identifying and assessing the local canopy for each city and their potential for additional trees, and 3) Quick Action plans or ideas; provided staff's recommendation for the Commission that evening was to provide input regarding priorities, scope, values, and strategies for staff to present to City Council and any other recommendations as determined by the PWSC.

Commissioner Tsao referenced the slide with the American Planning Association and asked what the 125% credit was referring to.

Public Works Director Winje stated his understanding would be that there would be a program set up that when you redevelop a property, you would need to achieve certain credits with contribution to tree canopy; noted that preserving an existing mature tree would give more credits than planting a new tree.

Commissioner Tsao wondered if there were any incentives tied for private owned properties.

Public Works Director Winje stated the Community Development Department has more experience and ideas regarding redevelopment and can address those items.

Commissioner Nafissi suggested having less flowering and fruit trees on their list because they take up more water and they leave a mess; spoke about informing people in the

early permit stage of development about tree preservation and stated she was not informed about it until all her permits were submitted and approved; noted the cost was high to change her plans; spoke in support of the Harbor give-a-way and felt it is a good way to get people to plant trees; felt that the Galleria should be a priority area for more trees.

Motion by Commissioner Anderson, seconded by Commissioner Bajaj, to receive and file documents from Mara Lang.

Motion carried 7-0 by voice vote.

Mara Lang, Public Amenities Commission, stated she presented to this Commission a few years ago when the City was first exploring a tree ordinance; reported she and Lara Duke have started a group called Redondo Beach Citizens for Trees and is also a member of the South Bay Parkland Conservancy Board; referenced the City of Encinitas and the success they have had with their urban forest; spoke of being an activist on the tree issue for nine plus years and recommended they do some research and look at other cities for ideas; mentioned the number of palms in the City, stated they don't capture carbon they way woody trees do and suggested removing them from the list; spoke in support of the long-term plan and offered her assistance if needed.

Jim Mueller, District 5, spoke about his neighborhood being R multiple zoning and all the trees being on private property; stated the current tree ordinance allows homeowners or developers to remove any tree they want on their property; suggested that the Commission must recommend to the Council that the City is bound to protect trees living on private property; spoke of the negative effect developers have had on the environmental situation the City is in with regard to trees; urged the Commission to recommend to Council that the City change its planning and development ordinances and rules so review of existing vegetation takes place at the earliest stage of design with priority given to preserving existing mature trees.

Teresa Mitchell, District 4, spoke of having a master's in Urban Planning with a concentration in Environmental Sustainability; recommended that the Commission suggest to Council to maximize single driveways and add permeable surfaces to the sidewalks; hoped that the AACAP is one of the priorities since there is a glut of trees and open space in that area; commented that San Diego and Sacramento have interesting programs and gave some details on their programs.

Lara Duke was in support of the item and hoped the lack of proper tree canopy in Redondo Beach would be addressed; spoke of the new group that was recently formed, Citizens for Redondo Trees, and hoped the Commission would work with them; commented on the value and benefits trees bring to neighborhoods; felt the City needs to include Redondo residents in matters of mature and new trees; opined the City needs an official and enforceable tree plan or the results will be dire; agreed with Commissioner Nafissi's comments about the Planning Department informing people in the initial stage of development and that the City may need to incentivize so people will abide by it.

Capital Projects Program Manager Reyes reported no hands raised on Zoom, two eComments in support of moving forward with more trees and one eComment neutral but no flowering or fruit trees.

Commissioner Anderson asked if Rob Osborne could come up and speak about the item.

Public Works Senior Management Analyst Rob Osborne stated his area of expertise is with the City's tree ordinance which started in 2021; provided some background regarding the tree ordinance and reported that, at that time, the Council decided against regulating trees on private property and only focused on public property; spoke about the formalized procedures and the strict guidelines for requests to remove trees on public property.

Commissioner Anderson asked how the ordinance will work on the private side.

Public Works Senior Management Analyst Osborne stated he is a career Public Works person and public property is his area but in his opinion if the City wanted to increase the tree canopy they would need to look at private property; reiterated that 75% of the area in Redondo Beach is not under the City's control so private property is where they would need to focus.

Commissioner Bajaj went back to the topic of the City having no control over developers removing mature trees on lots with zero consequences; asked if staff is proposing with a revised or new ordinance that some type of enforcement or regulation would be put in place, and each scenario would be reviewed on a case by case basis to determine if a tree can be removed and offset by planting a new tree, or if the building permit would just be denied.

Public Works Director Winje stated if the mature trees are in the right of way, the City won't move the tree to accommodate the build; mentioned a speaker spoke about the City of San Diego's landscaping points program and the APA having a points or bonus program but that he has not explored how those all work yet; reported that the Community Development and Public Works will work together on it; stated the Commission could invite one of the members of the audience up to speak on the topic.

Mara Lang stated she and Laura MacMorran approached the City Council and had drafted an ordinance but some of what they wanted did not get translated to the City Council; mentioned what was missing was a discussion to only protect the trees in the front setback on private properties and not those in the rear; stated the outcome that was presented to the City Council at that time was to protect trees in the rear but that was not something they were championing; noted that the City, as part of development standards, requires new builds to put a tree in the front yard but does not protect it, so once a Certificate of Occupancy is issued no one checks if the tree remained planted; stated that would be an easy first step for the City to protect the new trees planted as part of new builds, and the City can always amend the ordinance if they feel they can add more to the protection of trees on private property.

Commissioner Tsao asked Mara Lang how they are funding their initiative.

Mara Lang said it is a brand new initiative run by volunteers at this time but they are hoping the South Bay Parkland Conservancy Board will take this initiative under their name, and they will also be applying for grants to see if they can move it forward; mentioned they may just start with fundraising to put some trees in the ground but would need the City's buy in to do it on parkways.

Commissioner Tsao noted they would need to have a partnership with the City and they also need to educate the local residents; noted that between 2018 and 2022 there was a reduction in canopy due to the pandemic and people cutting trees down and landscaping.

More discussion continued on how to educate the residents on the importance of taking care of the trees in the City and growing the numbers.

Public Works Senior Management Analyst Rob Osborne reported that before they were directed by City Council to take private property off the table, there was a lot of discussion of creating a heritage tree designation, but they never got far enough in deciding what that protection would be.

Chair Arrata asked if there was time to form a subcommittee to do more research and make some recommendations.

Public Works Director Winje stated that the Strategic Plan asks staff to return to the Council by November 1st but said he believes that won't be the last time Council will hear them on the item and may refer it back to the Commission; felt they did not have time to form a subcommittee in the short term but probably n the long term.

Commissioner Beeli stated he has a large tree in his front yard that would probably be considered a heritage tree and he is doing his best to keep it alive but questioned whether he supports a program that could possibly hold him in violation resulting in covering the cost of five trees and a $15,000 fine; spoke about the difficulties with the current regulations on private property and wondered how they can grow their tree canopy in those areas when they are fairly restrictive; mentioned the Building Department will have conflicts in not allowing home building since there is a demand in supply and if trees need to be taken out they may need to allow it for new builds to happen.

Public Works Director Winje agreed with Commissioner Beeli's points; added that due to the housing crisis a lot of local control has been taken away and stated any ordinances need to consider statewide requirements; provided some potential programs they could look into and liked the suggestion about the front yard setback.

Commissioner Beeli asked about the school properties.

Public Works Director Winje responded that schools function under the State Department of the Architect and have a whole different set of rules; noted the City Council has a subcommittee that is in regular contact with officials from the School District and they might be able to address trees with them.

Chair Arrata asked if the decline in trees has anything to do with the type of trees that

were there and the change in climate.

Public Works Director Winje stated he has not studied that enough to know if that is the reason.

Chair Arrata asked if there are any requirements for areas to be roped off or barricaded when installing new trees.

Public Works Director Winje reported there is a Construction Protection Zone around trees in the City's ordinance now for City owned trees and Mark Garlock monitors that.

Chair Arrata asked the percentage of native to non-native trees on the list provided.

Mark Garlock reported they have approximately four California Native species on the list and 18 species on that approved street tree list; felt they can look at other species and find ones that at maturity would be larger and increase the diversity.

Chair Arrata asked about the ability to increase the native species to 27%.

Public Works Director Winje noted that native trees to Southern California are not great canopy trees so they would need to go beyond the native species list to have the most effective canopy producing tree list.

Mark Garlock agreed with Director Winje and added that there are actually very few California native species trees.

More discussion followed regarding what type of plants would be more successful and provide maximum canopy in the City.

Commissioner Bajaj referenced the tall and skinny neighborhoods which have no real sidewalks and asked if there would be any opportunity for an ordinance to be placed that would require a tree to be installed.

Public Works Director Winje stated if the street is wide enough to install medians then they could put planters in them to improve the tree canopy in those areas.

Mara Lang gave an example of what other cities were doing and stated instead of having the parkway on the curbside they would have the parkway up against the property; felt there are a lot of creative solutions.

More discussion followed on the unique areas in North Redondo and solutions the City is working on to increase the canopy and the challenges with some of the solutions.

Mara Lang spoke of a narrow street in South Redondo on Avenue D that has a beautiful canopy that could be a guide in helping homeowners and the City determine what would be appropriate in a narrow space.

Commissioner Anderson spoke in support of plans since they provide guidance but he is not a fan of telling people what they can do on their property; supports incentivizing

property owners; felt creating a list of accepted trees and not accepted trees would be helpful but that owners might need to do what works for them if they have maintenance issues with trees on their property; noted ADA issues in municipalities are a result of urban forestry issues; provided some suggestions for ordinances but felt if an owner wants to remove a tree on their property they should have that right.

Chair Arrata asked if there was any impact to the 2018 to 2022 margin for trees when the state changed the property line.

Public Works Director Winje was not sure about the cause and effect of that.

Chair Arrata spoke about the Commission needing to work on verbiage, liked Commissioner Nafissi's idea to do more education.

Commissioner Nafissi asked why all the give-a-ways are connected to a utility.

Mark Garlock explained that in most cases they are connected to utilities because the need to remove incompatibles with overhead conductors.

Commissioner Nafissi suggested the City work with SCE to institute a tree giving program and stated she would provide them with the link she found.

Discussion followed regarding the possibility of forming a subcommittee; Director Winje mentioned staff will go to the Council before November 1st and he is not certain of what they will do but if the Commission would like to suggest that the Commission develop a subcommittee to help craft whatever it is they do going forward then that can be part of the staff's recommendation; noted the Commission would need to recommend to staff to present to the City Council that forming a subcommittee would be a strategy to increase the canopy and then wait to see what Council decides.

Motion by Commissioner Anderson to look for funding opportunities to ultimately have an urban forest master plan, look at some replacement requirements, opportunities for Commission or Council approval depending upon if certain trees or certain amount of trees are removed, and creating a tiered list of trees for the City of Redondo Beach.

Motion died for lack of a second.

Commissioner Bajaj felt that those would be suggestions that would come out of the subcommittee.

Public Works Director Winje felt they needed to think of a recommendation based on the strategy they wanted to pursue; felt all their suggestions were good and would include them when they are ready to present; stated they are looking for what direction the Commission supports in terms of moving the item forward.

Chair Allen recommended the Commission form a subcommittee so they can collaborate with others to get all the data and make a proper recommendation.

Both Commissioners Beeli, Bajaj, and Simpson agreed that forming a subcommittee was a good idea; Commissioner Tsao felt partnering with a citizens group to get their feedback is needed.

Chair Arrata suggested a motion by made to form a subcommittee so that the Commission could be more strategic in their planning to help develop canopies and all of the other growth and development, maintenance, and other areas they spoke about that evening, and policy changes needed for protection of trees.

Motion by Commissioner Bajaj, seconded by Commissioner Simpson, to present to City Council that a subcommittee be formed to provide input regarding priority, scope, values, and strategies on the City's tree canopy.

More discussion followed.

ROLL CALL VOTE:

AYES: Simpson, Bajaj, Anderson, Nafissi, Beeli, Tsao, Chair Arrata

NOES: None

ABSENT: None

Motion carried 7-0.

K. COMMISSION MEMBER ITEMS AND FUTURE COMMISSION AGENDA TOPICS

Commissioner Anderson stated back in April, as part of the Strategic Planning Session, he brought up to review some opportunities for the City to provide recommendations on first/last mile solutions and various other elements for the green line extension; understood it is going through final environmental review and will be adopted by LA Metro; recommended for a future Commission agenda item to think about areas that would be beneficial to the City that they can discuss with Metro as it gets installed.

Public Works Director Winje pointed out that it does require concurrence from the rest of the Commission.

Commissioner Bajaj felt they should wait until the environmental report is finalized and once Metro makes their firm decision; asked Director Winje if he knew when Metro would do the final adoption.

Public Works Director Winje heard it was speculated by the end of the year and that City Council has publicly opposed the locally preferred alternative; felt it might be premature to start talking about first/last mile around the locally preferred alternative and would be judicious to wait until the Environmental Impact Study Report has been adopted and the locally preferred alternative has been identified.

More discussion followed.

Commissioner Nafissi mentioned the new park opening on September 30th and asked if it was too late to have that item come back as the Bill Brand Park.

Public Works Director Winje said it is not too late, that the groundbreaking in happening on September 30th but that it will take several months for it to be completed.

City Engineer Lauren Sablan mentioned there is a memo they can do tonight to make that recommendation to Council and staff can provide that to them and it would go on the agenda for the next City Council meeting.

Commissioners were in agreement with including in the memo to the Council the naming of the new park be the Bill Brand Park.

L. ADJOURNMENT – 8:37 P.M.

Motion by Commissioner Bajaj, seconded by Commissioner Simpson, to adjourn at 8:37 p.m. to the next meeting of the Redondo Beach Public Works and Sustainability Commission, which will be a Regular Meeting to be held at 7:00 p.m. on October 27, 2025, in the Redondo Beach Council Chambers, at 415 Diamond Street, Redondo Beach, California.

Motion carried 7-0 by voice vote.

Respectfully submitted:

_____
Andrew Winje
Public Works Director

Administrative Report

F.3., **File #** PWS25-1487 **Meeting Date:** 10/27/2025

To: **PUBLIC WORKS AND SUSTAINABILITY COMMISSION**

From: DEPARTMENT OF PUBLIC WORKS

TITLE

RECEIVE AND FILE THE MONTHLY UPDATE TO THE CITY'S STRATEGIC PLAN THREE YEAR PRIORITY AREAS AND TEN-MONTH OBJECTIVES ADOPTED BY COUNCIL ON JUNE 10, 2025

EXECUTIVE SUMMARY

On April 29, 2025, the City Council held a strategic planning session to discuss and update the City's Strategic Plan. At the session, the Mayor and City Council considered recent accomplishments, completed a strengths, weaknesses, opportunities, and threats (SWOT) analysis, evaluated and adjusted the previously established three-year goals, and listed specific objectives for the upcoming planning period which was set for the next ten-months. On October 21, 2025, the City Council approved the monthly update to the Strategic Plan Priority Areas and 10-Month Objectives adopted on June 10, 2025. A copy of this item is attached.

The Public Works Department has been assigned as leads or partners for a number of goals under the following priority areas:

- **Priority Area 1: Economic Vitality**
- **Priority Area 2: Public Safety and Community Well-Being**
- **Priority Area 3: Infrastructure and Public Spaces**
- **Priority Area 4: Customer-Centered Service Delivery**
- **Priority Area 5: Community Stewardship**

Staff will continue to regularly update the Commission on progress made on this set of ten-month objectives as periodic progress reports on the objectives are provided to the Council.

ATTACHMENTS

- Attachment 1 - 10/21/2025 City Council Strategic Plan Update

City of Redondo Beach Strategic Plan

Three-Year Priority Areas & 10-Month Objectives

June 2025 – March 2026

CM= City Manager **ATCM**=Assistant to City Manager **CD**=Community Development **CS**=Community Services **FD**=Fire Department **FS**=Financial Services **HR**=Human Resources **IT**=Information Technology **LIB**=Library **PD**=Police Department **PW**=Public Works **WED**=Waterfront and Economic Development **CA**=City Attorney **CC**=City Clerk **CT**=City Treasurer

Priority Area 1: Economic Vitality

Goal 1.1 Enhance the Waterfront

#	When	Who	Objectives	Done	On Target	Revised	Notes
1	March 1, 2026	WED/PW	Investigate the options and costs associated with improving the Pier Parking Structure to allow for redevelopment.		X		
2	July 15, 2025	WED	Identify strategies to proactively market and lease the identified commercial opportunity sites in the Harbor and Pier area.	X			Staff appeared before the City Council during the July 8 and August 12 closed session agendas to discuss the strategies.
3	September 1, 2025	WED	Complete the pre-design engineering studies needed to construct the new public boat launch and present the results to the City Council for review.	***X***			***Pre-design studies have been completed, and staff met with each Councilmember during the weeks of September 8 and September 15, to present the findings.***
4	December 31, 2025	WED, PW	Complete the entitlement approval process for all phases of the Seaside Lagoon Rehabilitation Project and complete the plans and specifications for Phase 1 of the project needed for the Coastal Development Permit.			X	Local consideration of approval of the Lagoon's CDP and phase one construction plan set is on schedule. Coastal Commission review and approval is still TBD.
5	October 1, 2025	WED, CD	Identify the process and cost to consider adjusting the Local Coastal Program requirements for King Harbor Marina parking.			***X***	***Staff is prepared to bring this discussion item for the City Council's consideration in November 2025.***
6	March 1, 2026	FD, PD, CA, WED	Research policy options and prepare a draft Safety Ordinance for rental watercraft in King Harbor.			***X***	***Staff is working with the City Council to update Title 12 language. The scope of the initial ordinance project has expanded, and staff anticipates completing this item in June 2026.***
7	September 1, 2025	WED	Complete consideration of the preliminary Marine Mammal Center/Waterfront Education Center Property Use and Fundraising Agreement.		X		***The Option Agreement was drafted and sent to the Marine Mammal Care Center (MMCC) for review in early July. Staff met with MMCC representatives on September 4 to answer questions and walk through the document. MMCC submitted initial comments and redlines on September 14, followed by additional revisions on September 29. Staff presented MMCC's counter proposal to the City Council at the October 7 closed session. In coordination with outside legal counsel, staff is now drafting updated redline language based on City Council direction and expects to return***

							the revised agreement to MMCC by October 17, 2025.
8	October 1, 2025	WED, FD	Present a report to the City Council comparing the City's harbor/marine management operating model/organizational structure to others.			X	Staff anticipates the presentation to occur at a City Council meeting in November/December.
9	October 1, 2025	WED	Prepare a report to discuss the options and process to remove the former Gold's Gym site from the Harbor Tidelands.			***X***	***Staff anticipates bringing this as a Closed Session item in November 2025.***

Goal 1.2: Revitalize Artesia Boulevard

#	When	Who	Objectives	Done	On Target	Revised	Notes
10	October 1, 2025	CD	Complete the policy discussions for adjusting the FAR Ratio and implementing property investment incentives along the Artesia/Aviation Corridor, in conjunction with the General Plan Phase 2 Update.	X			The policy discussion was held by the City Council on August 5, 2025. The Council directed staff to prepare an ordinance allowing up to 1.5 FAR along Artesia/Aviation.
11	September 1, 2025	CD	Provide a report to the City Council detailing the impact the changes made to Artesia Blvd parking regulations are having on business reinvestment in the area.	X			On August 5, the City Council directed staff to prepare an ordinance that would eliminate commercial parking requirements along Artesia. The draft ordinance will be reviewed by the Planning Commission in September, and will return to City Council for consideration of adoption in late October.
12	December 31, 2025	CS, WED, PW	Provide a status report on the public art procurement effort on Artesia Blvd. by the City's newly-hired art consultant.		X		***The first phase of stakeholder interviews is underway. A community meeting was held on September 30, 2025, and the community survey launched in September closed with 168 responses.***
13	October 1, 2025	CD	Provide a report to the City Council on the process to study and consider implementing rooftop dining; lot merger incentives that would encourage property reinvestment/revitalization; and options to enhance the quality of business signage along the boulevards.			X	These items are trailing the Ordinance modification discussion to reduce parking requirements along the boulevards.

Goal 1.3: Position Redondo Beach as a Destination for Business Investment

#	When	Who	Objectives	Done	On Target	Revised	Notes
14	November 1, 2025	WED, CD, ATCM, MAYOR+ COUNCIL SUBCOMM.	Convene an Economic Development Working Group to help recruit/retain businesses and assist staff in identifying and analyzing conditions/regulations/processes that exist in the City that may impede business reinvestment and report the preliminary results to the City Council.		X		***An Economic Development Subcommittee met with two commercial development teams on four occasions to tour Artesia Blvd, the Waterfront, and PCH. Staff is currently preparing an agreement with one of the teams to provide real estate advisory services for properties on the Artesia Boulevard Corridor. Project deliverables include a catalog of parcel owners with contact information, a void analysis, a prospect list of interested tenants and developers, and recommended land use adjustments to attract targeted uses. Staff anticipates presenting the draft agreement to the City Council on November 18, 2025.***

15	December 31, 2025	CD, WED	Support proactive development in the City with a focus on business retention and enhancing marketing efforts and outreach to potential businesses and provide a report to the City Council on the status of these efforts.		X		
16	March 1, 2026	MAYOR, WED, CD, ATCM	Create a Major Events working group to pursue opportunities and attract activities associated with the 2026 World Cup and LA28 Olympics, as appropriate.		X		Marketing material revisions are in progress and will be shared once finalized.

Future Goal 1.4: Revitalize the Pacific Coast Highway Corridor

Priority Area 2: Public Safety and Community Well-Being

Goal 2.1 Implement Measure FP (Reconstruct City Fire and Police Facilities)

#	When	Who	Objectives	Done	On Target	Revised	Notes
17	August 1, 2025	ATCM	Complete selection of the firm to serve as the City's Owner's Representative and Bond Program Manager and present the contract to City Council for consideration of approval.	X			An Agreement with Griffin Structures was approved by Council on July 15, 2025.
18	March 1, 2026	FIN, ATCM, PW, IT, PD, FD, CT	Following selection of the Owner's Representative and Bond Program Manager, work with the City's Municipal Financial Advisor to develop a strategy to appropriately time the City's bond issuance to complete the projects included in Measure FP.		X		PRAG is standing by to advise the City as the funding needs and project schedule are developed in the Strategic Planning phase of Measure FP implementation.
19	March 1, 2026	ATCM, CA	Prepare the selection guidelines and resolution to form a Citizens Oversight Committee to review bond-related expenditures.		X		
20	July 1, 2025	PW, PD	Complete the studies/design work needed to prepare the federal grant application for funding to replace the City's Police Shooting Range and engage appropriate outside/partnership agencies, pending release of the notice of funding opportunity.	X			City was notified that the application was not selected for the grant for this Cycle. Efforts to identify alternative grant funding options are underway.

Goal 2.2: Strengthen the City's Mental Health Response and Community Support Systems

#	When	Who	Objectives	Done	On Target	Revised	Notes
21	September 1, 2025	CA, FD, PD	Present a report to the City Council on the City's efforts to utilize grant funding to hire/procure a mental health clinician to provide targeted response to mental health-related incidents in the City.	***X***			***The report was presented to the City Council on September 2, followed by approval of an agreement with Clear on September 9. On October 7, 2025, the City Council also approved an agreement with HERO to provide consultation services and deploy a weekend pilot team***
22	August 1, 2025	CA, FD, PD	Explore partnership with Hermosa Beach that would pool resources to enhance the City's ability to respond to mental health issues.	X			The City of Hermosa Beach has agreed to Partner with the City to improve the City's ability to respond to mental health issues.

Goal 2.3: Further Enhance the City's Approach to Addressing Homelessness

#	When	Who	Objectives	Done	On Target	Revised	Notes
23	March 1, 2026	PW, CA	Complete construction of the pallet shelter expansion project.		X		***Plans and specifications for the project were approved on August 19. The project will be advertised on October 16, with the bid opening scheduled for November 5 and contract award anticipated on December 2, 2025.***
24	March 1, 2026	CS	Explore options to secure funding to support family supportive housing and report back to the City Council.		X		
25	August 1, 2025	CS	Develop a program to implement foster youth vouchers and report back to the City Council.	X			The Housing Authority approved the program agreement with Department of Children and Family Services at the June 17, 2025 Council meeting.

Goal 2.4: Continue to Leverage Technology to Enhance Public Safety, Emergency Response, and Community Resilience

#	When	Who	Objectives	Done	On Target	Revised	Notes
26	March 1, 2026	PD	Update the City's Drone First Responder agreement with Aerodome after the company obtains the FAA certificate waiver for autonomous drone use.		X		
27	October 31, 2025	IT, PD	Investigate options to modernize the City video camera platform and consolidate existing systems.		X		***A new camera platform has been selected and installed, and all jail cameras have been replaced on a like-for-like basis. The City Security Systems Administrative Policy and Procedure (APP) has been updated and is currently under review. Staff plans to present an item to the City Council in late 2025 to discuss the updated APP and security camera inventory.***
28	February 1, 2026	FD, IT	Complete additional research on the functionality and costs associated with implementing the Tablet Command Application for the Fire Department.	X			The product assessment is complete and Tablet Command was identified as the most suitable product available at this time. Negotiations with Tablet Command in another City Department yielded unfavorable contract terms, with the vendor unwilling to yield.

Priority Area 3: Infrastructure and Public Spaces

Goal 3.1: Rehabilitate City Roads and Critical Public Facilities

#	When	Who	Objectives	Done	On Target	Revised	Notes
29	December 31, 2025	PW	Identify the cost and process to inventory the condition of City facilities for future implementation of an asset management system.		X		Staff is exploring software providers and costs.
30	December 1, 2025	PW, ATCM	Pursue grant funding for energy-related infrastructure improvements.		X		Staff continues to explore opportunities to secure grant funding.
31	March 1, 2026	PW	Research and provide a report to Council on the options to enhance the City's Street rehabilitation program.		X		

Goal 3.2: Expand and Enhance Public Spaces, Amenities, and Programs

#	When	Who	Objectives	Done	On Target	Revised	Notes
32	April 1, 2026	CS, PW	Execute the Wilderness Park Master Plan as funded.		X		Construction on the Lower Pond Repair project began on August 18, 2025. Four educational signs were installed in the park and unveiled on August 25, 2025.
33	October 1, 2025	CS, PW	Complete conceptual design of the Franklin Park playground improvements.			***X***	***The Franklin Park All-Abilities Playground Working Group held meetings from June through September 2025. Playground amenities have been selected, and the conceptual design will be presented to the Public Amenities Commission and the City Council in November 2025. Staff successfully applied for a National Parks and Recreation Society Grant, which will fund 50% of the playground equipment costs.***
34	November 1, 2025	CS/PW	Explore options to add signage to Ito Park that draws inspiration from signage found in America's National Parks.	***X***			***Staff received information from Public Amenities Commissioners regarding signage language used by the FDR Presidential Museum, and subsequently contacted the Museum for additional information. The City has been granted permission to replicate the historical content for usage on signs. Staff acquired quotes from three sign production companies and identified the most appropriate vendor. Language for the Ito Park signage is being finalized with the assistance of the Bringing History to the Community subcommittee of the Public Amenities Commission. Installation is anticipated in late 2025.***
35	December 31, 2025	CS	Enhance available programming in the City's Teen Center.		X		***The Teen Center Ribbon Cutting took place on September 25, 2025. Programming continues to develop as feedback is***

							received by staff. A report detailing program development and participation will be presented to the City Council at the December 16, 2025, meeting.
36	November 1, 2025	CM, ATCM, FS	Provide a report on the status of negotiations with RBUSD regarding shared service and facility agreements.		X		***A negotiation update was scheduled for closed session discussion on October 14, 2025.***
37	January 1, 2026	ATCM	Research and provide Council with a report regarding the next steps to implement a licensing agreement to produce and market City-branded apparel using the updated City logo.		X		
38	October 1, 2025	ATCM	Prepare a report for Council to discuss the process and cost associated with updating the City flag with the new logo and also incorporating the logo on other City-maintained flags and banners.	***X***			***Staff presented the report at the October 7, 2025, City Council meeting.***

Goal 3.3: Enhance Alternative Transportation Options

#	When	Who	Objectives	Done	On Target	Revised	Notes
39	January 1, 2026	PW	Award the construction contract to implement the City's Local Travel Network (LTN).		X		***The project was advertised for bidding on September 18, 2025, and the bid opening was scheduled for October 16, 2025.***
40	December 1, 2025	PW	Develop a strategy to deploy available funding for bike lane repainting to enhance bicycle safety and provide a report on the status of the City's implementation of the Bicycle Master Plan.		X		***Staff anticipates bringing this discussion item for the City Council's consideration in November 2025.***
41	December 1, 2025	PW	Provide a report to the City Council on the status of the City's active transportation and micro-mobility projects included in the CIP.		X		***Staff anticipates bringing this discussion item for the City Council's consideration in November 2025.***
42	February 1, 2026	CS	Analyze BCT routes and determine if there are other route options that could enhance youth ridership.		X		

Future Goal 3.4: Develop Long-Range Plans to Modernize City Facilities, Including the Public Works Yard and City Hall

Priority Area 4: Customer-Centered Service Delivery

Goal 4.1: Improve Customer Service by Expanding the City's Use of Digital Tools and Online Services

#	When	Who	Objectives	Done	On Target	Revised	Notes
43	January 1, 2026	CC, IT	Work with Departments to determine the records and processes that can be digitized in order to improve operations and meet retention and disposition requirements. Develop a plan to digitize City records, make them more easily accessible to the public, and provide a progress report to the City Council.		X		***Form digitization is in progress for the Finance Department, IT Department, and City Clerk's Office. Staff are currently exploring tools leveraging AI to aid in document classification and metadata gathering. Initial meetings with each department are being held, and planning efforts are well underway.***
44	March 1, 2026	CC, IT	Research software options to improve the workflow for public records act requests.		X		***Product selection is complete, and the agreement is currently being reviewed by the City Attorney's Office.***
45	February 1, 2026	CC, IT, ATCM	Complete implementation of the new Agenda Management System to streamline internal operations and provide for enhanced agenda forecasting.		X		The implementation of the new Agenda Management System is underway. Currently scheduled to go-live Q4, 2025 or Q1 2026.
46	September 1, 2025	IT, ATCM	Develop a plan to prioritize and implement new online processes to improve the functionality of the City website and enhance service delivery, including the possible use of AI.	X			The website went live with an AI Chat Bot/AI Search on June 30, 2025. Staff continue ongoing efforts to improve search results through content updates.
47	March 1, 2026	IT, ATCM	Implement the Access Redondo App update and make it easier for community members to submit customer requests.		X		***The project has been kicked off, and Comcate staff are currently analyzing existing system data. Staff is evaluating data disposition strategies to align with record retention schedules and analyzing potential impacts. The system is tentatively scheduled to go live in Q1 or Q2 of 2026.***

Priority Area 5: Community Stewardship

Goal 5.1: Advance Environmental Sustainability and Climate Resilience

#	When	Who	Objectives	Done	On Target	Revised	
48	November 1, 2025	PW	Inventory the City's tree canopy and present a discussion item to the City Council to determine the best strategies to enhance the tree canopy in the future.		X		***Staff presented this item to the Public Works and Sustainability Commission. Staff anticipates bringing this discussion item for the City Council's consideration in November 2025.***
49	January 1, 2026	PW	Select and hire a consultant needed to study and update the City's Sewer System Management Plan.	X			A contract amendment was approved on July 15, 2025. The SSMP will be presented to Council by June 2026.
50	February 1, 2026	ATCM, PW	Continue to advance efforts to install additional EV charging stations throughout the City.		X		Staff continues to explore opportunities to secure grant funding.
51	September 1, 2025	WED	Provide a status report on the City's California Coastal Commission LCP Local Assistance Grant Program grant application, including climate resiliency.	***X***			***The report was presented to the City Council on September 16, 2025. On October 7, 2025, the City Council approved a grant agreement with the Coastal Commission, securing $500,000 in grant funding.***

Goal 5.2: Preserve and Promote the City's Historic Resources and Neighborhood Character

#	When	Who	Objectives	Done	On Target	Revised	Notes
52	November 1, 2025	CD, CA	Provide a report to the City Council on possible updates to the City's Historic Preservation Ordinance.				
53	March 1, 2026	CD	Prepare a contract for completion of a Citywide Historical Resources Survey and present it to the City Council for consideration of approval.				
54	October 1, 2025	CD	Review and present options to Council related to updating parking regulations in the Riviera Village as part of a larger discussion regarding preferred business uses in the Village.				

Administrative Report

F.4., **File #** PWS25-1488 **Meeting Date:** 10/27/2025

To: **PUBLIC WORKS AND SUSTAINABILITY COMMISSION**

From: DEPARTMENT OF PUBLIC WORKS

TITLE

RECEIVE AND FILE STATUS UPDATES ON PROJECTS DISCUSSED AT THE PUBLIC WORKS AND SUSTAINABILITY COMMISSION

BACKGROUND

Based on Public Works and Sustainability Commission (PWSC) recommendation, Staff has prepared a table comprised of all significant projects that have been discussed at the PWSC since August 26, 2019. The table is included as Attachment 1. Staff will continue providing ongoing project status updates to the PWSC in tabular format on a quarterly basis.

The most recent update was given at the April 2025 PWSC meeting for Q1 of 2025. Four new items have been added during Q2. Four items were deemed complete during the quarter and will be dropped from the tracking table after tonight's meeting.

ATTACHMENTS

- Attachment 1 - Public Works and Sustainability Commission Project Status Updates

PUBLIC WORKS AND SUSTAINABILITY COMMISSION DISCUSSED PROJECTS - QUARTERLY STATUS UPDATE ***Q3 2025***

PROJECT NAME	PWSC MEETING DATE	PWSC RECOMMENDATION	STAFF ACTION	CC MEETING DATE	CC ACTION	PROJECT STATUS	NOTES & PROJECT STATUS
North Redondo Beach Bikeway Extension	09/30/19	Receive and file report - forward Staff's conceptual design to City Council for approval.	Forward to CC	12/17/24	Approved plans and specs	Construction	Most construction complete, waiting for landscaping to grow before officially opening and accepting as complete.
Alta Vista Park Access Traffic Calming	06/28/21	Approve analysis, design, installation of updated E&T survey, speed cushion and speed table.	Staff To Do	10/05/21	Approved PWSC/staff's recommendations as presented.	Completed	Raised crosswalk completed June 2025.
Riviera Village Pedestrian Improvements	03/28/22	To be presented to PWSC at a later date.	Design			Pending	City received a grant to pursue design for comprehensive improvements in the Riviera Village. Project concepts were presented to transportation and design experts at a Metro Complete Streets Training as a case study. RFP will be issued to start design.
Pref Parking Zone on N Gertruda	08/28/23	Move forward with Pref Parking Zone - daytimes for res frontage & provide letter to adjoacent businesses	Forward to CC	TBD	Approved pending approval by Coastal Commission, if needed	Pending	Coastal Development Permit assigned to Planning pending available staff resources.
Truck Routes in So RB	03/25/24	PWSC recommended City Manager and CC discussions with Torrance counterparts	refer to CM and CC	TBD		Pending	In negotiation at City Manager and Council level with Torrance.
Curbspace at 2400 Artesia	03/25/24	PWSC Approval	N/A	N/A	N/A	Pending	To be implemented at developer cost when project is built.
AWS - Diamond/Gertruda and Diamond/Guadalupe	04/22/24	PWSC Rejection	In Planning		CC appropriated funds in FY24-25 for Diamond/RUHS area study	Pending	Study and recommendations to be presented at 10/27/2025 PWSC.
Pollinator Policy	10/28/24	Native Planting Policy recommended for CC approval	Forward to CC	03/11/25	Approved	Completed	City Council approved recommendations 1-3 and compliance with State requirements.
Beryl/Guadalupe Enhanced Crosswalk	12/02/24	Install Enhanced Crosswalk	Staff to do		none required	Completed	Striping contractor installed crosswalk in April 2025. Island installed June 2025
Class IV Bicycle Lanes on PVB	01/27/25	For City Council to fund design and construction of Class IV bike lanes	Design	N/A	TBD	Pending	Design to be funded by FY25-26 bicycle transportation fund. In design with consultant.
Meyer Lane Center Line Removal	02/24/25	To remove center line between 190th and Ralston	Staff to do	N/A	N/A	Completed	Removed in April 2025.
RB Blvd. Corridor MAT Project	04/28/25	Recommend project approval and further design. Recommend further consultation with Torrance	Design	08/19/25	Approved funding agreement, contract, and conceptual design	Pending	Metro funding agreement, consultant contract, and concept design approved by CC. CC to continue outreach to Torrance for cooperation. Staff awaiting fully executed contracts before starting design.
Ripley/Perkins/Huntington	3/24/25 & 4/24/25	Recommended approval as part of resi rehab project	Forward to CC	09/02/25	Approved plans and specs	Procurement	CC approved resi rehab FY23 plans and specs on 9/2/2025
500-600 Prospect Frontage (Safety Imp.)	4/28/25 & 06/23/2025	Recommended by PWSC 6/23/25	Staff to do	N/A	N/A	Pending	In review with PW Department and City Attorney's Office.
Preferential Permit Parking Reform	06/23/25	Recommended for CC approval	Forward to CC	09/16/25	CC tabled to future date	On-Hold	CC explored targeted permits for Ave H neighborhood but unlikely due to resident feedback.
Broadway/Sapphire/Guadalupe - Short-Term	07/28/25	Recommend short-term improvements	Staff to do	N/A	N/A	Pending	In queue for Public Works Operations to implement when resources available and materials arrive.

Administrative Report

J.1., **File #** PWS25-1476 **Meeting Date:** 10/27/2025

To: **PUBLIC WORKS AND SUSTAINABILITY COMMISSION**

From: DEPARTMENT OF PUBLIC WORKS

TITLE

DISCUSSION AND SELECTION OF NEW PUBLIC WORKS AND SUSTAINABILITY CHAIR AND VICE CHAIR

Administrative Report

J.2., **File #** PWS25-1477 **Meeting Date:** 10/27/2025

To: **PUBLIC WORKS AND SUSTAINABILITY COMMISSION**

From: DEPARTMENT OF PUBLIC WORKS

TITLE

DISCUSSION OF TRAFFIC SAFETY MEASURES AT THE GRANT AVENUE & BLOSSOM LANE INTERSECTION

EXECUTIVE SUMMARY

The City received a number of traffic safety complaints regarding the intersection of Grant Avenue and Blossom Lane. Residents expressed concerns regarding excessive speeds, crosswalk safety, and general traffic safety along Grant. Staff collected traffic and collision data, performed site visits of the intersection, and analyzed potential solutions. At this time, City staff is presenting a potential solution by prohibiting through and left-turning movements from either direction of Blossom onto Grant. Only right-turns would be permitted from Blossom onto Grant. Other concepts that may be infeasible or require further study/funding are also discussed. Noticing was provided to the residents living within approximately 300 feet of the intersection of Grant and Blossom (Attachment 1).

BACKGROUND

Intersections along Grant Avenue between Aviation Boulevard and Inglewood Avenue are generally similar to each other and evenly spaced from each other. Of the 10 intersections on Grant between Aviation and Inglewood, six are signalized and four are unsignalized. This agenda item pertains to the intersection of Grant and Blossom, which is unsignalized. Grant, which is wider, busier, and designated as a collector street, does not stop at this intersection. In comparison, Blossom is a designated local street and is stop-controlled at this intersection. This is typical practice as larger street traffic should not unnecessarily stop for smaller street traffic. At this intersection, left-turn pockets are provided for Grant approaches, curb extensions were recently constructed to improve safety, and intersection red curb is provided for visibility. The speed limit of Blossom is the residential prima facie 25 mph limit, while Grant's speed limit is 35 mph. The 85th percentile speeds along this section of Grant are generally 40 mph, which suggests excessive speeding. As a separate project, the City is narrowing vehicular lanes on Grant to current urban best practice (10 feet) and adding a buffer (3 feet) to the bicycle lanes when individual blocks on Grant are resurfaced to reduce excessive speeding and improve safety for all roadway users. Area residents expressed concerns regarding excessive speeds and crosswalk safety. The City expects that lane narrowing can somewhat address excessive speeds.

DISCUSSION

After receiving traffic safety complaints from area residents regarding this intersection, engineers from the City collected traffic and collision data, performed sight distance observations, and analyzed potential solutions. Vehicular turning movement counts were collected for the Blossom approaches

during one hour in the AM peak period and one hour during the PM peak period. Counts were collected in October 2025 when school was in session, shown below where AM is followed by PM in parentheses:

- Northbound Blossom: 21(14) Left, 25(10) Through, 48(48) Right
- Southbound Blossom: 8(6) Left, 22(21) Through, 16(23) Right

As shown, about 42-54% of Blossom vehicular approach traffic performs left or through movements during a typical peak hour, which are more complex to perform than right-turns. Right turns are by far the most executed single movement.

Engineers from the City performed sight distance analyses and found that adequate red curb exists to provide adequate visibility for performing turning movements from Blossom. A collision analysis was also performed and detailed statistics for an eight-year period (2016-2024) can be found in Attachment 2. In a recent five-year period (2020-2024), nine crashes occurred at Grant/Blossom. Four were injury collisions while five resulted in property damage only. Four of the crashes were right angle crashes, which typically involve one party approaching from Grant and the other party approaching from Blossom.

Potential Countermeasure(s):

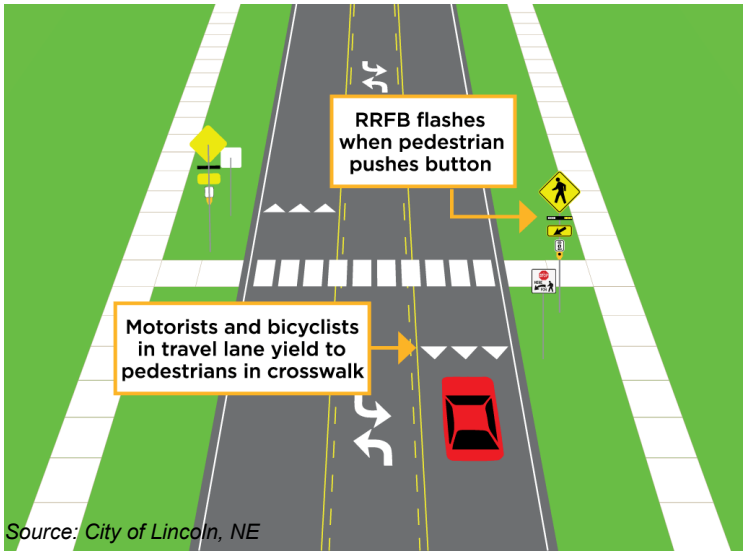
Right-Turn Only From Blossom

Prohibiting through and left-turns from Blossom to Grant would remove the most difficult turning movements at this intersection. Drivers on Blossom do not have the right-of-way and must calculate gaps on Grant to proceed safely, which includes looking for pedestrians, cyclists, and vehicles. Drivers proceeding straight or turning left must navigate both directions of Grant, a comparatively higher level of complexity. Staff proposes a relatively easy-to-implement countermeasure by adding signage that prohibits the left and through movements from Blossom in both directions. Prohibiting these turns would reduce the number of conflict points within the intersection, but would force drivers to reroute and potentially increase traffic on other streets to a minor extent. This countermeasure could address angle crashes, as drivers turning from Blossom would only need to focus on one direction of traffic to turn right. This solution would be easy to implement via signage, although it would be reliant on regular police enforcement. Physical impediments to block those turns would not be feasible without also prohibiting one or both left-turns from Grant and are not recommended at this time. If the “right turn only” signage is recommended by the PWSC, this countermeasure would require City Council approval. The cost to install right-turn only signs and associated roadway paint is approximately $1,500, available in the City’s Traffic Calming account.

Striped Crosswalk With RRFB Across Grant

Legal crosswalks exist at Grant and Blossom, however only crosswalks crossing Blossom, the shorter crossing, are marked. While unmarked, a legal crosswalk still exists to cross Grant. Curb extensions are present to provide enhanced visibility and shorten the crossing distance. Another feasible countermeasure would be to stripe a crosswalk across Grant when Grant is resurfaced in this area and add a rectangular rapid flashing beacon (RRFB). The proposed location would be the east leg of the intersection where ramps and curb extensions are available. While this striped crosswalk would remain uncontrolled and require pedestrians and drivers to exercise vigilance, RRFBs have been proven to improve crosswalk yielding compliance significantly. Signalized crosswalks are available at Green Lane to the west and Rindge Lane to the east, both 640 feet away. Pedestrians who feel uncomfortable with current crossing conditions at Blossom may feel more comfortable if a striped crosswalk and pedestrian-activated flashing lights are installed, which may

improve safety and discourage crossing outside of intersections. However, if the desire is to focus Birney School-related pedestrian crossings to the signalized crosswalk at Green Lane where a crossing guard is present during school commute hours, the proposed countermeasure here may not be consistent with that principle. In addition, the City does not have pedestrian crossing counts at this location. It is unclear whether resources should be spent at this location if demand is low. However, if enhancements are installed, pedestrian crossings would increase. Nonetheless, the proposed countermeasure features would be consistent with FHWA guidance on crosswalks at intersections like Grant and Blossom. The graphic below shows an example of an RRFB. If recommended by the PWSC, further consultation with the District 4 Councilmember would be required before incorporating these features and associated costs into design when this portion of Grant is resurfaced. Striping this crosswalk during Grant resurfacing would be of nominal cost, while adding an RRFB and associated crosswalk signs would cost approximately $15,000. This money may be available in the City's Traffic Calming account.



Source: City of Lincoln, NE

Countermeasures Deemed Infeasible or Requiring Further Study:

Traffic Signal

Traffic signals generally require a full traffic study and analysis to ensure the intersection would meet traffic signal warrants in the CAMUTCD. It is not likely that a traffic signal would meet installation warrants at Grant/Blossom, and the City does not have the funds to install nor maintain additional traffic signals within its jurisdiction.

Median Island With Crosswalk and RRFB

City staff also investigated the feasibility to add a physical pedestrian refuge median island within the two-way left-turn lane on Grant to increase crosswalk safety, similar to the recently installed median at Beryl/Guadalupe. This would be paired with the striped crosswalk across Grant and the aforementioned RRFB. The refuge island would help pedestrians cross one direction at a time and increase crosswalk signage visibility for drivers. However, it would remove the left-turn lane from westbound Grant to southbound Blossom. While the turn could still be performed, staff determined that due to higher traffic volumes on Grant and the narrow footprint of the intersection, removing the center turn lane could cause more issues compared to past installations. Staff determined that this location would be only a marginal candidate for a refuge island at this time.

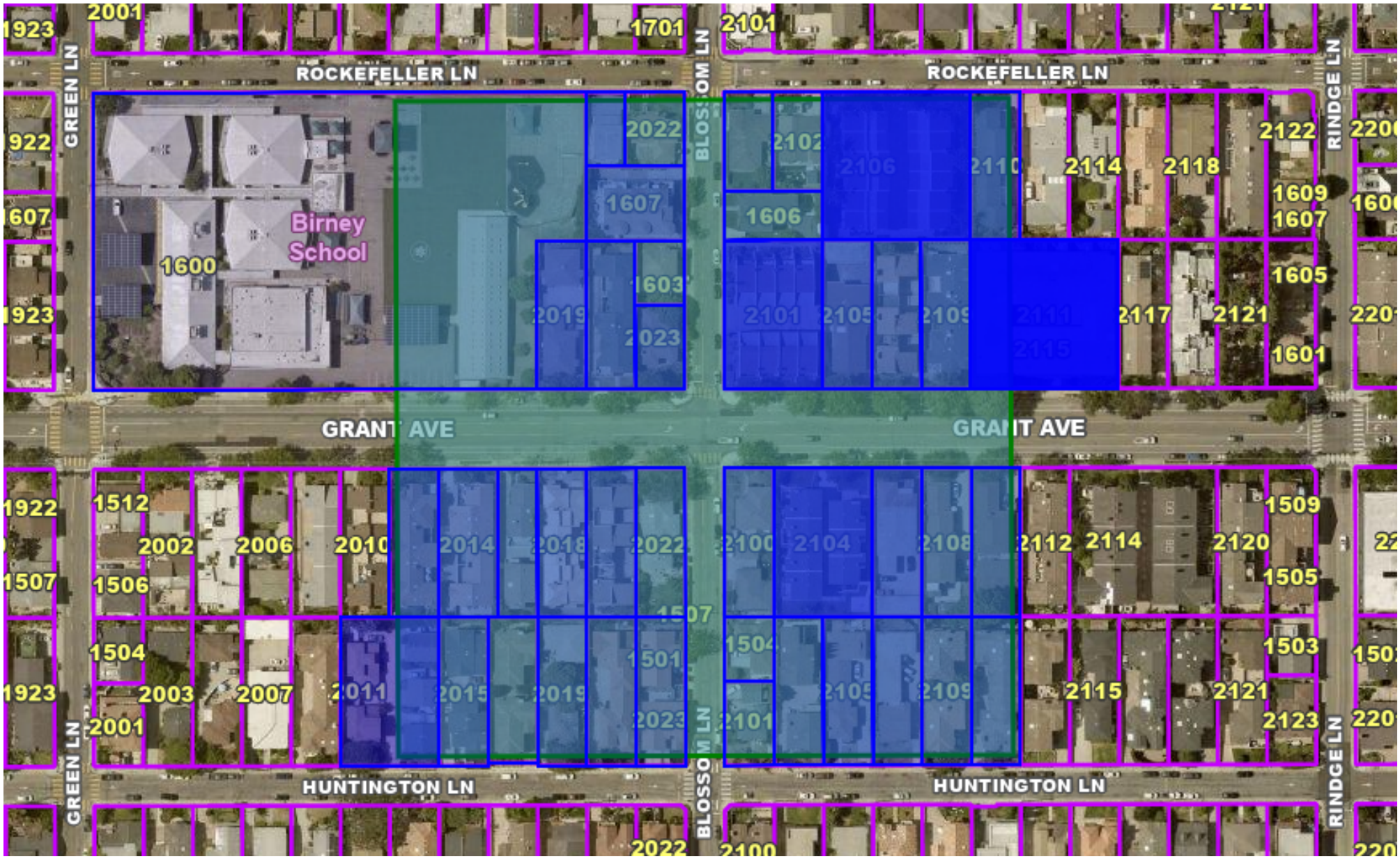
All-Way Stop
As mentioned before, traffic volumes on Grant are significantly higher than those approaching from Blossom. Grant is a much wider street and designated as a Collector, while Blossom is a narrower local street. It would not be appropriate to force all traffic at all times on Grant to stop for what would be infrequent cross-traffic from Blossom. An all-way stop here would not be consistent with Federal and State guidance.

Staff is seeking public and Commission input on whether any (or none) of the proposed countermeasures should be installed. Restricting turns would require City Council approval, while installing a striped crosswalk with an RRFB would require further consultation with the District 4 Councilmember and a commitment of funding to include in an upcoming striping project.

COORDINATION
Coordination of this report took place within the Public Works Department.

ATTACHMENTS
- Public Noticing Area
- Collision Statistics

Notification Area

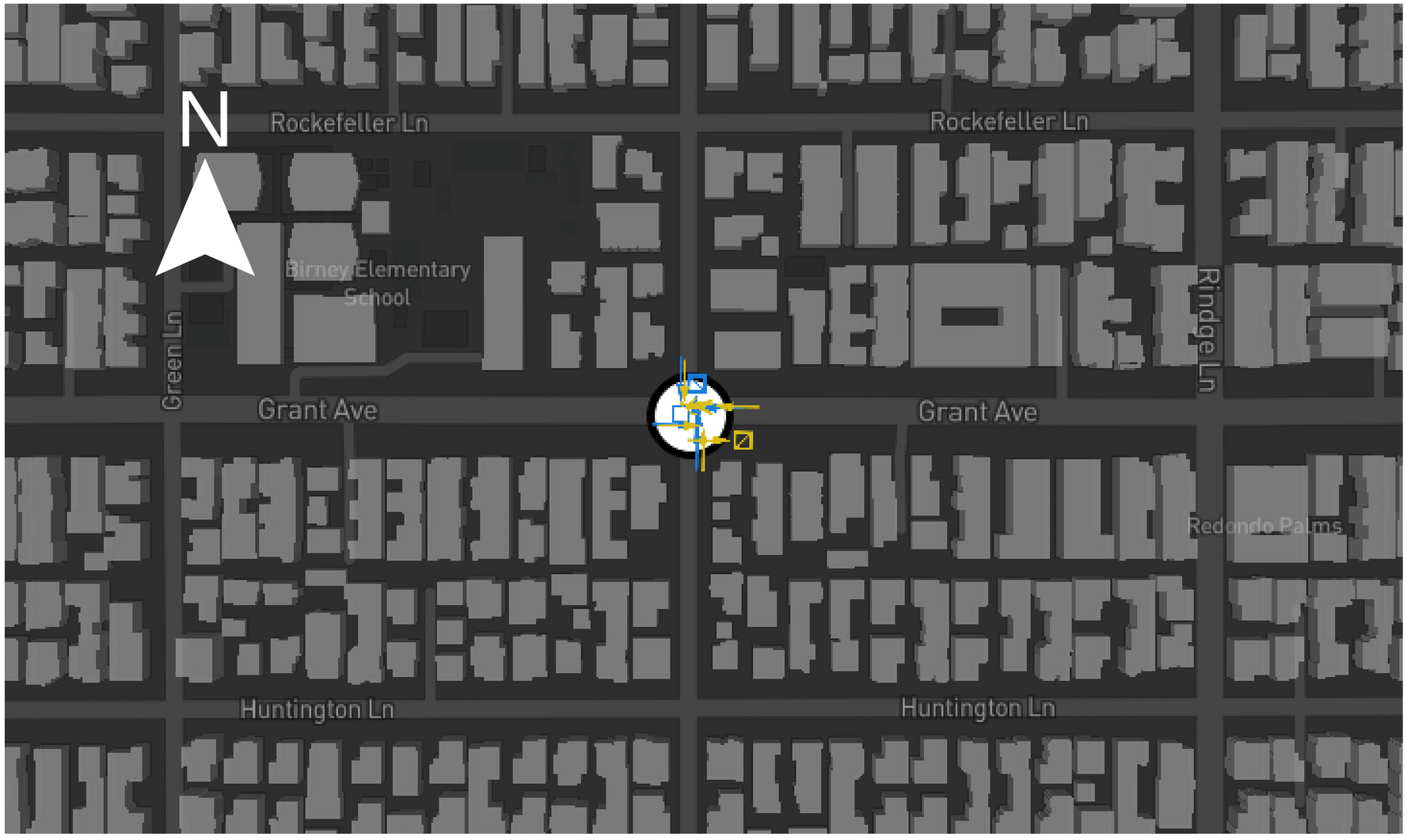


Blossom Lane & Grant Avenue

14 Crashes

04/18/2016 - 12/26/2024

(8.5 years of data)



2020-2024 (5yrs)
-9 Crashes
-4 Injury, 5 PDO
-4 Right Angle

Collision Type

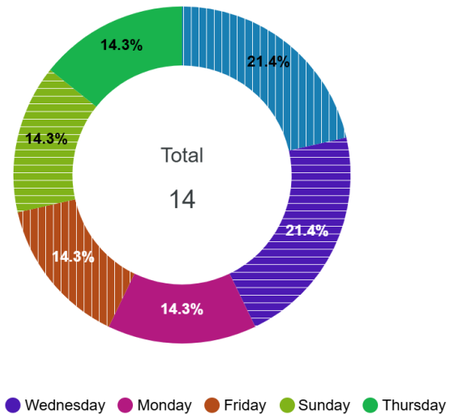
- Parked Vehicle: 6
- Right Angle: 6
- Fixed Object: 1
- Straight Hit VRU: 1
- Backing: 0
- Backing Hit VRU: 0
- Head On: 0
- Hit Animal: 0
- Left Turn: 0
- Left Turn Hit VRU: 0
- Non-Fixed Object: 0
- Other: 0
- Other Non-Collision Crash: 0
- Override or Underride: 0
- Parked Vehicle with VRU: 0
- Rail Crossing Related: 0
- Rear End: 0
- Right Turn: 0
- Right Turn Hit VRU: 0
- Run Off Road or Rollover: 0
- Side Swiped Hit VRU: 0
- Side Swiped Opposite Direction: 0
- Side Swiped Same Direction: 0

Severity

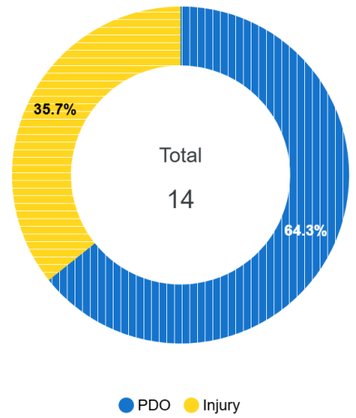
PDO:	9
Injury:	5

Charts and Graphs

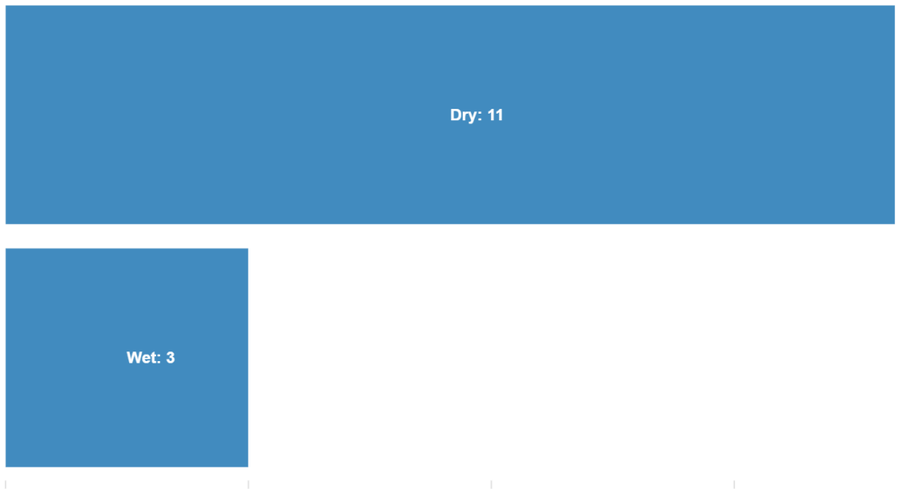
Day of Week



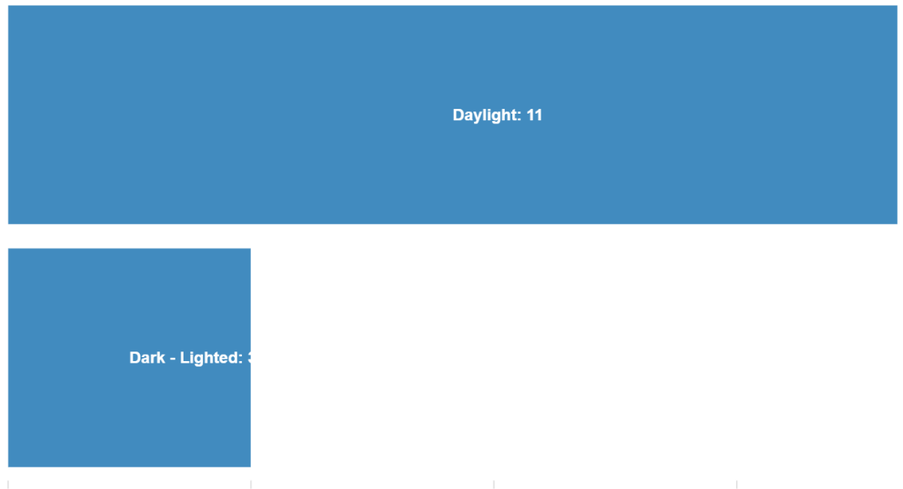
Severity



Roadway Condition

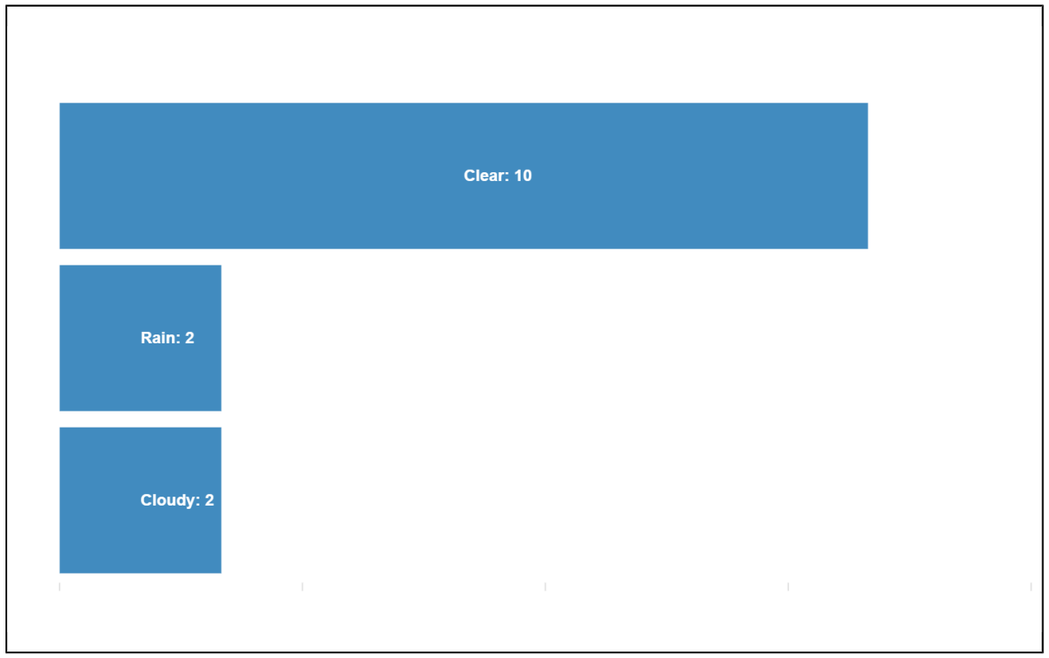


Light Condition

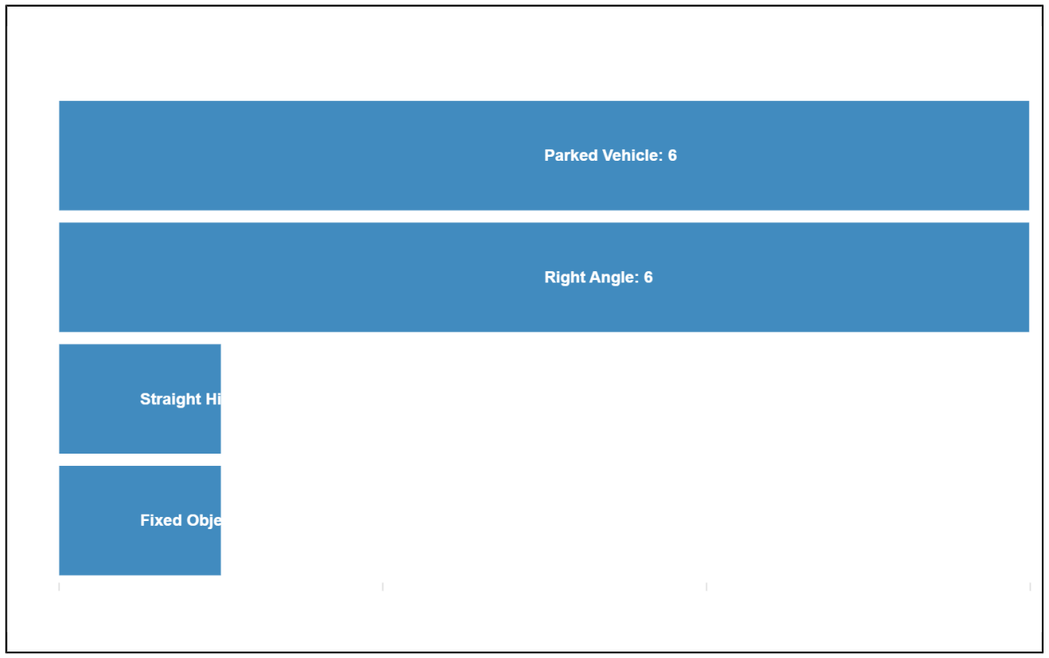


Blossom Lane & Grant Avenue

Weather



Collision Type



Collision Diagram Table

CCN	Collision Type	Severity	KABCO Severity	Weather	Crash Date	Crash Time
8018827	Parked Vehicle	PDO	(O) Property Damage-Only	Clear	April 18, 2016	12:00:00 AM
8282943	Parked Vehicle	PDO	(O) Property Damage-Only	Clear	December 23, 2016	1:11:00 AM
8684896	Parked Vehicle	PDO	(O) Property Damage-Only	Clear	August 7, 2018	12:00:00 AM
8701679	Right Angle	Injury	(B) Suspected Minor Injury	Clear	August 28, 2018	12:34:00 PM

8932923	Right Angle	PDO	(O) Property Damage-Only	Clear	September 2, 2019	7:06:00 PM
9170866	Right Angle	Injury	(B) Suspected Minor Injury	Clear	October 21, 2020	12:51:00 PM
9250687	Parked Vehicle	PDO	(O) Property Damage-Only	Clear	April 7, 2021	5:15:00 PM
9270451	Parked Vehicle	Injury	(B) Suspected Minor Injury	Rain	May 16, 2021	1:57:00 AM
9510630	Right Angle	PDO	(O) Property Damage-Only	Rain	December 11, 2022	1:50:00 AM
9559649	Right Angle	PDO	(O) Property Damage-Only	Cloudy	February 24, 2023	4:04:00 PM
9589483	Parked Vehicle	PDO	(O) Property Damage-Only	Cloudy	May 3, 2023	6:52:00 PM
9648236	Straight Hit VRU	Injury	(A) Suspected Serious Injury	Clear	October 26, 2023	3:17:00 PM
9689598	Right Angle	Injury	(B) Suspected Minor Injury	Clear	March 19, 2024	10:26:00 AM
4545935	Fixed Object	PDO	(O) Property Damage-Only	Clear	December 26, 2024	9:51:00 AM

Administrative Report

J.3., **File #** PWS25-0934 **Meeting Date:** 10/27/2025

To: **PUBLIC WORKS AND SUSTAINABILITY COMMISSION**

From: DEPARTMENT OF PUBLIC WORKS

TITLE

DISCUSSION OF DIAMOND STREET RESTRIPING BETWEEN PCH AND PROSPECT AND RUHS ACCESS IMPROVEMENTS

EXECUTIVE SUMMARY

As part of the City's FY2024-2025 budget, the City Council directed staff to study safety and circulation improvements along Diamond Street between PCH and Prospect Avenue to improve traffic operations on City streets around the RUHS area during school peak periods, and possible changes to curbspace on City streets along RUHS' frontages. The City hired a consultant with substantial experience performing school area traffic/safety studies around the region and country. Existing conditions data were collected, a stakeholder focus group was conducted, an online community meeting was held, and potential improvements were analyzed in cooperation with RBUSD. At this time, the City is proposing minor enhancements to on-street school loading zones on both north and south sides of RUHS, and narrowing existing lanes on Diamond to provide improved bicycle lanes and a dedicated bicycle turning lane into RUHS at Sea Hawk Way. These improvements were also presented at a District 2 community meeting on 10/22/2025. If these improvements are recommended by the Public Works & Sustainability Commission (PWSC) and approved by the City Council, staff will proceed with final design for construction as part of a future slurry seal project on Diamond Street. Noticing of this agenda item was provided to the residents living closest to RUHS entrances along Diamond Street and Vincent Street (**Attachment 1**).

BACKGROUND

The City Council directed staff as part of its FY2024-2025 budget motion to investigate potential solutions to RUHS-related traffic concerns along Diamond Street between PCH and Prospect, and potential curbspace use modifications along Diamond Street and City streets along RUHS' south side frontage near Vincent Street. City staff selected a transportation engineering consultant with national expertise, including experience with school-area projects, to perform the study, community engagement, and design. The process began in Summer 2024 after budget adoption, followed by data collection and community engagement in Fall/Winter 2024. Community engagement consisted of two parts. The first part were focused stakeholder sessions that included City staff, RBUSD staff, community groups, and two selected RUHS students from the Youth Commission. The second part was an online District 2 community meeting that was noticed to the public per **Attachment 1**. Twenty attendees joined the meeting and participated in an interactive survey. After community input was gathered, the project team proceeded with analyzing solutions. City staff met further with RBUSD staff to determine mutually beneficial changes to improve traffic operations and safety. At this time,

City staff is presenting proposed solutions to the PWSC and the public seeking input. Eventually the City Council will need to determine if further design efforts should proceed.

The project consultant prepared the *Redondo Union High Access Study and Design Evaluation Report*, which is shown as **Attachment 2**. The prior draft report was reviewed by City staff and RBUSD staff, and circulated with the District 2 councilmember. The report has been available for public viewing since October 16, 2025 on the City's website and was included as a QR code in the noticing for this agenda item. The link is also available below:

<https://www.redondo.org/departments/public_works/engineering_services/traffic_engineering/traffic_projects.php>

The report contains all data collection (parking, traffic counts, speeds, crashes), community engagement summaries, and recommendations. Copies of the report were also available at the recent District 2 community meeting.

Residents at the 10/22/2025 District 2 community meeting expressed general concerns about RUHS' size, generated traffic, entrance locations, and on-site traffic procedures. Although it could not be confirmed directly, many of the residents who attended the meeting lived along Vincent Street. Residents also expressed general favorability to adding an additional pick-up/drop-off zone on-site along Francisca Avenue, which is not within the control of the City. Specific to the City's project, residents reacted favorably to protected bike lanes that limited parking loss, curb extensions and lane narrowing to reduce speeds, and dedicated bicycle entryways into on-campus bicycle parking. However, residents were not in favor of expanding pick-up/drop-off spaces along Vincent Park. Residents also requested additional bicycle racks on-campus (RBUSD property) and off-campus (City property) to absorb bike parking demand.

DISCUSSION

As shown in Figure 9 of the report, the City is proposing to restripe Diamond Street to achieve traffic calming/slower speeds, improved bicycle riding experiences, improved safety, clearer pick-up/drop-off zones, and safer intersections. For Diamond Street, this includes:

- Narrowed vehicular lanes to decrease speeds on Diamond
- Parking-protected bicycle lane sections where feasible to improve safety
- Buffered bicycle lanes where on-street parking preservation is important
- More robust bicycle lane striping to current best practice
- Bus stop relocation at Diamond/Helberta (near side to far side) to improve crosswalk compliance and adhere to bus stop best practices
- In-street bicycle parking corral near Starbucks to encourage on-street bike riding
- Dedicated bicycle left-turn lane into Sea Hawk Way, and possibly into future Francisca pick-up/drop-off zone2, to address safety issues
- Dedicated bike entry into bike parking areas in RUHS
- Curb extensions and protected median islands at major crosswalk locations along Diamond to simplify turning movements and improve safety
- Refreshed pick-up/drop-off zones along Diamond Street to improve usage, to be utilized as short-term parking during the school day for visitors.

The proposed changes on Diamond Street will result in the loss of approximately 12 parking spaces. Only one of those parking spaces is located west of Del Amo Street where parking utilization is high (82/86) during school days. The remaining 11 parking spaces proposed to be removed on Diamond are east of Del Amo Street, where supply exceeds demand by 68 spaces. Some parking space removal is required in order to accommodate the proposed sections of protected/buffered bicycle lanes and the bicycle turn lane.

Limited changes are proposed along RUHS' southern frontages. This consists of:

- Converting non-standard and underutilized ADA (two spaces) and police (one space) parking along Vincent Park to school peak-period loading to improve curbspace efficiency and traffic circulation, with daytime short-term parking available for members of the public (e.g. school, Vincent Park, etc.) outside of loading zone hours. No existing preferential permit spaces are proposed to be modified or removed.
- Refreshed loading zone signage to improve operations and usability.

Staff would also like to note that RBUSD is embarking on a separate project to create another on-campus pick-up/drop-off zone along the southern extension of Francisca Avenue south of Diamond Street. While this area is owned and controlled by RBUSD, City and RBUSD staff are working together so that their project is amenable to both parties and the community. It is expected that this separate project would absorb some existing demand from other existing loading zones (on and off RUHS property).

Staff is seeking public and Commission input on whether to move forward with the proposed changes along Diamond Street and the south frontage of RUHS. If recommended by the PWSC and approved by the City Council, staff will issue a notice-to-proceed to the consultant to commence preparation of plans and specifications for construction.

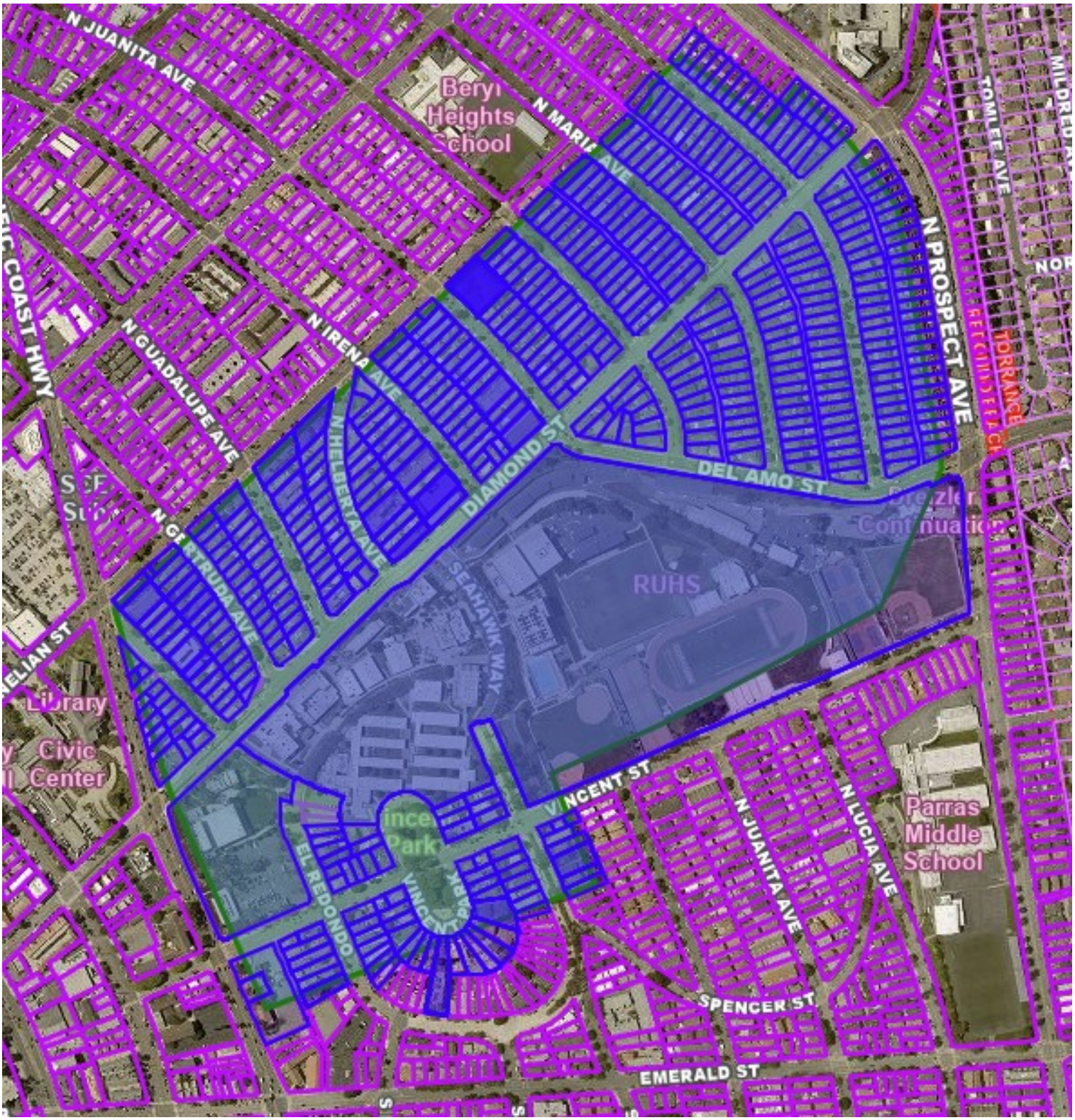
COORDINATION

Coordination of this report took place within the Public Works Department and with prominent staff of the RBUSD. Community engagement was carried out through the District 2 councilmember.

ATTACHMENTS

- Public Noticing Area
- Redondo Union High Access Study and Design Evaluation Report

Noticing Area



REDONDO UNION HIGH ACCESS STUDY AND DESIGN

Promoting safer and more accessible options for all users on Diamond Street including Redondo Union High School (RUHS) students, parents, and staff.

Table of Contents

REDONDO UNION HIGH ACCESS STUDY AND DESIGN

Project Introduction

The Redondo Union High Access Study and Design project focuses on promoting safer and more accessible options for all users on Diamond Street from Pacific Coast Highway to N. Prospect Avenue. This project aims to redefine curbside loading, parking, and multimodal mobility, with an emphasis on Redondo Union High School (RUHS) traffic, by gathering data and community input to identify short-term treatments and provide recommendations on pickup and drop-off zones at El Redondo Avenue and Vincent Park on the south side of the RUHS campus. Upon approval of project recommendations, the project team will develop a 100% signing and striping PS&E package to potentially implement “quick-build” changes as part of the repaving of Diamond Street.

The project aligns with the guiding principles from the City of Redondo Beach’s General Plan Vision 2050 to enhance **Community Character and Livability** and to achieve greater **Health and Vitality** throughout the community by:

- Promoting safety and security for its residents and visitors;
- Reducing automobile traffic volume and congestion;
- Providing safe, efficient, multimodal transportation that offers alternatives to the car;
- Providing walkable and bike-friendly interconnected neighborhoods; and
- Promoting active lifestyles for all age groups

Evaluation of Data

Toole Design collected parking occupancy data, traffic volumes, travel speed, and crash data on Diamond Street to identify key issues in the project area and determine the recommended interventions to improve the experience of people walking, biking, driving, and taking transit.

Parking Occupancy

Parking occupancy data was collected on Diamond Street on Wednesday, December 4, 2024, from 7 AM to 7 PM. The time when most people were parked on the street was 9 AM which aligns with the RUHS’s typical Wednesday class start time of 8:30 AM. Figure 1 depicts the parking occupancy percentage by block at 9 AM.

Though the south curb of Diamond Street from N. Gertruda Avenue to Del Amo Street/ N. Juanita Avenue right in front of RUHS was fully occupied (a total of 46 parking spots) and the north curb from Pacific Coast Highway to Del Amo Street/ N. Juanita Avenue had 36 out of 40 spots filled, 68 spots remained vacant from Del Amo Street/ N. Juanita Avenue to Prospect Avenue to the east.

See **Appendix A** for a detailed table of the parking occupancy along Diamond Street.

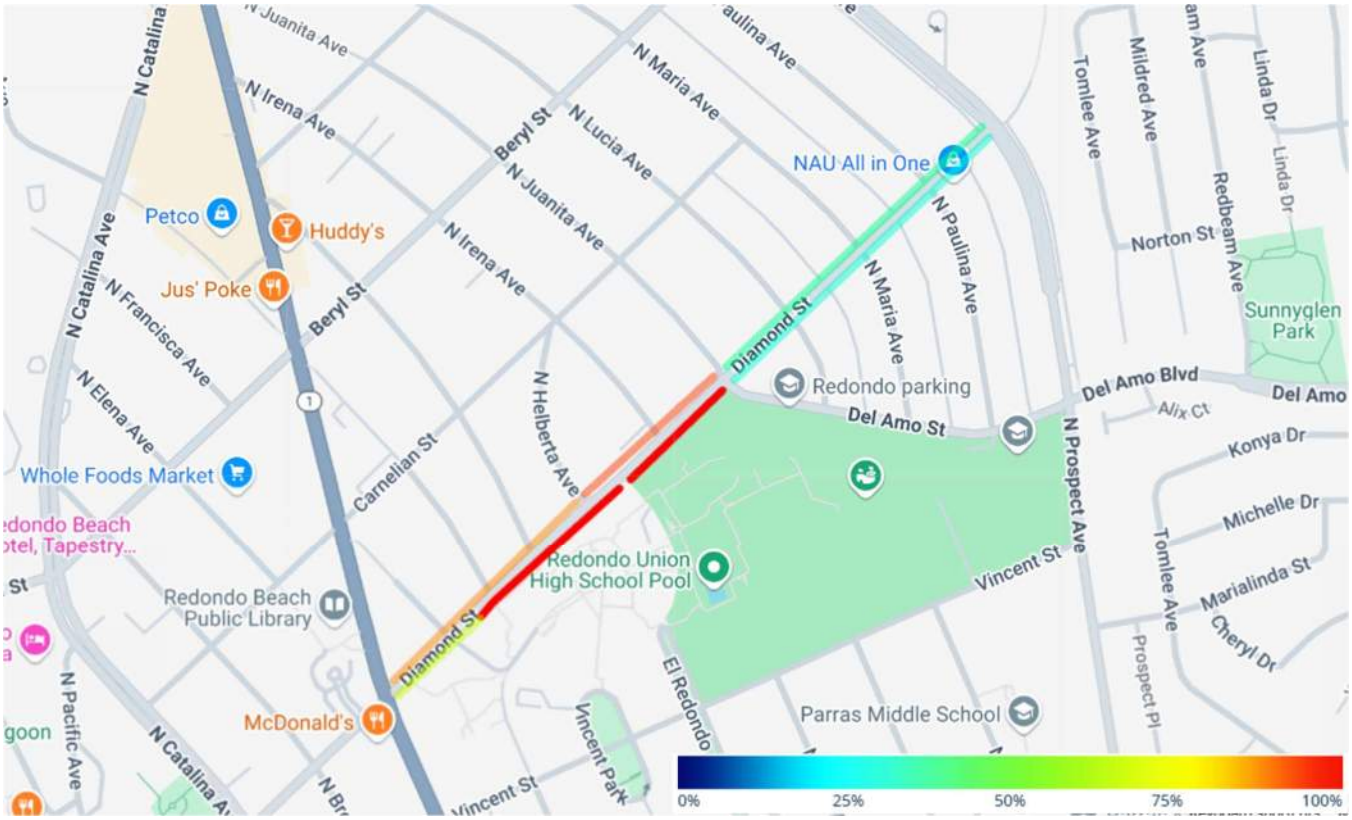


Figure 1. Parking Occupancy on Diamond Street at 9 AM (Wednesday, December 4, 2024)

Traffic Volumes

The project team collected turning movement counts at five (5) key intersections on Diamond Street to assess potential traffic impacts and determine where potentially unsafe conflicts are occurring. The intersections included: N. Francisca Avenue, N. Helberta Avenue, Sea Hawk Way, Del Amo Street/ N. Juanita Avenue, and N. Lucia Avenue.

During the morning peak hour when the greatest number of people are traveling on Diamond St, from 7:45 AM to 8:45 AM, one of the most notable conflicts was at the uncontrolled Diamond Street/Sea Hawk Way intersection between westbound left-turning bicyclists and motorists also making the same left turn and motorists traveling eastbound (Figure 2). There was a total of 141 people biking turning left as compared to 131 vehicles making the same left turn. The project team visited the site during arrival and dismissal times on October 29, 2024, and observed that people biking would ride next to and in front of turning vehicles while navigating the turn at the same time and entering the same receiving lane.

Students getting off at the nearside westbound bus stop regularly cross Diamond Street at Helberta Avenue where there is no crosswalk.

A second notable conflict that was observed included people crossing Diamond Street on the east leg of N Helberta Ave as shown in Figure 3. Collected data showed 171 people making this crossing, even though no crosswalk exists on the east approach. The westbound bus stop is located nearside on the north side of the intersection and the most direct path across Diamond Street is the unmarked crossing on the east side.

Lastly, a common sighting during the morning and afternoon observations were students biking in groups to and from school. The students would typically bike in the adjacent travel lane due to space constraints of the bike lane.

See **Appendix B** for detailed traffic volume data at the peak periods of the five (5) intersections.

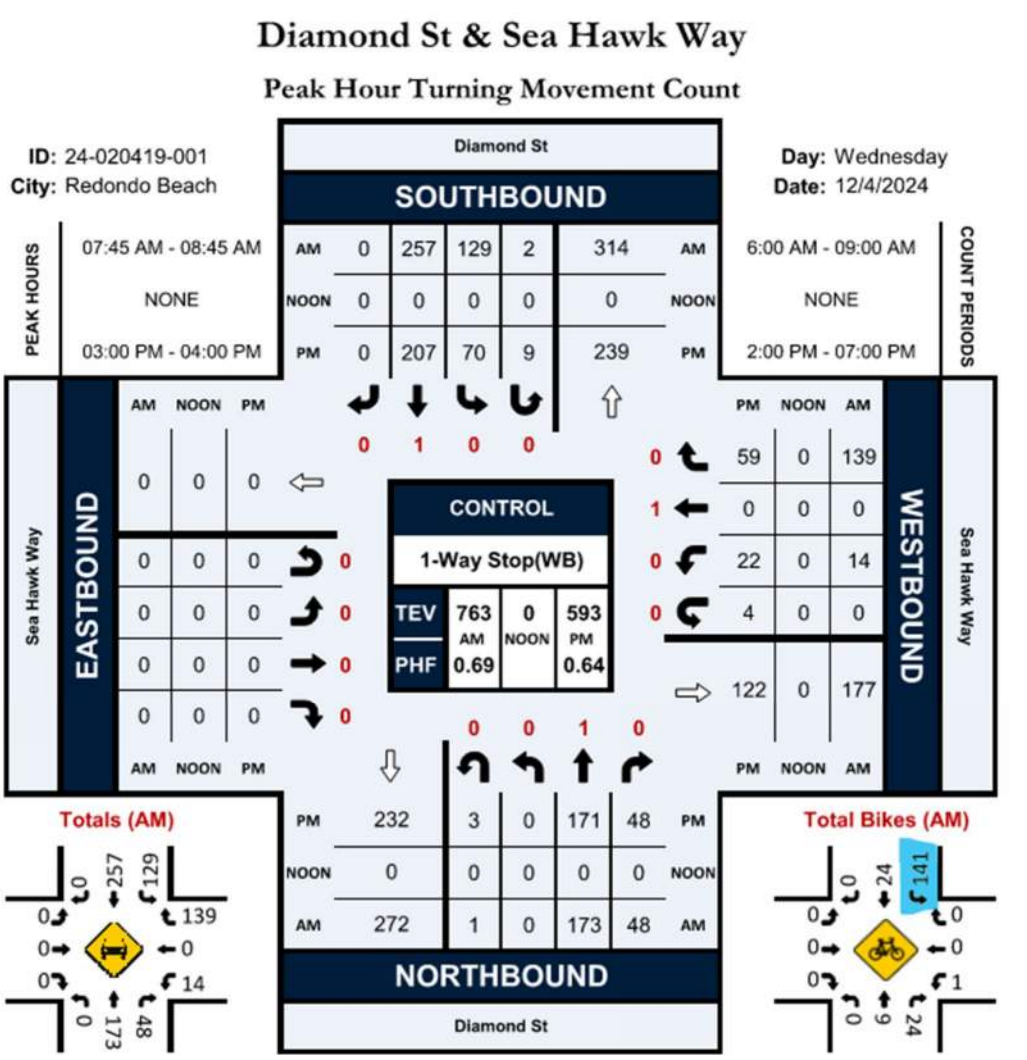


Figure 2. Volumes at Diamond Street & Sea Hawk Way in the AM peak period

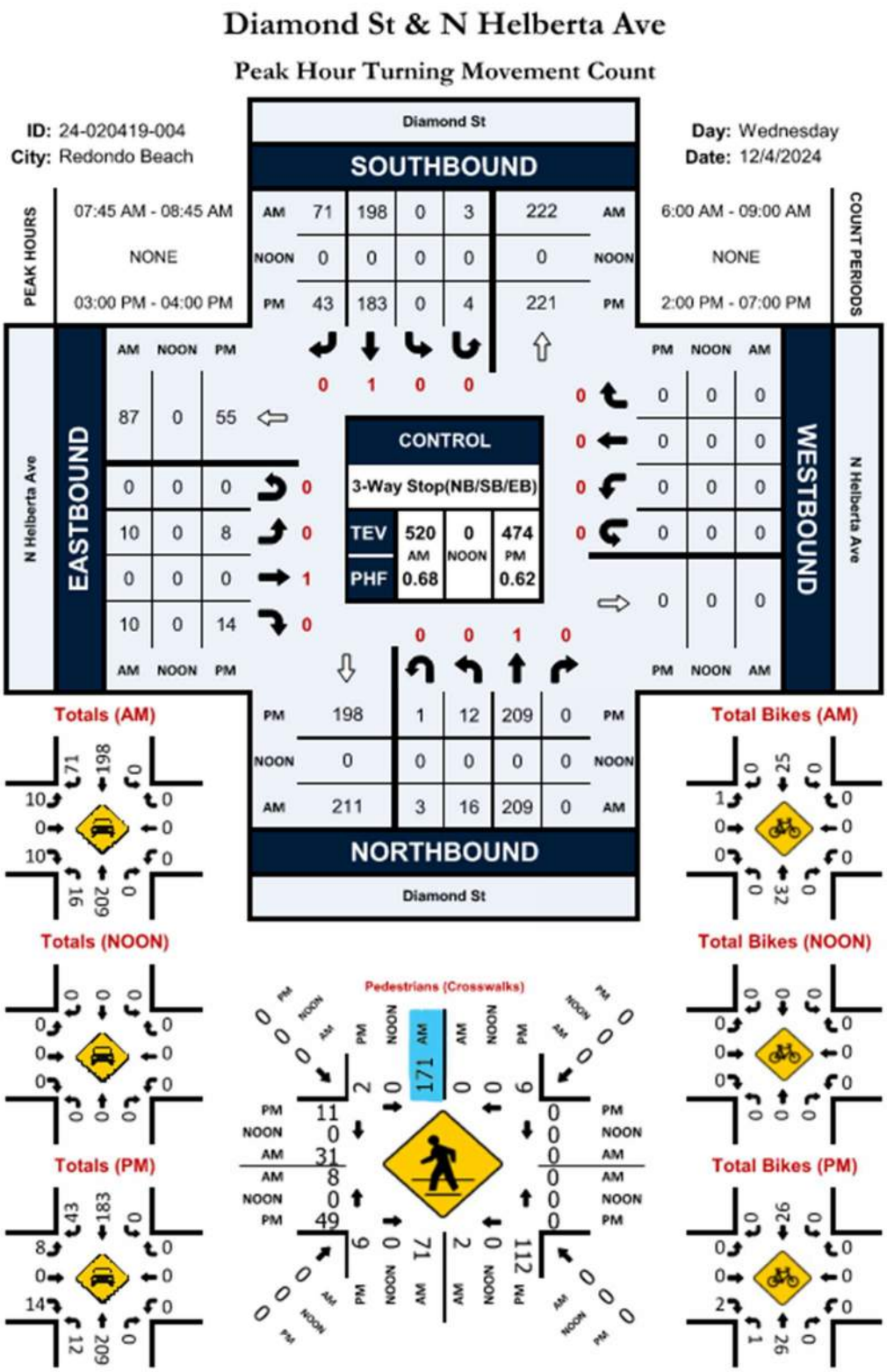


Figure 3. Volumes at Diamond Street & N Helberta Avenue

Travel Speed

The posted speed limit along Diamond Street is 30 miles per hour (mph) in both the eastbound and westbound directions and 25 mph during school arrival and dismissal. Vehicular travel speeds were collected along the corridor at the same time the turning movement counts and parking occupancy were collected. Figure 4 depicts the average speed of vehicles traveling along various locations along the corridor on December 4, 2024.

The 85th percentile speed is the speed at or below which 85 percent of all vehicles are observed to travel and has historically been used to set speed limits. For all locations, the 85th percentile ranged from 32 to 35 mph with the highest 85th percentile being along the eastbound direction between N Guadalupe Avenue and N Gertruda Avenue.

On average, vehicles travel at or below the 30-mph speed limit. Speed surveys, however, confirmed that a few motorists travel more than 45 mph, at the western end of the corridor. Though this is less than 1% of all vehicles, the time of day at which they sped included 5 AM and in the afternoon around the time of dismissal (3 PM) until 8 PM.

See **Appendix C** for a detailed speed survey.

Figure 4. Average Speed of Vehicles on Diamond Street

Crash Trends

Using the Transportation Injury Mapping System (TIMS) Crash Data (Dec 2019 – June 2024) and additional crash data provided by Redondo Beach Traffic Engineering, showed that there were 17 total reported crashes on Diamond Street. An analysis of the last 5 years' worth of collision data demonstrated that crashes involving people biking and walking made up 47% of total crashes recorded along Diamond Street. In addition, 63% of crashes resulting in minor injuries included bicyclists. Figure 5 shows that more crashes occurred during school arrival and dismissal times than any other time of day.

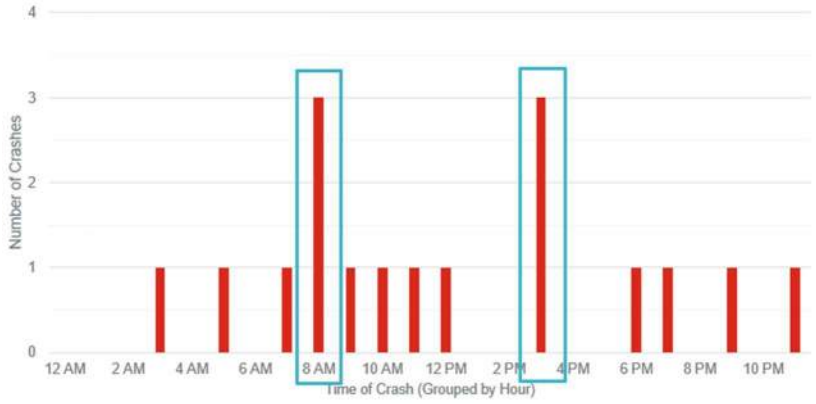


Figure 5. Crashes along Diamond Street by Hour (December 2019 – June 2024)

Figure 6 depicts the location of all crashes involving people biking and walking and their severity. On Diamond Street, most crashes occur at an intersection where people walking, rolling, biking, and driving have the most conflicts.

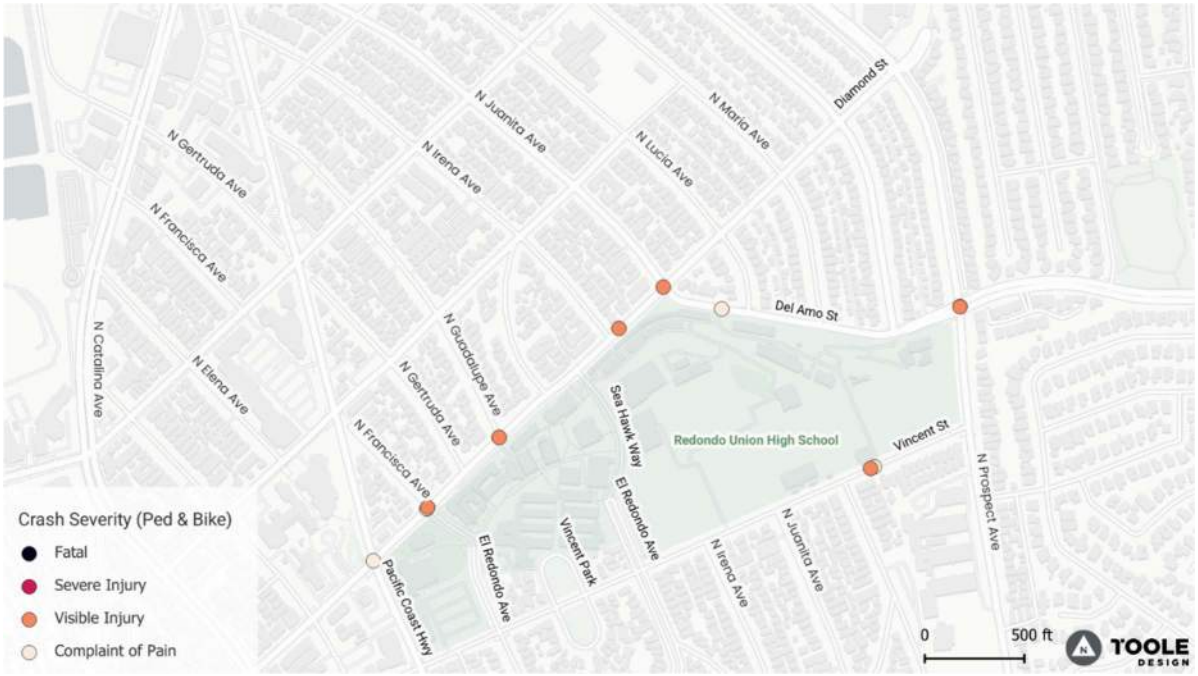


Figure 6. Crash Location and Severity Involving People Walking and Biking

Community Engagement

Approach

The project team led three virtual engagement events to gather input from the community on key issues the data may not have captured.

Stakeholder Meeting – January 8, 2025

The project team met with key City staff to discuss traffic safety and operations, including representatives of the Parent Teacher Association, the Redondo Beach Unified School District, the Redondo Beach Fire Department, the South Bay Bicycle Coalition, and the Redondo Beach Police Department. The community event included a presentation outlining background and preliminary data analysis and concluded with a discussion with guiding questions.

Stakeholder Meeting (Students) – January 16, 2025

A second stakeholder meeting was held to gather input from students. The school chose two students with diverse backgrounds, one who walked to school and one who took public transit or was driven to school, to meet with the team and provide input. The meeting included a presentation outlining background and preliminary data analysis and had guiding questions throughout the presentation to encourage discussion throughout.

Community Meeting – February 19, 2025

In addition to the presentation, the community meeting used Mentimeter, an interactive polling site to gather feedback during the presentation. The community meeting consisted of:

- 16 neighbors – largely residents living on the other side of RUHS along Vincent Street
- 1 parent and neighbor, and
- 3 people who identified as “other”.

Summary of Community Input

Below is a summary of additional concerns brought up by community members during the Stakeholder and Community Meetings.

- All-way stop-controlled intersections
  - People walking feel unsafe crossing Diamond Street because they must cross in front of multiple lanes of traffic, both for motor vehicles and bikes.
  - The Del Amo Street / N. Juanita Avenue & Diamond Street intersection can feel chaotic during the morning.
  - People biking tend to not stop at stop signs.
  - People driving tend to run the stop sign at N Francisca Avenue going westbound towards Pacific Coast Highway, possibly to catch a green signal for Diamond Street at PCH, since the green signal is visible from a distance (this was highlighted in a letter from a resident to the City).
- Bus Stops
  - The bus is full by the time it reaches the Sea Hawk Way stop in the afternoon, so most students wait by the Pacific Coast Highway stop instead.
  - There is a need for better bus transportation options to accommodate students' schedules.
  - It is difficult to see around the westbound bus that stops at Helberta Avenue if you are driving westbound as well.
- Bike Parking

    - While e-bikes can be an issue due to reckless riders, the bigger issue with e-bikes is the overcrowding and traffic congestion caused by having a single central parking location for bikes at Sea Hawk Way.
- Conflicts
    - Students go to Starbucks after school and bike and park on the sidewalk causing bike and pedestrian conflicts.
    - The Sea Hawk Way entrance is congested with people trying to enter and exit (bicyclists, vehicles, pedestrians).
    - Double parking in the bike lanes.
- Near-misses and Speeding
    - When asked to identify any locations where community members had experienced or witnessed a near-miss, many of the points placed were at intersections as shown in Figure 7.
    - The students mentioned speeding issues, particularly on Juanita Avenue and downhill towards Pacific Coast Hwy.

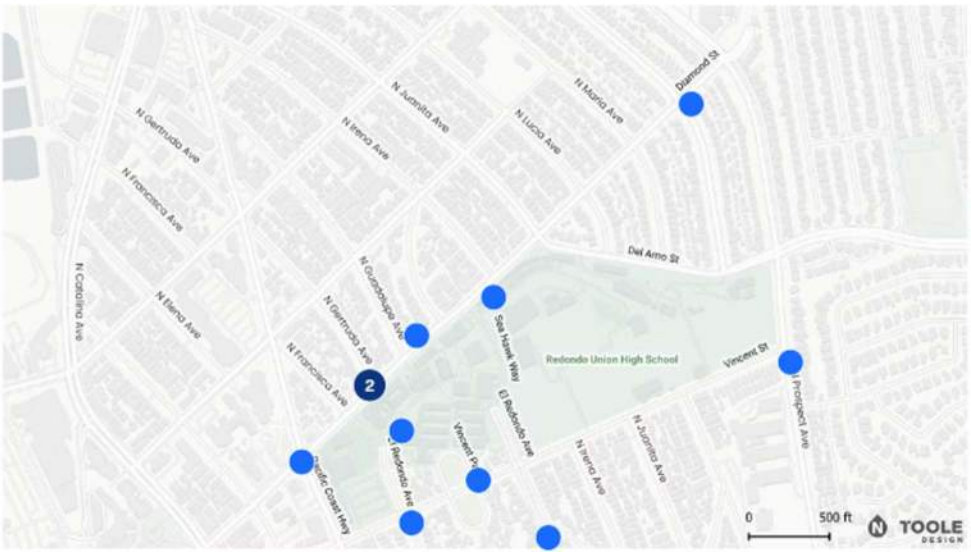
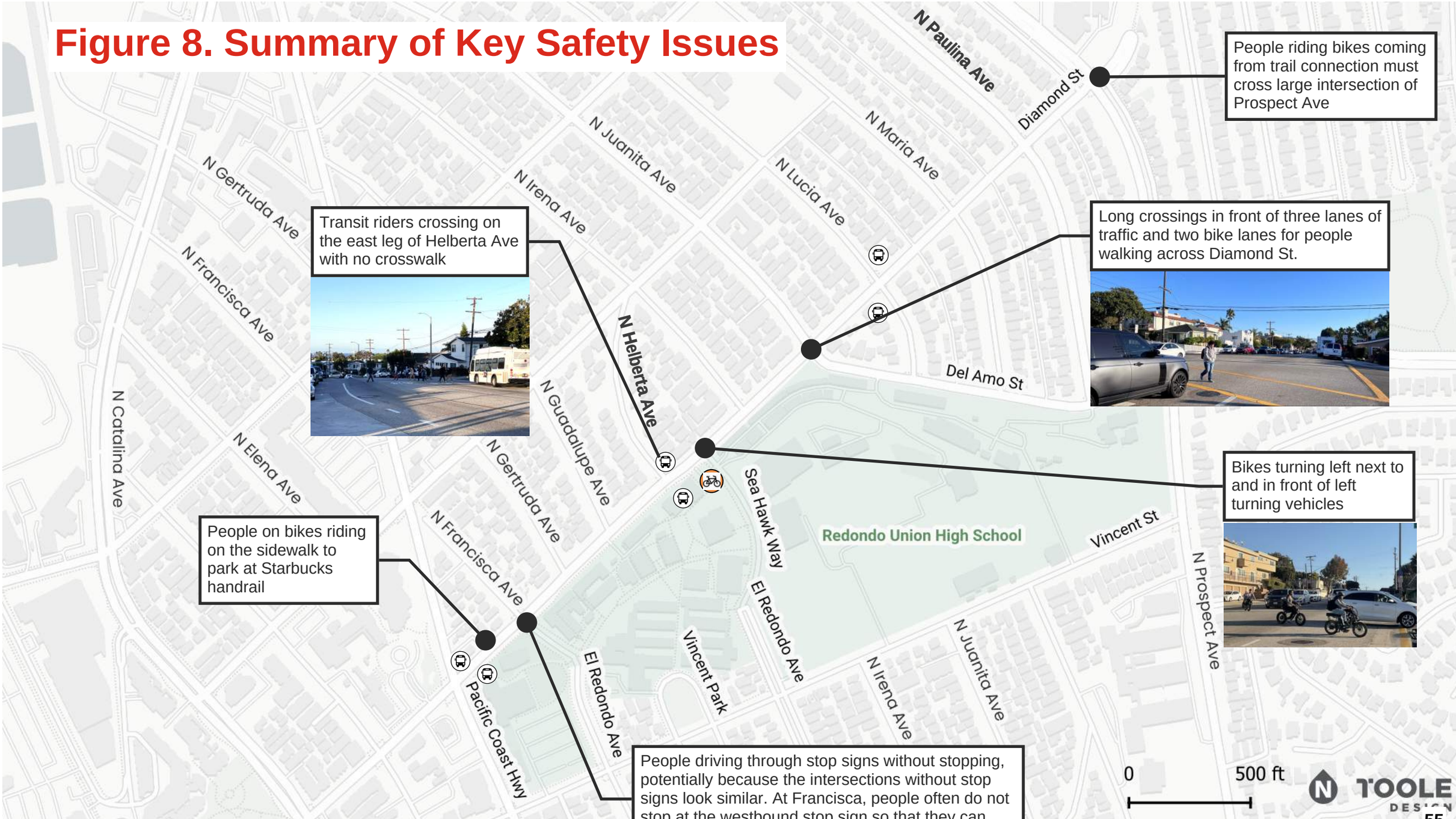


Figure 7. Locations of Potential Near-Misses in the Project Area (Redondo Union Access Study and Design Community Meeting – February 19, 2025)

Summary of Key Safety Issues

Figure 8 summarizes the key safety issues on Diamond Street.

Figure 8. Summary of Key Safety Issues



Recommendations

Summary of Recommendations

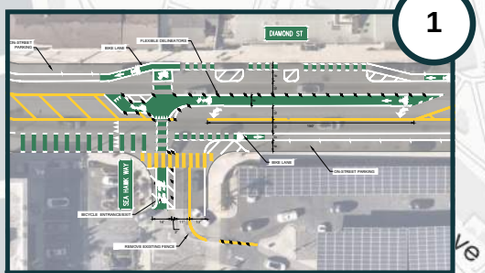
Figure 9 summarizes the recommended interventions on Diamond Street and in the project area.

Clear Space and Parking Impacts

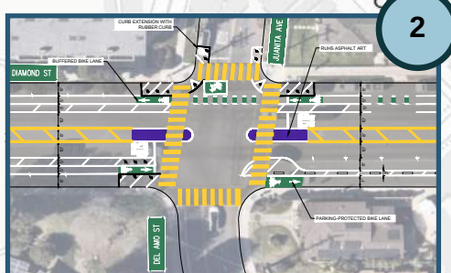
Clear space leading up to intersections and alleyways is required to provide appropriate sight distance for approaching vehicles and bicyclists to see each other so that each user can anticipate and avoid a potential collision with crossing traffic. This “clear sight triangle” should be kept clear of obstructions, including parked vehicles. At intersections, 50 ft of clear space is recommended. At alleyways, 20 ft of clear space is recommended.

The proposed design has minimal impacts on the parking on Diamond Street to the west of Del Amo Street/ N. Juanita Avenue with the potential removal of one (1) parking spot. East of Del Amo Street/ N. Juanita Avenue, about 11 parking spots are impacted. As stated in the Parking Occupancy section of this report, 68 vacant spots remained east of Del Amo Street/ N. Juanita Avenue during the most heavily parked time of the day while 4 vacant spots remained to the west of Del Amo Street/ N. Juanita Avenue. The parking loss is equal to or less than the current number of vacant spots on Diamond Street per the parking occupancy data. As documented in the collected parking occupancy data, the corridor has substantial parking availability today, and while the design would reduce some parking spaces, parking would remain available throughout a typical school day.

Figure 9. Summary of Recommendations



Sea Hawk Way Design - Appendix E



Del Amo St - Appendix E (Applies to Francisca Ave)

Additional bike parking along the perimeter of RUHS and at Starbucks to discourage sidewalk riding.*

Buffered bike lane*

Relocate WB bus stop west of the intersection

Additional loading zone signage.

Future RUHS project for pickup and drop-off on Francisca Ave. Details to be determined between City and RBUSD.

Additional curb space for pickup and drop-off by converting ADA parking to school loading zone.

Reconfigure existing loading zone and parking restrictions.

Parking removal (4)

Parking removal (1)

Parking removal (1)

Parking removal (2)

Parking removal (2)

Parking removal (1)

Parking removal (1)

Conflict markings at the intersection*

Curb extensions and asphalt art at all-way stops*

Parking-protected bike lane*

Bike lane, no buffer*

N Paulina Ave
Diamond St
N Maria Ave
N Lucia Ave
N Irena Ave
N Helberta Ave
N Guadalupe Ave
N Gertruda Ave
N Francisca Ave
Del Amo St
Sea Hawk Way
El Redondo Ave
Redondo Union High School
Vincent St
N Prospect Ave
N Juanita Ave
N Irena Ave
Vincent Park
El Redondo Ave
Pacific Coast Hwy

0 500 ft

TOOLE DESIGN

*Image can also be found in Appendix E.

Recommended Interventions and Benefits

	KEY ISSUE	INTERVENTION(S)	BENEFIT
ADDITIONAL DROP-OFF/PICKUP AREAS	The Sea Hawk Way entrance congested with people trying to enter and exit (bicyclists, vehicles, pedestrians).	Remove 2 ADA spaces and 1 police parking space on Vincent Park loop and convert to 7:45-8:45 am and 3:00-4:00pm loading with 2-hour parking between loading times. No restrictions outside of school hours. Maintain 1 ADA space near building door. Future RUHS project for pickup and drop-off area on Francisca Ave. Shift existing loading zone on south side of Diamond St closer to school building next to existing bus stop. Change parking restrictions to 7:45-8:45 and 3:00-4:00pm loading with 1-hour parking between loading times. No restrictions outside of school hours.	By providing multiple pickup and drop-off locations, the Sea Hawk Way entrance will see less demand and improve congestion and safety.

	KEY ISSUE	INTERVENTION(S)	BENEFIT
IMPROVED PEDESTRIAN CROSSING DESIGN	People walking across Diamond Street must navigate across long crossings with multiple conflict zones.	Install curb extensions at the following crossings on Diamond Street: Francisca Avenue, Helberta Avenue, Del Amo Street/ N. Juanita Avenue, N. Lucia Avenue, N. Paulina Avenue. Install pedestrian refuges at the following crossings on Diamond Street: Francisca Avenue (east side), Del Amo Street/ N. Juanita Avenue, and N. Lucia Avenue (west side). See City's level of service analysis determining feasibility of turn lane removal along Diamond St. Install high-visibility crosswalks at all existing marked crossings on Diamond Street and its side streets in the project area.	Curb extensions shorten crossing distances and provide better visibility for pedestrians crossing, a pedestrian refuge provides a waiting area to help people navigate two directions of traffic.
ADDITIONAL BIKE PARKING	Overcrowding and traffic congestion due to only two parking locations for bikes – one at Sea Hawk Way and another on Francisca Ave. Students go to Starbucks after school and bike and park on the sidewalk causing bike and pedestrian conflicts.	Install bike parking around the perimeter of RUHS (the project team will work with RUSD to identify final locations). Install on-street corral for bikes in the red curb by the Starbucks driveway. See Appendix E for an example of bicycle parking.	By providing multiple convenient bike parking locations, the Sea Hawk Way entrance will see less demand and improve congestion and safety. This also reduces the conflicts between people walking and biking on the sidewalk east of the Starbucks.
ASPHALT ART AT ALL-WAY STOP INTERSECTIONS	People biking tend to not stop at stop signs. People driving tend to run the stop sign at N Francisca Avenue going	Install asphalt art at the pedestrian refuges and potentially the curb extensions where they're proposed. See Appendix E	Providing asphalt art at all-way stop-controlled intersections gives drivers an additional indication of

	KEY ISSUE	INTERVENTION(S)	BENEFIT
	westbound towards Pacific Coast Hwy.	for an example of asphalt art at all-way stop intersections.	an all-way stop intersection.
RELOCATION OF WB BUS STOP AT HELBERTA AVE	The westbound bus stop is located on the east side of the intersection which encourages riders to cross Diamond Street in the unmarked crossing on the east side. It is difficult to see pedestrians crossing around the westbound bus that stops at Helberta Avenue if you are driving westbound due to buses obstructing the view of crossing students.	Relocate the WB bus stop at Helberta Avenue to the far side of the intersection.	Improves the visibility of pedestrians crossing the crosswalk on the west leg. Encourages people taking transit to use the existing marked crossing and curb ramps at this intersection.
PARKING-PROTECTED BIKE LANES ON THE SOUTH SIDE OF THE STREET	People double park in the bike lanes.	Install parking-protected bike lanes on the south side of Diamond Street. See Appendix E for an example of parking-protected bike lanes.	Protected bike lanes discourage double parking and provides a safer, protected area for people to bike without vehicular conflict between intersections.
BUFFERED BIKE LANES ON THE NORTH SIDE OF THE STREET	Students biking in groups to and from school. The students would typically bike in the adjacent travel lane due to space constraints of the bike lane.	Install bike lanes with a 5' buffer on the north side of Diamond Street. See Appendix E for an example of buffered bike lanes.	Buffered bike lanes provide additional space for people biking while maintaining curbside parking
LEFT TURN BIKE LANE AND DEDICATED RECEIVING LANE AT SEA HAWK WAY	Left-turning bicyclists going westbound on Diamond Street turning into Sea Hawk Way at the uncontrolled intersection. People biking ride next to and in front of turning	Install dedicated left turn lane and receiving lane for people biking at Sea Hawk Way to separate bike traffic from vehicular traffic as shown on Figure 9.	Dedicated lanes for people biking separate and decrease the conflict zones between the two modes of transportation.

	KEY ISSUE	INTERVENTION(S)	BENEFIT
	vehicles while navigating the turn at the same time and entering the same receiving lane.		
GREEN CONFLICT MARKINGS	Some crashes along Diamond Street involving people biking were due to vehicles striking people biking at intersections.	Install conflict markings at all intersections where bike lanes continue through the intersection. The City has used green conflict markings for other bikeways, such as Beryl Street's Class II bike lanes from PCH to Flagler Lane. See Appendix E for an example of green conflict markings.	Conflict markings alert people driving and biking to potential conflict areas.

Next Steps

The project team's primary goal for the Redondo Union Access Study and Design was to identify "quick-build" interventions that would provide the highest impact to the safety and efficient access of the RUHS area. This report serves to demonstrate how the community engagement process and the data analysis led to the identification of targeted safety countermeasures on Diamond Street. The project team recommends continuing to 60% design of the project to implement countermeasures so that enhancements can installed quickly, tested and evaluated, and modified as required before more permanent and capital-intensive measures are designed and constructed.

A. PARKING OCCUPANCY

Prepared by National Data & Surveying Services

Parking Study

Project ID: 24-020420
City: Redondo Beach, CA

Date: 12/4/2024
Day: Wednesday

Segment	Street	From	To	Curb Type	Side of the Street	Marked/ Unmarked	Restriction	Measurement *(ft.)* / # of Spaces *(if Marked)*	Approximate Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
OSP-001	Diamond Street	Pacific Coast Hwy	Francisca Avenue	Regular	S	Unmarked	No Parking Monday 8am-9pm	170'	9	3	6	5	6	7	7	2	6	7	1	1	0
	Diamond Street	Pacific Coast Hwy	Francisca Avenue	Regular	S	Marked	No Parking Thursday 11am-2pm/Tow-Away No Parking 7:45am-8:45am & 2:15pm-3:15pm School Days Only		4	2	1	4	4	4	4	4	4	4	1	1	2
	Diamond Street	Pacific Coast Hwy	Francisca Avenue	Red	S	Unmarked	Illegal Parking	-	-	0	0	0	1	1	0	0	1	1	0	0	0
OSP-002	Diamond Street	Francisca Avenue	Sea Hawk Way	Regular	S	Marked	No Parking Thursday 11am-2pm		10	7	10	10	9	9	8	7	8	7	5	5	4
	Diamond Street	Francisca Avenue	Sea Hawk Way	Regular	S	Marked	Tow-Away No Parking 7:30am-3:30pm School Days Only		13	13	13	13	13	13	13	3	10	5	3	4	3
OSP-003	Diamond Street	Sea Hawk Way	Del Amo Street	Regular	S	Marked	No Parking Thursday 11am-2pm		23	22	23	23	22	22	21	15	20	18	13	14	12
OSP-004	Diamond Street	Del Amo Street	Prospect Avenue	Regular	S	Unmarked	No Parking Thursday 11am-2pm	962'	48	11	11	14	15	14	14	10	12	12	8	8	8
OSP-005	Diamond Street	Prospect Avenue	Del Amo Street	Regular	N	Unmarked	No Parking Friday 11am-2pm	908'	45	29	18	16	16	16	16	19	7	8	6	6	6
OSP-006	Diamond Street	Del Amo Street	Helberta Avenue	Regular	N	Marked	No Parking Friday 11am-2pm		17	14	16	16	14	16	14	14	15	14	14	15	13
OSP-007	Diamond Street	Helberta Avenue	Pacific Coast Hwy	Regular	N	Marked	No Parking Friday 11am-2pm		18	13	16	18	17	15	15	13	13	10	7	7	7
	Diamond Street	Helberta Avenue	Pacific Coast Hwy	Regular	N	Unmarked	Parking by Permit Only everyday 8am-10am/No Parking Friday 11am-2pm	90'	5	3	3	2	2	2	2	3	3	3	3	3	3
	Diamond Street	Helberta Avenue	Pacific Coast Hwy	Red	N	Unmarked	Illegal Parking	-	-	0	2	0	0	0	0	0	0	0	0	0	0

Notes: ***OSP-001 & OSP-007 -*** *Vehicles illegally parked at the red curb during the study*

OSP-002 (Tow-Away No Parking 7:30am-3:30pm School Days Only) - *Buses occupying 2 spaces but counted as 1 occupancy from 4:00pm-6:00pm.*

B. TRAFFIC VOLUMES

Prepared by National Data & Surveying Services

Diamond St & N Francisca Ave

Peak Hour Turning Movement Count

ID: 24-020419-005
City: Redondo Beach

Day: Wednesday
Date: 12/4/2024

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 03:00 PM - 04:00 PM

COUNT PERIODS

AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 2:00 PM - 07:00 PM

CONTROL: 4-Way Stop

	AM	NOON	PM
TEV	478	0	457
PHF	0.67		0.69

SOUTHBOUND (Diamond St)

	Left	Thru	Right	Peds	Total
AM	15	183	7	15	231
NOON	0	0	0	0	0
PM	16	169	6	3	224

EASTBOUND (N Francisca Ave)

	Left	Thru	Right	Peds
AM	0	12	0	21
NOON	0	0	0	0
PM	0	12	0	21

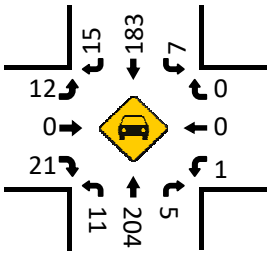
WESTBOUND (N Francisca Ave)

	Left	Thru	Right	Peds
AM	0	4	0	7
NOON	0	0	0	0
PM	0	4	0	7

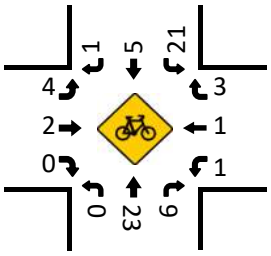
NORTHBOUND (Diamond St)

	Left	Thru	Right	Peds	Total
AM	4	11	204	5	209
NOON	0	0	0	0	0
PM	3	12	196	1	198

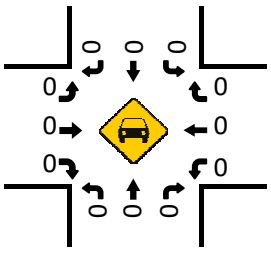
Totals (AM)



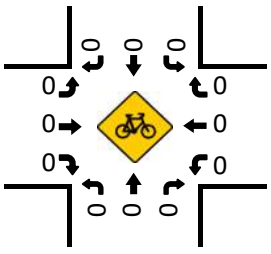
Total Bikes (AM)



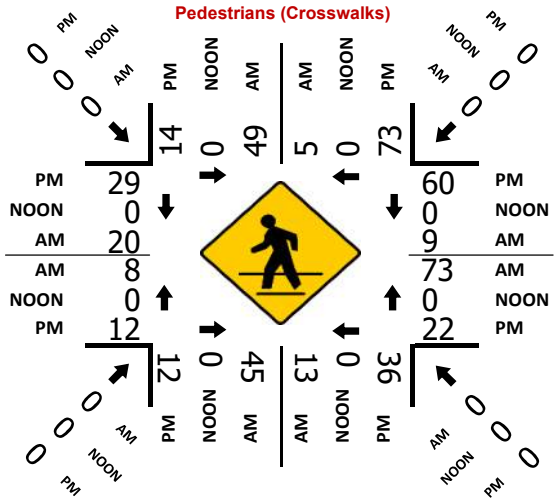
Totals (NOON)



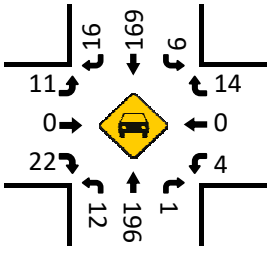
Total Bikes (NOON)



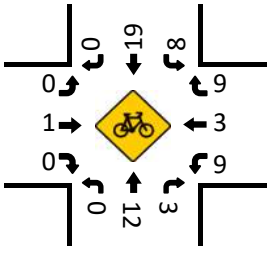
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Diamond St & N Helberta Ave

Peak Hour Turning Movement Count

ID: 24-020419-004
City: Redondo Beach

Day: Wednesday
Date: 12/4/2024

PEAK HOURS
AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 03:00 PM - 04:00 PM

COUNT PERIODS
AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 2:00 PM - 07:00 PM

SOUTHBOUND (Diamond St)

	L	T	R	U	Total	
AM	71	198	0	3	222	AM
NOON	0	0	0	0	0	NOON
PM	43	183	0	4	221	PM

EASTBOUND (N Helberta Ave)

	L	T	R	
AM	87	0	55	
NOON	0	0	0	
PM	10	0	8	

WESTBOUND (N Helberta Ave)

	L	T	R	
PM	0	0	0	
NOON	0	0	0	
AM	0	0	0	

NORTHBOUND (Diamond St)

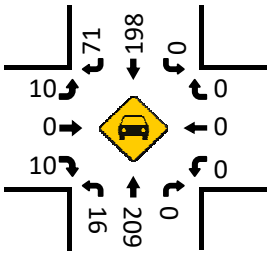
	L	T	R	U	Total	
PM	198	1	12	209	0	PM
NOON	0	0	0	0	0	NOON
AM	211	3	16	209	0	AM

CONTROL

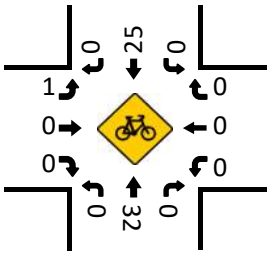
3-Way Stop(NB/SB/EB)

	AM	NOON	PM
TEV	520	0	474
PHF	0.68		0.62

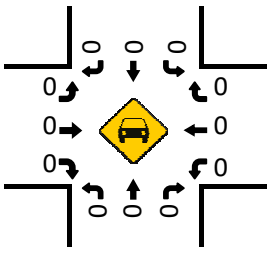
Totals (AM)



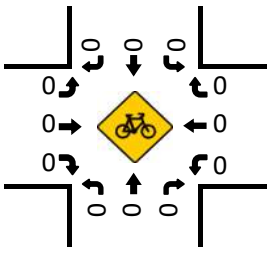
Total Bikes (AM)



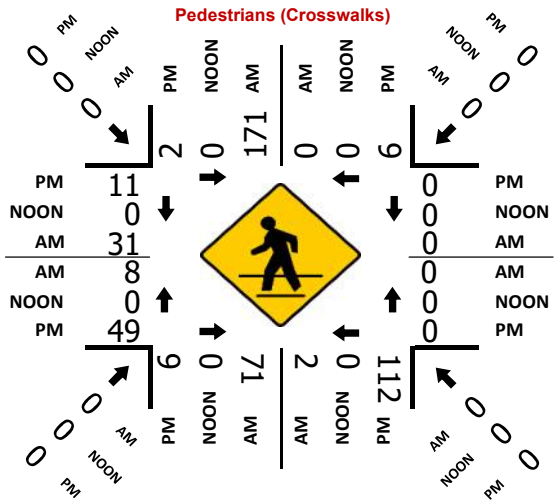
Totals (NOON)



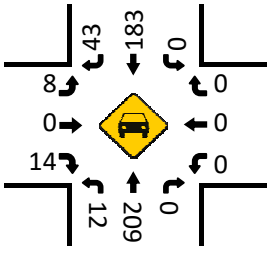
Total Bikes (NOON)



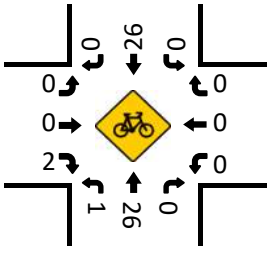
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Diamond St & Sea Hawk Way

Peak Hour Turning Movement Count

ID: 24-020419-001
City: Redondo Beach

Day: Wednesday
Date: 12/4/2024

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 03:00 PM - 04:00 PM

COUNT PERIODS

AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 2:00 PM - 07:00 PM

CONTROL: 1-Way Stop(WB)

	AM	NOON	PM
TEV	763	0	593
PHF	0.69		0.64

SOUTHBOUND (Diamond St)

	Left	Thru	Thru	Right	Total	
AM	0	257	129	2	314	AM
NOON	0	0	0	0	0	NOON
PM	0	207	70	9	239	PM

EASTBOUND (Sea Hawk Way)

	Left	Thru	Right	
AM	0	0	0	
NOON	0	0	0	
PM	0	0	0	

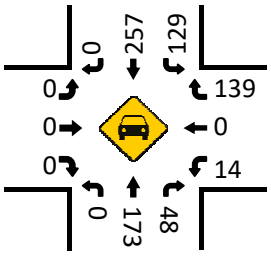
WESTBOUND (Sea Hawk Way)

	Left	Thru	Right	
PM	59	0	139	
NOON	0	0	0	
AM	22	0	14	
	4	0	0	
	122	0	177	

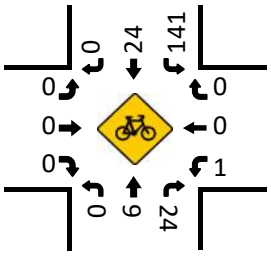
NORTHBOUND (Diamond St)

	Left	Thru	Thru	Right	Total	
PM	232	3	0	171	48	PM
NOON	0	0	0	0	0	NOON
AM	272	1	0	173	48	AM

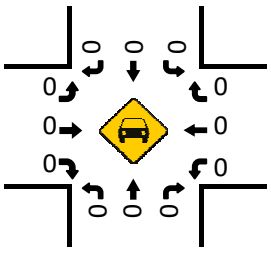
Totals (AM)



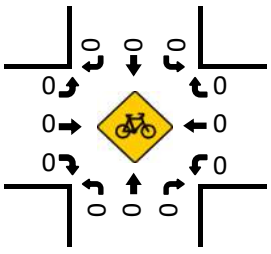
Total Bikes (AM)



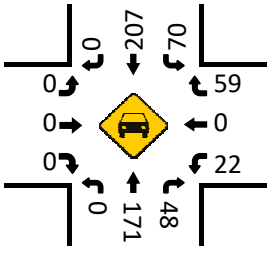
Totals (NOON)



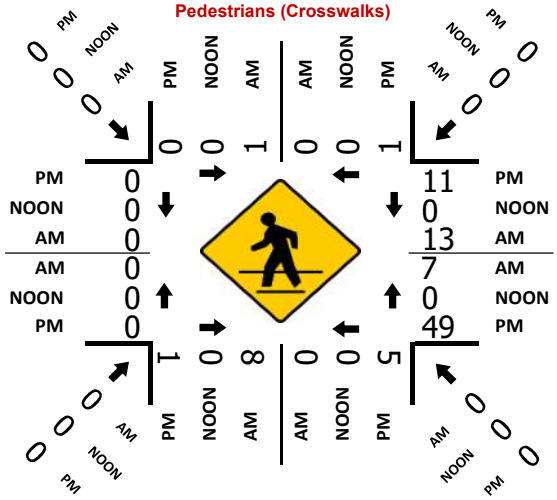
Total Bikes (NOON)



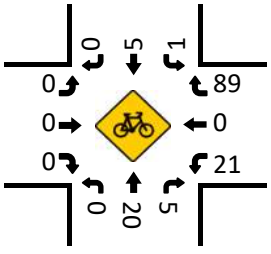
Totals (PM)



Pedestrians (Crosswalks)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Diamond St & Del Amo St/N Juanita Ave

Peak Hour Turning Movement Count

ID: 24-020419-003
City: Redondo Beach

Day: Wednesday
Date: 12/4/2024

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	6:00 AM - 09:00 AM
NONE	NONE
03:00 PM - 04:00 PM	2:00 PM - 07:00 PM

CONTROL: 4-Way Stop

	TEV	AM	NOON	PM
	820	0	656	
PHF	0.70		0.69	

SOUTHBOUND (Diamond St)

AM	11	201	24	0	156	AM
NOON	0	0	0	0	0	NOON
PM	15	127	17	0	129	PM
	0	1	0	0		

EASTBOUND (Del Amo St/N Juanita Ave)

AM	NOON	PM	
67	0	74	
1	0	0	0
5	0	9	0
72	0	46	1
43	0	18	0
AM	NOON	PM	

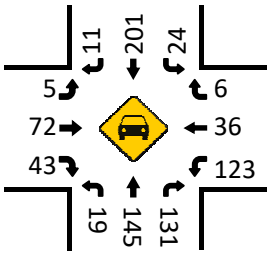
WESTBOUND (Del Amo St/N Juanita Ave)

PM	NOON	AM	
20	0	6	0
50	0	36	1
120	0	123	0
0	0	0	0
187	0	227	
PM	NOON	AM	

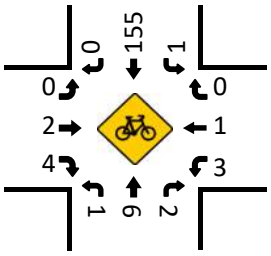
NORTHBOUND (Diamond St)

	0	0	1	0		
PM	266	1	9	100	124	PM
NOON	0	0	0	0	0	NOON
AM	370	3	19	145	131	AM

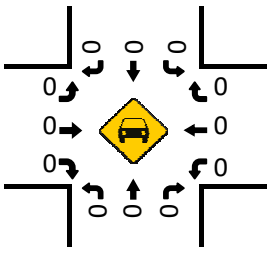
Totals (AM)



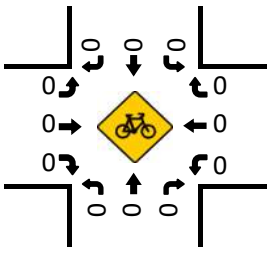
Total Bikes (AM)



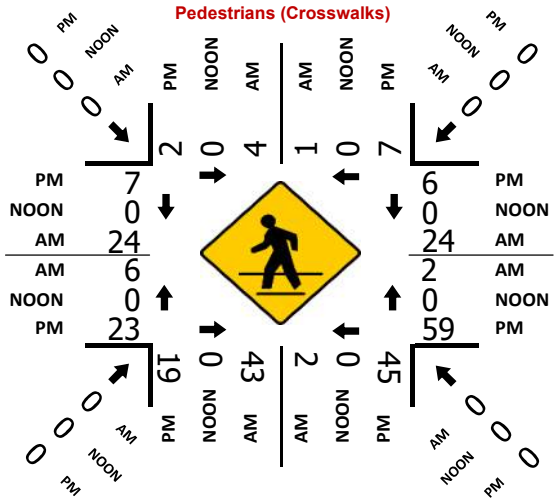
Totals (NOON)



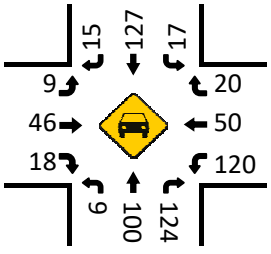
Total Bikes (NOON)



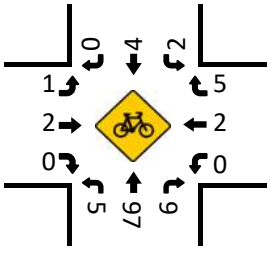
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Diamond St & N Lucia Ave

Peak Hour Turning Movement Count

ID: 24-020419-002
City: Redondo Beach

Day: Wednesday
Date: 12/4/2024

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 03:15 PM - 04:15 PM

COUNT PERIODS

AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 2:00 PM - 07:00 PM

SOUTHBOUND (Diamond St)

AM	17	221	34	0	163	AM
NOON	0	0	0	0	0	NOON
PM	10	132	12	0	174	PM

EASTBOUND (N Lucia Ave)

AM	NOON	PM		
73	0	47		
0	0	0	0	
9	0	12	0	
37	0	30	1	
18	0	9	0	
AM	NOON	PM		

WESTBOUND (N Lucia Ave)

PM	NOON	AM	
39	0	19	0
33	0	41	1
6	0	2	0
0	0	0	0
49	0	77	
PM	NOON	AM	

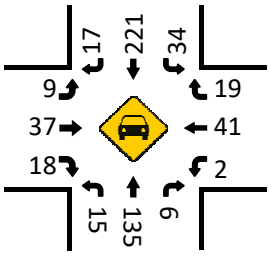
NORTHBOUND (Diamond St)

PM	148	1	4	123	7	PM
NOON	0	0	0	0	0	NOON
AM	241	0	15	135	6	AM

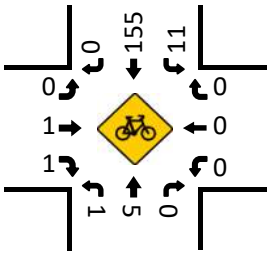
CONTROL: 4-Way Stop

TEV	554 AM	0 NOON	418 PM
PHF	0.65		0.64

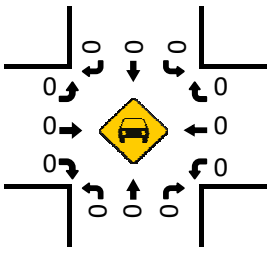
Totals (AM)



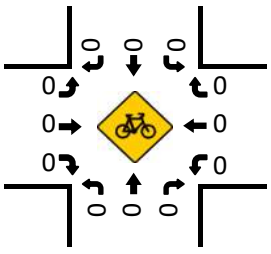
Total Bikes (AM)



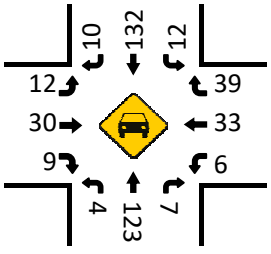
Totals (NOON)



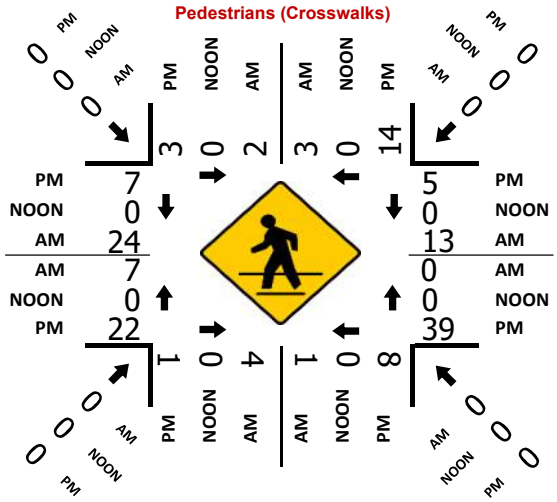
Total Bikes (NOON)



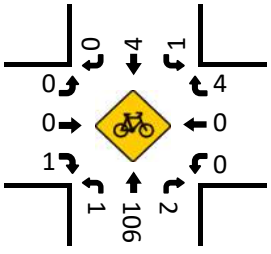
Totals (PM)



Pedestrians (Crosswalks)



Total Bikes (PM)



C. TRAVEL SPEED

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Guadalupe Ave & N Gertruda Ave

Day: Wednesday **City:** Redondo Beach

Date: 12/4/2024 **Project #:** CA24_020421_003

HOURLY BREAKDOWN — NORTHBOUND

Time	5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
0:00	0	0	0	1	3	3	0	0	0	0	0	0	0	7
1:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
4:00	0	0	0	2	5	2	0	0	0	0	0	0	0	9
5:00	0	0	2	5	5	2	0	0	0	0	0	0	0	14
6:00	0	2	6	13	23	7	1	0	0	0	0	0	0	52
7:00	2	3	14	52	56	23	3	0	0	0	0	0	0	153
8:00	7	10	33	73	46	18	0	0	0	0	0	0	0	187
9:00	0	2	5	25	35	13	1	0	0	0	0	0	0	81
10:00	2	3	4	34	30	8	1	0	0	0	0	0	0	82
11:00	1	4	5	19	43	20	0	0	0	0	0	0	0	92
12:00	1	4	7	32	58	14	0	0	0	0	0	0	0	116
13:00	0	4	13	39	41	12	1	0	0	0	0	0	0	110
14:00	2	2	16	51	45	10	3	0	0	0	0	0	0	129
15:00	3	17	39	87	73	10	1	0	0	0	0	0	0	230
16:00	2	3	14	50	63	23	5	0	0	0	0	0	0	160
17:00	0	2	13	51	86	22	3	0	0	0	0	0	0	177
18:00	3	7	8	54	49	24	3	0	0	0	0	0	0	148
19:00	2	3	6	38	38	10	3	0	0	0	0	0	0	100
20:00	1	1	7	33	25	11	0	0	0	0	0	0	0	78
21:00	1	1	7	48	18	2	0	0	0	0	0	0	0	77
22:00	0	2	1	6	7	0	2	0	0	0	0	0	0	18
23:00	0	0	2	3	3	0	0	0	0	0	0	0	0	8
Totals	27	70	203	719	752	235	27	0	0	0	0	0	0	2,033
% of Totals	1%	3%	10%	35%	37%	12%	1%							100%

HOURLY BREAKDOWN — SOUTHBOUND

Time	5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
0:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
1:00	0	0	0	0	1	2	1	0	0	0	0	0	0	4
2:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
3:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	0	1	3	0	0	0	0	0	0	0	4
5:00	0	0	0	4	10	1	2	1	0	0	0	0	0	18
6:00	0	1	2	18	17	3	2	0	0	0	0	0	0	43
7:00	8	2	15	58	46	9	0	0	0	0	0	0	0	138
8:00	7	22	45	88	46	15	0	0	0	0	0	0	0	223
9:00	3	3	4	32	38	17	2	0	0	0	0	0	0	99
10:00	3	2	12	25	48	12	1	0	0	0	0	0	0	103
11:00	2	6	8	32	49	11	1	0	0	0	0	0	0	109
12:00	1	3	10	24	36	11	2	0	0	0	0	0	0	87
13:00	1	7	21	39	51	17	1	0	0	0	0	0	0	137
14:00	0	5	5	40	52	12	0	0	0	0	0	0	0	114
15:00	28	20	31	69	60	11	0	1	0	0	0	0	0	220
16:00	3	5	13	35	58	17	0	0	0	0	0	0	0	131
17:00	2	8	3	39	45	11	1	1	0	0	0	0	0	110
18:00	2	2	9	35	37	13	1	1	0	0	0	0	0	100
19:00	0	7	12	39	29	6	0	1	0	0	0	0	0	94
20:00	3	0	5	32	20	1	0	1	0	0	0	0	0	62
21:00	2	2	9	26	19	2	0	0	0	0	0	0	0	60
22:00	0	1	1	8	12	2	0	0	0	0	0	0	0	24
23:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Totals	65	96	205	645	679	177	14	6	0	0	0	0	0	1,887
% of Totals	3%	5%	11%	34%	36%	9%	1%	0.32%						100%

HOURLY BREAKDOWN — TOTALS

Time	5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
0:00	0	0	0	1	4	4	0	0	0	0	0	0	0	9
1:00	0	0	0	0	1	3	1	0	0	0	0	0	0	5
2:00	0	0	0	1	2	0	0	0	0	0	0	0	0	3
3:00	0	0	1	3	0	0	0	0	0	0	0	0	0	4
4:00	0	0	0	2	6	5	0	0	0	0	0	0	0	13
5:00	0	0	2	9	15	3	2	1	0	0	0	0	0	32
6:00	0	3	8	31	40	10	3	0	0	0	0	0	0	95
7:00	10	5	29	110	102	32	3	0	0	0	0	0	0	291
8:00	14	32	78	161	92	33	0	0	0	0	0	0	0	410
9:00	3	5	9	57	73	30	3	0	0	0	0	0	0	180
10:00	5	5	16	59	78	20	2	0	0	0	0	0	0	185
11:00	3	10	13	51	92	31	1	0	0	0	0	0	0	201
12:00	2	7	17	56	94	25	2	0	0	0	0	0	0	203
13:00	1	11	34	78	92	29	2	0	0	0	0	0	0	247
14:00	2	7	21	91	97	22	3	0	0	0	0	0	0	243
15:00	31	37	70	156	133	21	1	1	0	0	0	0	0	450
16:00	5	8	27	85	121	40	5	0	0	0	0	0	0	291
17:00	2	10	16	90	131	33	4	1	0	0	0	0	0	287
18:00	5	9	17	89	86	37	4	1	0	0	0	0	0	248
19:00	2	10	18	77	67	16	3	1	0	0	0	0	0	194
20:00	4	1	12	65	45	12	0	1	0	0	0	0	0	140
21:00	3	3	16	74	37	4	0	0	0	0	0	0	0	137
22:00	0	3	2	14	19	2	2	0	0	0	0	0	0	42
23:00	0	0	2	4	4	0	0	0	0	0	0	0	0	10
Totals	92	166	408	1,364	1,431	412	41	6	0	0	0	0	0	3,920
% of Totals	2%	4%	10%	35%	37%	11%	1%	0.15%						100%

STATISTICS — NORTHBOUND

	5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
00:00 - 12:00	12	24	70	227	246	97	6	0	0	0	0	0	0	682
%	1%	1%	3%	11%	12%	5%	0%	0%	0%	0%	0%	0%	0%	34%
Peak Hour	7:45	8:15	7:45	7:45	7:00	7:00	6:45	0:00	0:00	0:00	0:00	0:00	0:00	7:45
Peak Volume	9	11	36	83	56	23	3	0	0	0	0	0	0	215
12:00 - 24:00	15	46	133	492	506	138	21	0	0	0	0	0	0	1351
%	1%	2%	7%	24%	25%	7%	1%	0%	0%	0%	0%	0%	0%	66%
Peak Hour	18:45	15:15	15:00	15:00	17:00	17:45	16:00	12:00	12:00	12:00	12:00	12:00	12:00	15:00
Peak Volume	4	19	39	87	86	25	5	0	0	0	0	0	0	230
07:00 - 09:00	9	13	47	125	102	41	3	0	0	0	0	0	0	340
%	0%	1%	2%	6%	5%	2%	0%	0%	0%	0%	0%	0%	0%	17%
Peak Hour	7:45	8:00	7:45	7:45	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45
Peak Volume	9	10	36	83	56	23	3	0	0	0	0	0	0	215
16:00 - 18:00	2	5	27	101	149	45	8	0	0	0	0	0	0	337
%	0%	0%	1%	5%	7%	2%	0%	0%	0%	0%	0%	0%	0%	17%
Peak Hour	16:00	16:00	16:00	16:15	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	17:00
Peak Volume	2	3	14	55	86	23	5	0	0	0	0	0	0	177

STATISTICS — SOUTHBOUND

	5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
00:00 - 12:00	23	36	86	258	259	74	9	1	0	0	0	0	0	746
%	1%	2%	4%	13%	13%	4%	0%	0%	0%	0%	0%	0%	0%	37%
Peak Hour	7:30	7:45	7:30	7:45	10:45	9:15	4:30	4:30	0:00	0:00	0:00	0:00	0:00	7:45
Peak Volume	10	23	45	104	53	21	2	1	0	0	0	0	0	237
12:00 - 24:00	42	60	119	387	420	103	5	5	0	0	0	0	0	1141
%	2%	3%	6%	19%	21%	5%	0%	0%	0%	0%	0%	0%	0%	56%
Peak Hour	15:00	14:45	15:15	15:00	16:15	15:45	12:00	17:15	12:00	12:00	12:00	12:00	12:00	15:00
Peak Volume	28	22	33	69	63	19	2	2	0	0	0	0	0	220
07:00 - 09:00	15	24	60	146	92	24	0	0	0	0	0	0	0	361
%	1%	1%	3%	7%	5%	1%	0%	0%	0%	0%	0%	0%	0%	18%
Peak Hour	7:30	7:45	7:30	7:45	7:00	8:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45
Peak Volume	10	23	45	104	46	15	0	0	0	0	0	0	0	237
16:00 - 18:00	5	13	16	74	103	28	1	1	0	0	0	0	0	241
%	0%	1%	1%	4%	5%	1%	0%	0%	0%	0%	0%	0%	0%	12%
Peak Hour	16:15	16:30	16:00	16:15	16:15	16:00	17:00	16:45	16:00	16:00	16:00	16:00	16:00	16:15
Peak Volume	4	9	13	40	63	17	1	1	0	0	0	0	0	140

STATISTICS — TOTALS

	5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
00:00 - 12:00	35	60	156	485	505	171	15	1	0	0	0	0	0	1428
%	2%	3%	8%	24%	25%	8%	1%	0%	0%	0%	0%	0%	0%	70%
Peak Hour	7:45	8:15	7:45	7:45	7:00	7:45	6:00	4:30	0:00	0:00	0:00	0:00	0:00	7:45
Peak Volume	19	33	81	187	102	35	3	1	0	0	0	0	0	452
12:00 - 24:00	57	106	252	879	926	241	26	5	0	0	0	0	0	2492
%	3%	5%	12%	43%	46%	12%	1%	0%	0%	0%	0%	0%	0%	123%
Peak Hour	15:00	15:15	15:15	15:00	16:15	15:45	17:45	17:15	12:00	12:00	12:00	12:00	12:00	15:00
Peak Volume	31	39	71	156	135	40	6	2	0	0	0	0	0	450
07:00 - 09:00	24	37	107	271	194	65	3	0	0	0	0	0	0	701
%	1%	2%	5%	13%	10%	3%	0%	0%	0%	0%	0%	0%	0%	34%
Peak Hour	7:45	7:45	7:45	7:45	7:00	7:45	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45
Peak Volume	19	32	81	187	102	35	3	0	0	0	0	0	0	452
16:00 - 18:00	7	18	43	175	252	73	9	1	0	0	0	0	0	578
%	0%	1%	2%	9%	12%	4%	0%	0%	0%	0%	0%	0%	0%	28%
Peak Hour	16:00	16:30	16:00	16:15	16:15	16:00	16:00	16:45	16:00	16:00	16:00	16:00	16:00	16:15
Peak Volume	5	12	27	95	135	40	5	1	0	0	0	0	0	307

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
NORTHBOUND	25	30	30	35	38	2033
SOUTHBOUND	23	29	29	34	38	1887
TOTALS	24	30	29	35	38	3920

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Guadalupe Ave & N Gertruda Ave

Day: Wednesday

Date: 12/4/2024

City: Redondo Beach

Project #: CA24_020421_003

15-MINUTE BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**
0:15	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**
0:30	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	1	2	0	0	0	0	0	0	0	**3**
0:45	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	1	0	0	0	0	0	0	**2**	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1:45	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
2:15	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:30	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	2	0	0	0	0	0	0	0	0	0	**2**
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:15	0	0	0	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	1	1	2	0	0	0	0	0	0	0	**4**
4:30	0	0	0	0	2	1	0	0	0	0	0	0	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	2	1	0	0	0	0	0	0	**3**
4:45	0	0	0	0	2	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	2	0	0	0	0	0	0	0	**2**	0	0	0	0	0	2	2	0	0	0	0	0	0	**4**
5:00	0	0	0	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	2	1	0	1	0	0	0	0	0	0	**4**	0	0	0	0	3	1	1	1	0	0	0	0	0	**6**
5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	2	0	1	1	0	0	0	0	0	**5**	0	0	0	0	1	2	0	1	1	0	0	0	0	**5**
5:30	0	0	1	3	1	0	0	0	0	0	0	0	0	**5**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	1	3	2	1	0	0	0	0	0	0	**7**
5:45	0	0	1	1	4	1	0	0	0	0	0	0	0	**7**	0	0	0	1	6	0	0	0	0	0	0	0	0	**7**	0	0	0	1	2	10	1	0	0	0	0	0	0	**14**
6:00	0	0	0	0	2	2	0	0	0	0	0	0	0	**4**	0	0	1	2	2	0	1	0	0	0	0	0	0	**6**	0	0	0	1	2	4	2	1	0	0	0	0	0	**10**
6:15	0	0	0	2	6	0	0	0	0	0	0	0	0	**8**	0	0	0	3	7	0	1	0	0	0	0	0	0	**11**	0	0	0	0	5	13	0	1	0	0	0	0	0	**19**
6:30	0	0	0	4	6	3	0	0	0	0	0	0	0	**13**	0	0	0	1	4	2	0	0	0	0	0	0	0	**7**	0	0	0	0	5	10	5	0	0	0	0	0	0	**20**
6:45	0	2	6	7	9	2	1	0	0	0	0	0	0	**27**	0	1	1	12	4	1	0	0	0	0	0	0	0	**19**	0	3	7	19	13	3	1	0	0	0	0	0	0	**46**
7:00	0	2	5	16	19	8	0	0	0	0	0	0	0	**50**	1	0	9	18	22	2	0	0	0	0	0	0	0	**52**	1	2	14	34	41	10	0	0	0	0	0	0	0	**102**
7:15	0	1	2	9	11	5	0	0	0	0	0	0	0	**28**	1	1	0	8	9	3	0	0	0	0	0	0	0	**22**	1	2	2	17	20	8	0	0	0	0	0	0	0	**50**
7:30	0	0	3	8	8	2	2	0	0	0	0	0	0	**23**	3	0	4	11	9	3	0	0	0	0	0	0	0	**30**	3	0	7	19	17	5	2	0	0	0	0	0	0	**53**
7:45	2	0	4	19	18	8	1	0	0	0	0	0	0	**52**	3	1	2	21	6	1	0	0	0	0	0	0	0	**34**	5	1	6	40	24	9	1	0	0	0	0	0	0	**86**
8:00	1	1	4	30	15	5	0	0	0	0	0	0	0	**56**	0	2	12	21	11	4	0	0	0	0	0	0	0	**50**	1	3	16	51	26	9	0	0	0	0	0	0	0	**106**
8:15	3	7	21	21	12	3	0	0	0	0	0	0	0	**67**	4	17	27	37	12	2	0	0	0	0	0	0	0	**99**	7	24	48	58	24	5	0	0	0	0	0	0	0	**166**
8:30	3	1	7	13	9	7	0	0	0	0	0	0	0	**40**	3	3	4	25	14	5	0	0	0	0	0	0	0	**54**	6	4	11	38	23	12	0	0	0	0	0	0	0	**94**
8:45	0	1	1	9	10	3	0	0	0	0	0	0	0	**24**	0	0	2	5	9	4	0	0	0	0	0	0	0	**20**	0	1	3	14	19	7	0	0	0	0	0	0	0	**44**
9:00	0	2	1	6	11	2	0	0	0	0	0	0	0	**22**	2	2	3	13	13	0	0	0	0	0	0	0	0	**33**	2	4	4	19	24	2	0	0	0	0	0	0	0	**55**
9:15	0	0	2	8	11	4	0	0	0	0	0	0	0	**25**	0	0	0	5	7	5	2	0	0	0	0	0	0	**19**	0	0	2	13	18	9	2	0	0	0	0	0	0	**44**
9:30	0	0	1	5	10	5	1	0	0	0	0	0	0	**22**	0	1	0	5	7	6	0	0	0	0	0	0	0	**19**	0	1	1	10	17	11	1	0	0	0	0	0	0	**41**
9:45	0	0	1	6	3	2	0	0	0	0	0	0	0	**12**	1	0	1	9	11	6	0	0	0	0	0	0	0	**28**	1	0	2	15	14	8	0	0	0	0	0	0	0	**40**
10:00	0	0	0	8	6	1	0	0	0	0	0	0	0	**15**	1	0	1	4	7	4	0	0	0	0	0	0	0	**17**	1	0	1	12	13	5	0	0	0	0	0	0	0	**32**
10:15	0	2	1	10	7	5	0	0	0	0	0	0	0	**25**	1	1	5	4	9	3	0	0	0	0	0	0	0	**23**	1	3	6	14	16	8	0	0	0	0	0	0	0	**48**
10:30	2	1	1	5	12	1	1	0	0	0	0	0	0	**23**	1	0	2	9	15	2	0	0	0	0	0	0	0	**29**	3	1	3	14	27	3	1	0	0	0	0	0	0	**52**
10:45	0	0	2	11	5	1	0	0	0	0	0	0	0	**19**	0	1	4	8	17	3	1	0	0	0	0	0	0	**34**	0	1	6	19	22	4	1	0	0	0	0	0	0	**53**
11:00	0	3	1	6	9	6	0	0	0	0	0	0	0	**25**	1	2	2	10	6	0	0	0	0	0	0	0	0	**21**	1	5	3	16	15	6	0	0	0	0	0	0	0	**46**
11:15	0	0	1	5	3	5	0	0	0	0	0	0	0	**14**	1	0	1	4	13	2	1	0	0	0	0	0	0	**22**	1	0	2	9	16	7	1	0	0	0	0	0	0	**36**
11:30	1	0	0	4	15	5	0	0	0	0	0	0	0	**25**	0	3	3	10	17	4	0	0	0	0	0	0	0	**37**	1	3	3	14	32	9	0	0	0	0	0	0	0	**62**
11:45	0	1	3	4	16	4	0	0	0	0	0	0	0	**28**	0	1	2	8	13	5	0	0	0	0	0	0	0	**29**	0	2	5	12	29	9	0	0	0	0	0	0	0	**57**

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Guadalupe Ave & N Gertruda Ave

Day: Wednesday

Date: 12/4/2024

City: Redondo Beach

Project #: CA24_020421_003

15-MINUTE BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
12:00	0	0	0	4	12	6	0	0	0	0	0	0	0	**22**	0	1	2	7	9	1	1	0	0	0	0	0	0	**21**	0	1	2	11	21	7	1	0	0	0	0	0	0	**43**
12:15	0	0	1	8	10	3	0	0	0	0	0	0	0	**22**	0	0	4	3	7	2	1	0	0	0	0	0	0	**17**	0	0	5	11	17	5	1	0	0	0	0	0	0	**39**
12:30	1	1	1	10	10	4	0	0	0	0	0	0	0	**27**	1	0	3	7	7	6	0	0	0	0	0	0	0	**24**	2	1	4	17	17	10	0	0	0	0	0	0	0	**51**
12:45	0	3	5	10	26	1	0	0	0	0	0	0	0	**45**	0	2	1	7	13	2	0	0	0	0	0	0	0	**25**	0	5	6	17	39	3	0	0	0	0	0	0	0	**70**
13:00	0	2	8	12	8	3	0	0	0	0	0	0	0	**33**	0	2	12	16	10	4	0	0	0	0	0	0	0	**44**	0	4	20	28	18	7	0	0	0	0	0	0	0	**77**
13:15	0	1	1	8	14	2	0	0	0	0	0	0	0	**26**	1	4	2	7	13	5	0	0	0	0	0	0	0	**32**	1	5	3	15	27	7	0	0	0	0	0	0	0	**58**
13:30	0	1	1	16	8	4	0	0	0	0	0	0	0	**30**	0	1	4	8	16	4	1	0	0	0	0	0	0	**34**	0	2	5	24	24	8	1	0	0	0	0	0	0	**64**
13:45	0	0	3	3	11	3	1	0	0	0	0	0	0	**21**	0	0	3	8	12	4	0	0	0	0	0	0	0	**27**	0	0	6	11	23	7	1	0	0	0	0	0	0	**48**
14:00	0	1	3	18	15	3	0	0	0	0	0	0	0	**40**	0	2	0	7	14	2	0	0	0	0	0	0	0	**25**	0	3	3	25	29	5	0	0	0	0	0	0	0	**65**
14:15	2	0	2	13	10	6	2	0	0	0	0	0	0	**35**	0	0	4	13	14	2	0	0	0	0	0	0	0	**33**	2	0	6	26	24	8	2	0	0	0	0	0	0	**68**
14:30	0	0	9	9	10	1	1	0	0	0	0	0	0	**30**	0	1	0	9	14	5	0	0	0	0	0	0	0	**29**	0	1	9	18	24	6	1	0	0	0	0	0	0	**59**
14:45	0	1	2	11	10	0	0	0	0	0	0	0	0	**24**	0	2	1	11	10	3	0	0	0	0	0	0	0	**27**	0	3	3	22	20	3	0	0	0	0	0	0	0	**51**
15:00	1	0	6	15	18	1	0	0	0	0	0	0	0	**41**	1	1	2	8	22	4	0	0	0	0	0	0	0	**38**	2	1	8	23	40	5	0	0	0	0	0	0	0	**79**
15:15	0	5	7	21	19	5	0	0	0	0	0	0	0	**57**	1	3	4	16	8	2	0	1	0	0	0	0	0	**35**	1	8	11	37	27	7	0	1	0	0	0	0	0	**92**
15:30	2	9	20	35	12	2	1	0	0	0	0	0	0	**81**	25	16	22	25	15	0	0	0	0	0	0	0	0	**103**	27	25	42	60	27	2	1	0	0	0	0	0	0	**184**
15:45	0	3	6	16	24	2	0	0	0	0	0	0	0	**51**	1	0	3	20	15	5	0	0	0	0	0	0	0	**44**	1	3	9	36	39	7	0	0	0	0	0	0	0	**95**
16:00	1	2	5	9	13	8	0	0	0	0	0	0	0	**38**	1	1	4	7	14	4	0	0	0	0	0	0	0	**31**	2	3	9	16	27	12	0	0	0	0	0	0	0	**69**
16:15	0	0	4	10	18	6	2	0	0	0	0	0	0	**40**	0	0	3	8	15	8	0	0	0	0	0	0	0	**34**	0	0	7	18	33	14	2	0	0	0	0	0	0	**74**
16:30	1	0	1	18	17	5	2	0	0	0	0	0	0	**44**	2	2	2	8	13	2	0	0	0	0	0	0	0	**29**	3	2	3	26	30	7	2	0	0	0	0	0	0	**73**
16:45	0	1	4	13	15	4	1	0	0	0	0	0	0	**38**	0	2	4	12	16	3	0	0	0	0	0	0	0	**37**	0	3	8	25	31	7	1	0	0	0	0	0	0	**75**
17:00	0	2	1	14	22	6	0	0	0	0	0	0	0	**45**	2	3	1	12	19	3	0	0	0	0	0	0	0	**40**	2	5	2	26	41	9	0	0	0	0	0	0	0	**85**
17:15	0	0	5	10	24	5	1	0	0	0	0	0	0	**45**	0	2	1	7	9	3	0	0	0	0	0	0	0	**22**	0	2	6	17	33	8	1	0	0	0	0	0	0	**67**
17:30	0	0	2	15	20	4	0	0	0	0	0	0	0	**41**	0	1	0	9	9	2	0	1	0	0	0	0	0	**22**	0	1	2	24	29	6	0	1	0	0	0	0	0	**63**
17:45	0	0	5	12	20	7	2	0	0	0	0	0	0	**46**	0	2	1	11	8	3	1	0	0	0	0	0	0	**26**	0	2	6	23	28	10	3	0	0	0	0	0	0	**72**
18:00	0	3	1	14	18	8	1	0	0	0	0	0	0	**45**	0	1	3	9	15	5	0	1	0	0	0	0	0	**34**	0	4	4	23	33	13	1	1	0	0	0	0	0	**79**
18:15	0	2	2	15	14	5	1	0	0	0	0	0	0	**39**	1	1	0	10	6	3	0	0	0	0	0	0	0	**21**	1	3	2	25	20	8	1	0	0	0	0	0	0	**60**
18:30	1	0	3	15	8	5	0	0	0	0	0	0	0	**32**	0	0	3	5	7	2	1	0	0	0	0	0	0	**18**	1	0	6	20	15	7	1	0	0	0	0	0	0	**50**
18:45	2	2	2	10	9	6	1	0	0	0	0	0	0	**32**	1	0	3	11	9	3	0	0	0	0	0	0	0	**27**	3	2	5	21	18	9	1	0	0	0	0	0	0	**59**
19:00	0	1	2	11	10	3	0	0	0	0	0	0	0	**27**	0	0	2	7	8	2	0	0	0	0	0	0	0	**19**	0	1	4	18	18	5	0	0	0	0	0	0	0	**46**
19:15	0	0	2	10	9	3	0	0	0	0	0	0	0	**24**	0	0	3	11	7	0	0	1	0	0	0	0	0	**22**	0	0	5	21	16	3	0	1	0	0	0	0	0	**46**
19:30	2	2	0	8	11	3	2	0	0	0	0	0	0	**28**	0	6	6	10	6	2	0	0	0	0	0	0	0	**30**	2	8	6	18	17	5	2	0	0	0	0	0	0	**58**
19:45	0	0	2	9	8	1	1	0	0	0	0	0	0	**21**	0	1	1	11	8	2	0	0	0	0	0	0	0	**23**	0	1	3	20	16	3	1	0	0	0	0	0	0	**44**
20:00	1	0	1	4	7	2	0	0	0	0	0	0	0	**15**	0	0	0	10	3	1	0	0	0	0	0	0	0	**14**	1	0	1	14	10	3	0	0	0	0	0	0	0	**29**
20:15	0	0	2	8	4	6	0	0	0	0	0	0	0	**20**	2	0	1	6	4	0	0	0	0	0	0	0	0	**13**	2	0	3	14	8	6	0	0	0	0	0	0	0	**33**
20:30	0	1	3	6	9	2	0	0	0	0	0	0	0	**21**	0	0	0	5	6	0	0	0	0	0	0	0	0	**11**	0	1	3	11	15	2	0	0	0	0	0	0	0	**32**
20:45	0	0	1	15	5	1	0	0	0	0	0	0	0	**22**	1	0	4	11	7	0	0	1	0	0	0	0	0	**24**	1	0	5	26	12	1	0	1	0	0	0	0	0	**46**
21:00	0	0	2	9	2	0	0	0	0	0	0	0	0	**13**	0	1	1	6	5	0	0	0	0	0	0	0	0	**13**	0	1	3	15	7	0	0	0	0	0	0	0	0	**26**
21:15	1	0	1	12	3	0	0	0	0	0	0	0	0	**17**	1	1	5	12	5	1	0	0	0	0	0	0	0	**25**	2	1	6	24	8	1	0	0	0	0	0	0	0	**42**
21:30	0	1	3	15	7	2	0	0	0	0	0	0	0	**28**	1	0	1	7	6	1	0	0	0	0	0	0	0	**16**	1	1	4	22	13	3	0	0	0	0	0	0	0	**44**
21:45	0	0	1	12	6	0	0	0	0	0	0	0	0	**19**	0	0	2	1	3	0	0	0	0	0	0	0	0	**6**	0	0	3	13	9	0	0	0	0	0	0	0	0	**25**
22:00	0	1	0	3	3	0	0	0	0	0	0	0	0	**7**	0	1	1	3	2	2	0	0	0	0	0	0	0	**9**	0	2	1	6	5	2	0	0	0	0	0	0	0	**16**
22:15	0	0	0	2	2	0	1	0	0	0	0	0	0	**5**	0	0	0	3	6	0	0	0	0	0	0	0	0	**9**	0	0	0	5	8	0	1	0	0	0	0	0	0	**14**
22:30	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	2	3	0	0	0	0	0	0	0	0	**5**	0	1	1	2	3	0	0	0	0	0	0	0	0	**7**
22:45	0	0	0	1	2	0	1	0	0	0	0	0	0	**4**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	1	3	0	1	0	0	0	0	0	0	**5**
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	**2**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	1	1	1	0	0	0	0	0	0	0	0	**3**
23:15	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
23:30	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
23:45	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	1	1	1	0	0	0	0	0	0	0	0	**3**
Totals	**27**	**70**	**203**	**719**	**752**	**235**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**2,033**	**65**	**96**	**205**	**645**	**679**	**177**	**14**	**6**	**0**	**0**	**0**	**0**	**0**	**1,887**	**92**	**166**	**408**	**1,364**	**1,431**	**412**	**41**	**6**	**0**	**0**	**0**	**0**	**0**	**3,920**
% of Totals	1%	3%	10%	35%	37%	12%	1%	0%	0%	0%	0%	0%	0%	**100%**	3%	5%	11%	34%	36%	9%	1%	0%	0%	0%	0%	0%	0%	**100%**	2%	4%	10%	35%	37%	11%	1%	0%	0%	0%	0%	0%	0%	**100%**

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Irena Ave & Del Amo St/N Juanita Ave

Day: Wednesday
Date: 12/4/2024

City: Redondo Beach
Project #: CA24_020421_002

HOURLY BREAKDOWN

Time	NORTHBOUND 5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total	SOUTHBOUND 5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total	TOTALS 5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
0:00	0	0	0	0	3	2	0	0	0	0	0	0	0	**5**	0	0	1	0	1	0	1	0	0	0	0	0	0	**3**	0	0	1	0	4	2	1	0	0	0	0	0	0	**8**
1:00	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	2	0	0	1	2	1	0	0	0	0	0	0	0	**6**	2	0	0	1	3	1	0	0	0	0	0	0	0	**7**
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**
3:00	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	2	1	0	0	0	0	0	0	0	0	0	**3**
4:00	0	0	2	0	3	0	0	0	0	0	0	0	0	**5**	0	0	2	2	4	0	0	0	0	0	0	0	0	**8**	0	0	4	2	7	0	0	0	0	0	0	0	0	**13**
5:00	0	0	1	5	7	1	1	0	0	0	0	0	0	**15**	0	1	2	13	7	2	2	0	0	0	0	0	0	**27**	0	1	3	18	14	3	3	0	0	0	0	0	0	**42**
6:00	0	3	12	10	18	2	0	0	0	0	0	0	0	**45**	1	0	12	34	18	2	1	0	0	0	0	0	0	**68**	1	3	24	44	36	4	1	0	0	0	0	0	0	**113**
7:00	0	13	47	72	50	14	1	0	0	0	0	0	0	**197**	9	8	35	108	47	11	0	0	0	0	0	0	0	**218**	9	21	82	180	97	25	1	0	0	0	0	0	0	**415**
8:00	8	40	93	83	45	6	0	0	0	0	0	0	0	**275**	25	58	122	98	42	4	0	0	0	0	0	0	0	**349**	33	98	215	181	87	10	0	0	0	0	0	0	0	**624**
9:00	0	7	11	31	31	10	3	0	0	0	0	0	0	**93**	2	7	10	44	35	4	3	0	0	0	0	0	0	**105**	2	14	21	75	66	14	6	0	0	0	0	0	0	**198**
10:00	1	13	21	28	38	4	0	0	0	0	0	0	0	**105**	3	8	18	52	45	5	2	0	0	0	0	0	0	**133**	4	21	39	80	83	9	2	0	0	0	0	0	0	**238**
11:00	1	6	11	31	47	5	0	0	0	0	0	0	0	**101**	1	3	17	51	33	9	0	0	0	0	0	0	0	**114**	2	9	28	82	80	14	0	0	0	0	0	0	0	**215**
12:00	3	13	14	43	49	8	0	0	0	0	0	0	0	**130**	1	3	15	54	28	6	0	0	0	0	0	0	0	**107**	4	16	29	97	77	14	0	0	0	0	0	0	0	**237**
13:00	0	8	29	58	43	5	2	0	0	0	0	0	0	**145**	5	10	24	53	36	7	0	0	0	0	0	0	0	**135**	5	18	53	111	79	12	2	0	0	0	0	0	0	**280**
14:00	0	6	13	68	36	11	0	0	0	0	0	0	0	**134**	0	5	26	60	25	8	0	0	0	0	0	0	0	**124**	0	11	39	128	61	19	0	0	0	0	0	0	0	**258**
15:00	19	23	51	85	46	8	1	0	0	0	0	0	0	**233**	21	27	71	99	46	4	0	0	0	0	0	0	0	**268**	40	50	122	184	92	12	1	0	0	0	0	0	0	**501**
16:00	2	5	35	67	52	17	1	0	0	0	0	0	0	**179**	2	11	29	81	45	4	0	0	0	0	0	0	0	**172**	4	16	64	148	97	21	1	0	0	0	0	0	0	**351**
17:00	1	8	39	77	51	6	2	0	0	0	0	0	0	**184**	5	14	48	79	29	3	0	0	0	0	0	0	0	**178**	6	22	87	156	80	9	2	0	0	0	0	0	0	**362**
18:00	2	9	45	64	30	12	0	0	0	0	0	0	0	**162**	7	20	37	75	25	2	0	0	0	0	0	0	0	**166**	9	29	82	139	55	14	0	0	0	0	0	0	0	**328**
19:00	5	22	30	32	25	5	0	0	0	0	0	0	0	**119**	10	21	32	52	11	2	0	0	0	0	0	0	0	**128**	15	43	62	84	36	7	0	0	0	0	0	0	0	**247**
20:00	0	8	23	32	26	4	0	0	0	0	0	0	0	**93**	3	7	22	27	10	1	0	0	0	0	0	0	0	**70**	3	15	45	59	36	5	0	0	0	0	0	0	0	**163**
21:00	0	8	33	79	28	3	0	0	0	0	0	0	0	**151**	3	3	15	18	9	1	0	0	0	0	0	0	0	**49**	3	11	48	97	37	4	0	0	0	0	0	0	0	**200**
22:00	0	4	4	19	4	1	1	0	0	0	0	0	0	**33**	1	2	3	17	7	0	0	0	0	0	0	0	0	**30**	1	6	7	36	11	1	1	0	0	0	0	0	0	**63**
23:00	0	0	4	2	2	0	0	0	0	0	0	0	0	**8**	0	0	1	0	1	0	0	0	0	0	0	0	0	**2**	0	0	5	2	3	0	0	0	0	0	0	0	0	**10**
Totals	**42**	**196**	**519**	**887**	**635**	**124**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**2,415**	**101**	**208**	**543**	**1,018**	**507**	**77**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**2,463**	**143**	**404**	**1,062**	**1,905**	**1,142**	**201**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**4,878**
% of Totals	2%	8%	21%	37%	26%	5%	0%							100%	4%	8%	22%	41%	21%	3%	0%							100%	3%	8%	22%	39%	23%	4%	0%							100%

STATISTICS

00:00 - 12:00	10	82	199	261	243	44	5	0	0	0	0	0	0	844	43	85	220	403	235	39	9	0	0	0	0	0	0	1034	53	167	419	664	478	83	14	0	0	0	0	0	0	1878
%	0%	3%	8%	11%	10%	2%	0%	0%	0%	0%	0%	0%	0%	35%	2%	4%	9%	17%	10%	2%	0%	0%	0%	0%	0%	0%	0%	43%	2%	7%	17%	27%	20%	3%	1%	0%	0%	0%	0%	0%	0%	78%
Peak Hour	7:45	7:45	7:45	7:45	7:00	7:15	8:45	0:00	0:00	0:00	0:00	0:00	0:00	7:45	7:45	8:00	7:45	7:45	6:45	7:00	9:30	0:00	0:00	0:00	0:00	0:00	0:00	7:45	7:45	8:00	7:45	7:45	7:00	7:15	9:00	0:00	0:00	0:00	0:00	0:00	0:00	7:45
Peak Volume	8	41	95	98	50	15	3	0	0	0	0	0	0	298	25	58	130	111	49	11	4	0	0	0	0	0	0	369	33	98	225	209	97	26	6	0	0	0	0	0	0	667
12:00 - 24:00	32	114	320	626	392	80	7	0	0	0	0	0	0	1571	58	123	323	615	272	38	0	0	0	0	0	0	0	1429	90	237	643	1241	664	118	7	0	0	0	0	0	0	3000
%	1%	5%	13%	26%	16%	3%	0%	0%	0%	0%	0%	0%	0%	65%	2%	5%	13%	25%	11%	2%	0%	0%	0%	0%	0%	0%	0%	59%	4%	10%	27%	51%	27%	5%	0%	0%	0%	0%	0%	0%	0%	124%
Peak Hour	15:00	15:00	18:30	15:15	16:15	16:00	13:00	12:00	12:00	12:00	12:00	12:00	12:00	15:30	15:00	18:45	14:45	15:00	15:45	13:45	12:00	12:00	12:00	12:00	12:00	12:00	12:00	15:00	15:00	18:45	15:00	15:15	15:45	14:15	13:00	12:00	12:00	12:00	12:00	12:00	12:00	15:00
Peak Volume	19	23	53	94	59	17	2	0	0	0	0	0	0	244	21	31	71	99	49	10	0	0	0	0	0	0	0	268	40	52	122	189	105	21	2	0	0	0	0	0	0	501
07:00 - 09:00	8	53	140	155	95	20	1	0	0	0	0	0	0	472	34	66	157	206	89	15	0	0	0	0	0	0	0	567	42	119	297	361	184	35	1	0	0	0	0	0	0	1039
%	0%	2%	6%	6%	4%	1%	0%	0%	0%	0%	0%	0%	0%	20%	1%	3%	7%	9%	4%	1%	0%	0%	0%	0%	0%	0%	0%	23%	2%	5%	12%	15%	8%	1%	0%	0%	0%	0%	0%	0%	0%	43%
Peak Hour	7:45	7:45	7:45	7:45	7:00	7:15	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45	7:45	8:00	7:45	7:45	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45	7:45	8:00	7:45	7:45	7:00	7:15	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45
Peak Volume	8	41	95	98	50	15	1	0	0	0	0	0	0	298	25	58	130	111	47	11	0	0	0	0	0	0	0	369	33	98	225	209	97	26	1	0	0	0	0	0	0	667
16:00 - 18:00	3	13	74	144	103	23	3	0	0	0	0	0	0	363	7	25	77	160	74	7	0	0	0	0	0	0	0	350	10	38	151	304	177	30	3	0	0	0	0	0	0	713
%	0%	1%	3%	6%	4%	1%	0%	0%	0%	0%	0%	0%	0%	15%	0%	1%	3%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%	2%	6%	13%	7%	1%	0%	0%	0%	0%	0%	0%	0%	30%
Peak Hour	16:30	16:30	16:45	17:00	16:15	16:00	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:30	16:45	16:45	17:00	16:30	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	17:00	16:30	16:30	17:00	16:30	16:15	16:00	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:30
Peak Volume	3	10	46	77	59	17	2	0	0	0	0	0	0	197	5	16	48	84	45	4	0	0	0	0	0	0	0	178	7	25	87	158	102	21	2	0	0	0	0	0	0	370

Direction	Percentiles 15th	50th	Average	85th	95th	ADT
NORTHBOUND	21	28	27	33	36	2415
SOUTHBOUND	21	27	26	32	35	2463
TOTALS	21	27	27	33	35	4878

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Irena Ave & Del Amo St/N Juanita Ave

Day: Wednesday

Date: 12/4/2024

City: Redondo Beach

Project #: CA24_020421_002

15-MINUTE BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	**1**
0:15	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	1	0	0	0	0	0	0	**2**
0:30	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**	0	0	1	0	0	0	1	0	0	0	0	0	0	**2**	0	0	1	0	1	1	1	0	0	0	0	0	**4**
0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	0	0	0	1	1	0	0	0	0	0	0	0	**2**
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	2	0	0	0	0	1	0	0	0	0	0	0	0	**3**	2	0	0	0	0	1	0	0	0	0	0	0	**3**
1:45	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	**1**
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	1	0	0	0	0	0	0	**1**
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	1	0	0	0	0	0	0	0	**1**
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	**1**
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:30	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	2	0	0	0	0	0	0	0	0	0	**2**
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	1	0	0	0	0	0	0	0	0	0	**1**
4:15	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	2	1	0	0	0	0	0	0	0	0	**3**	0	0	1	2	1	0	0	0	0	0	0	0	**4**
4:30	0	0	0	0	3	0	0	0	0	0	0	0	0	**3**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	4	0	0	0	0	0	0	0	**4**
4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	2	0	2	0	0	0	0	0	0	0	0	**4**	0	0	2	0	2	0	0	0	0	0	0	0	**4**
5:00	0	0	0	1	1	0	1	0	0	0	0	0	0	**3**	0	0	1	2	0	0	1	0	0	0	0	0	0	**4**	0	0	1	3	1	0	2	0	0	0	0	0	**7**
5:15	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	2	1	1	1	0	0	0	0	0	0	**5**	0	0	0	2	2	1	1	0	0	0	0	0	**6**
5:30	0	0	0	1	2	0	0	0	0	0	0	0	0	**3**	0	0	0	3	0	0	0	0	0	0	0	0	0	**3**	0	0	0	4	2	0	0	0	0	0	0	0	**6**
5:45	0	0	1	3	3	1	0	0	0	0	0	0	0	**8**	0	1	1	6	6	1	0	0	0	0	0	0	0	**15**	0	1	2	9	9	2	0	0	0	0	0	0	**23**
6:00	0	0	1	1	2	1	0	0	0	0	0	0	0	**5**	0	0	1	5	1	0	1	0	0	0	0	0	0	**8**	0	0	2	6	3	1	1	0	0	0	0	0	**13**
6:15	0	1	0	2	5	0	0	0	0	0	0	0	0	**8**	0	0	2	8	1	1	0	0	0	0	0	0	0	**12**	0	1	2	10	6	1	0	0	0	0	0	0	**20**
6:30	0	1	4	2	4	1	0	0	0	0	0	0	0	**12**	0	0	1	6	4	0	0	0	0	0	0	0	0	**11**	0	1	5	8	8	1	0	0	0	0	0	0	**23**
6:45	0	1	7	5	7	0	0	0	0	0	0	0	0	**20**	1	0	8	15	12	1	0	0	0	0	0	0	0	**37**	1	1	15	20	19	1	0	0	0	0	0	0	**57**
7:00	0	5	30	29	14	0	0	0	0	0	0	0	0	**78**	3	4	17	49	16	2	0	0	0	0	0	0	0	**91**	3	9	47	78	30	2	0	0	0	0	0	0	**169**
7:15	0	3	9	8	11	3	0	0	0	0	0	0	0	**34**	4	1	3	22	11	3	0	0	0	0	0	0	0	**44**	4	4	12	30	22	6	0	0	0	0	0	0	**78**
7:30	0	1	4	9	10	5	0	0	0	0	0	0	0	**29**	0	1	4	15	10	4	0	0	0	0	0	0	0	**34**	0	2	8	24	20	9	0	0	0	0	0	0	**63**
7:45	0	4	4	26	15	6	1	0	0	0	0	0	0	**56**	2	2	11	22	10	2	0	0	0	0	0	0	0	**49**	2	6	15	48	25	8	1	0	0	0	0	0	**105**
8:00	0	5	30	30	10	1	0	0	0	0	0	0	0	**76**	6	21	56	36	13	2	0	0	0	0	0	0	0	**134**	6	26	86	66	23	3	0	0	0	0	0	0	**210**
8:15	7	27	45	21	9	0	0	0	0	0	0	0	0	**109**	13	23	53	29	11	0	0	0	0	0	0	0	0	**129**	20	50	98	50	20	0	0	0	0	0	0	0	**238**
8:30	1	5	16	21	11	3	0	0	0	0	0	0	0	**57**	4	8	10	24	9	2	0	0	0	0	0	0	0	**57**	5	13	26	45	20	5	0	0	0	0	0	0	**114**
8:45	0	3	2	11	15	2	0	0	0	0	0	0	0	**33**	2	6	3	9	9	0	0	0	0	0	0	0	0	**29**	2	9	5	20	24	2	0	0	0	0	0	0	**62**
9:00	0	4	5	6	9	2	0	0	0	0	0	0	0	**26**	1	2	6	12	6	0	0	0	0	0	0	0	0	**27**	1	6	11	18	15	2	0	0	0	0	0	0	**53**
9:15	0	0	1	12	11	3	2	0	0	0	0	0	0	**29**	0	0	0	11	10	0	0	0	0	0	0	0	0	**21**	0	0	1	23	21	3	2	0	0	0	0	0	**50**
9:30	0	2	2	7	8	4	1	0	0	0	0	0	0	**24**	0	3	3	7	9	1	1	0	0	0	0	0	0	**24**	0	5	5	14	17	5	2	0	0	0	0	0	**48**
9:45	0	1	3	6	3	1	0	0	0	0	0	0	0	**14**	1	2	1	14	10	3	2	0	0	0	0	0	0	**33**	1	3	4	20	13	4	2	0	0	0	0	0	**47**
10:00	0	3	4	7	8	1	0	0	0	0	0	0	0	**23**	1	2	3	9	10	0	0	0	0	0	0	0	0	**25**	1	5	7	16	18	1	0	0	0	0	0	0	**48**
10:15	1	1	5	8	10	2	0	0	0	0	0	0	0	**27**	0	3	5	13	11	3	1	0	0	0	0	0	0	**36**	1	4	10	21	21	5	1	0	0	0	0	0	**63**
10:30	0	5	5	8	11	0	0	0	0	0	0	0	0	**29**	2	2	4	17	10	1	1	0	0	0	0	0	0	**37**	2	7	9	25	21	1	1	0	0	0	0	0	**66**
10:45	0	4	7	5	9	1	0	0	0	0	0	0	0	**26**	0	1	6	13	14	1	0	0	0	0	0	0	0	**35**	0	5	13	18	23	2	0	0	0	0	0	0	**61**
11:00	0	2	3	4	17	1	0	0	0	0	0	0	0	**27**	0	0	4	10	6	0	0	0	0	0	0	0	0	**20**	0	2	7	14	23	1	0	0	0	0	0	0	**47**
11:15	0	0	2	9	5	0	0	0	0	0	0	0	0	**16**	0	1	3	10	11	2	0	0	0	0	0	0	0	**27**	0	1	5	19	16	2	0	0	0	0	0	0	**43**
11:30	1	3	3	4	14	1	0	0	0	0	0	0	0	**26**	1	1	8	17	7	4	0	0	0	0	0	0	0	**38**	2	4	11	21	21	5	0	0	0	0	0	0	**64**
11:45	0	1	3	14	11	3	0	0	0	0	0	0	0	**32**	0	1	2	14	9	3	0	0	0	0	0	0	0	**29**	0	2	5	28	20	6	0	0	0	0	0	0	**61**

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Irena Ave & Del Amo St/N Juanita Ave

Day: Wednesday
Date: 12/4/2024

City: Redondo Beach
Project #: CA24_020421_002

15-MINUTE BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
12:00	1	2	1	8	13	3	0	0	0	0	0	0	0	28	1	1	3	10	7	2	0	0	0	0	0	0	0	24	2	3	4	18	20	5	0	0	0	0	0	0	0	52
12:15	0	3	1	8	11	2	0	0	0	0	0	0	0	25	0	0	3	12	3	2	0	0	0	0	0	0	0	20	0	3	4	20	14	4	0	0	0	0	0	0	0	45
12:30	0	3	9	13	4	1	0	0	0	0	0	0	0	30	0	1	5	19	6	1	0	0	0	0	0	0	0	32	0	4	14	32	10	2	0	0	0	0	0	0	0	62
12:45	2	5	3	14	21	2	0	0	0	0	0	0	0	47	0	1	4	13	12	1	0	0	0	0	0	0	0	31	2	6	7	27	33	3	0	0	0	0	0	0	0	78
13:00	0	3	9	25	13	2	0	0	0	0	0	0	0	52	0	4	6	17	12	3	0	0	0	0	0	0	0	42	0	7	15	42	25	5	0	0	0	0	0	0	0	94
13:15	0	0	6	12	7	1	0	0	0	0	0	0	0	26	2	4	4	10	13	1	0	0	0	0	0	0	0	34	2	4	10	22	20	2	0	0	0	0	0	0	0	60
13:30	0	2	9	13	14	2	0	0	0	0	0	0	0	40	1	1	9	9	6	1	0	0	0	0	0	0	0	27	1	3	18	22	20	3	0	0	0	0	0	0	0	67
13:45	0	3	5	8	9	0	2	0	0	0	0	0	0	27	2	1	5	17	5	2	0	0	0	0	0	0	0	32	2	4	10	25	14	2	2	0	0	0	0	0	0	59
14:00	0	2	2	23	10	2	0	0	0	0	0	0	0	39	0	2	7	11	4	1	0	0	0	0	0	0	0	25	0	4	9	34	14	3	0	0	0	0	0	0	0	64
14:15	0	1	4	12	9	5	0	0	0	0	0	0	0	31	0	1	2	16	5	4	0	0	0	0	0	0	0	28	0	2	6	28	14	9	0	0	0	0	0	0	0	59
14:30	0	1	2	18	11	3	0	0	0	0	0	0	0	35	0	1	8	15	10	3	0	0	0	0	0	0	0	37	0	2	10	33	21	6	0	0	0	0	0	0	0	72
14:45	0	2	5	15	6	1	0	0	0	0	0	0	0	29	0	1	9	18	6	0	0	0	0	0	0	0	0	34	0	3	14	33	12	1	0	0	0	0	0	0	0	63
15:00	1	1	6	14	6	3	0	0	0	0	0	0	0	31	1	0	12	25	18	2	0	0	0	0	0	0	0	58	2	1	18	39	24	5	0	0	0	0	0	0	0	89
15:15	0	1	6	17	11	3	1	0	0	0	0	0	0	39	4	11	26	29	10	0	0	0	0	0	0	0	0	80	4	12	32	46	21	3	1	0	0	0	0	0	0	119
15:30	15	18	29	36	13	0	0	0	0	0	0	0	0	111	15	15	24	25	8	0	0	0	0	0	0	0	0	87	30	33	53	61	21	0	0	0	0	0	0	0	0	198
15:45	3	3	10	18	16	2	0	0	0	0	0	0	0	52	1	1	9	20	10	2	0	0	0	0	0	0	0	43	4	4	19	38	26	4	0	0	0	0	0	0	0	95
16:00	0	0	5	23	9	4	0	0	0	0	0	0	0	41	1	2	5	21	14	0	0	0	0	0	0	0	0	43	1	2	10	44	23	4	0	0	0	0	0	0	0	84
16:15	0	1	6	12	14	6	1	0	0	0	0	0	0	40	0	0	9	16	14	2	0	0	0	0	0	0	0	41	0	1	15	28	28	8	1	0	0	0	0	0	0	81
16:30	1	2	9	21	17	3	0	0	0	0	0	0	0	53	0	1	6	21	11	1	0	0	0	0	0	0	0	40	1	3	15	42	28	4	0	0	0	0	0	0	0	93
16:45	1	2	15	11	12	4	0	0	0	0	0	0	0	45	1	8	9	23	6	1	0	0	0	0	0	0	0	48	2	10	24	34	18	5	0	0	0	0	0	0	0	93
17:00	0	0	10	22	16	1	0	0	0	0	0	0	0	49	1	5	6	23	12	0	0	0	0	0	0	0	0	47	1	5	16	45	28	1	0	0	0	0	0	0	0	96
17:15	1	6	11	20	11	1	0	0	0	0	0	0	0	50	2	1	14	17	3	1	0	0	0	0	0	0	0	38	3	7	25	37	14	2	0	0	0	0	0	0	0	88
17:30	0	0	10	16	13	2	0	0	0	0	0	0	0	41	1	2	11	15	8	2	0	0	0	0	0	0	0	39	1	2	21	31	21	4	0	0	0	0	0	0	0	80
17:45	0	2	8	19	11	2	2	0	0	0	0	0	0	44	1	6	17	24	6	0	0	0	0	0	0	0	0	54	1	8	25	43	17	2	2	0	0	0	0	0	0	98
18:00	0	2	9	13	13	3	0	0	0	0	0	0	0	40	4	3	12	24	5	0	0	0	0	0	0	0	0	48	4	5	21	37	18	3	0	0	0	0	0	0	0	88
18:15	0	1	6	21	6	3	0	0	0	0	0	0	0	37	0	2	9	17	6	2	0	0	0	0	0	0	0	36	0	3	15	38	12	5	0	0	0	0	0	0	0	73
18:30	1	4	7	15	4	4	0	0	0	0	0	0	0	35	1	3	5	18	7	0	0	0	0	0	0	0	0	34	2	7	12	33	11	4	0	0	0	0	0	0	0	69
18:45	1	2	23	15	7	2	0	0	0	0	0	0	0	50	2	12	11	16	7	0	0	0	0	0	0	0	0	48	3	14	34	31	14	2	0	0	0	0	0	0	0	98
19:00	0	6	10	11	8	0	0	0	0	0	0	0	0	35	1	7	6	12	2	2	0	0	0	0	0	0	0	30	1	13	16	23	10	2	0	0	0	0	0	0	0	65
19:15	2	6	13	5	6	1	0	0	0	0	0	0	0	33	6	6	10	18	2	0	0	0	0	0	0	0	0	42	8	12	23	23	8	1	0	0	0	0	0	0	0	75
19:30	3	7	2	7	5	3	0	0	0	0	0	0	0	27	2	6	9	12	4	0	0	0	0	0	0	0	0	33	5	13	11	19	9	3	0	0	0	0	0	0	0	60
19:45	0	3	5	9	6	1	0	0	0	0	0	0	0	24	1	2	7	10	3	0	0	0	0	0	0	0	0	23	1	5	12	19	9	1	0	0	0	0	0	0	0	47
20:00	0	2	4	6	5	0	0	0	0	0	0	0	0	17	2	1	5	6	2	1	0	0	0	0	0	0	0	17	2	3	9	12	7	1	0	0	0	0	0	0	0	34
20:15	0	3	6	9	7	2	0	0	0	0	0	0	0	27	0	1	4	10	2	0	0	0	0	0	0	0	0	17	0	4	10	19	9	2	0	0	0	0	0	0	0	44
20:30	0	2	8	8	5	1	0	0	0	0	0	0	0	24	1	4	2	3	4	0	0	0	0	0	0	0	0	14	1	6	10	11	9	1	0	0	0	0	0	0	0	38
20:45	0	1	5	9	9	1	0	0	0	0	0	0	0	25	0	1	11	8	2	0	0	0	0	0	0	0	0	22	0	2	16	17	11	1	0	0	0	0	0	0	0	47
21:00	0	1	13	6	6	0	0	0	0	0	0	0	0	26	1	1	4	5	1	0	0	0	0	0	0	0	0	12	1	2	17	11	7	0	0	0	0	0	0	0	0	38
21:15	0	3	5	22	8	0	0	0	0	0	0	0	0	38	0	1	6	9	1	0	0	0	0	0	0	0	0	17	0	4	11	31	9	0	0	0	0	0	0	0	0	55
21:30	0	1	9	32	6	1	0	0	0	0	0	0	0	49	2	1	1	2	4	1	0	0	0	0	0	0	0	11	2	2	10	34	10	2	0	0	0	0	0	0	0	60
21:45	0	3	6	19	8	2	0	0	0	0	0	0	0	38	0	0	4	2	3	0	0	0	0	0	0	0	0	9	0	3	10	21	11	2	0	0	0	0	0	0	0	47
22:00	0	2	3	9	0	1	0	0	0	0	0	0	0	15	0	1	1	5	2	0	0	0	0	0	0	0	0	9	0	3	4	14	2	1	0	0	0	0	0	0	0	24
22:15	0	0	0	6	1	0	0	0	0	0	0	0	0	7	1	1	0	7	5	0	0	0	0	0	0	0	0	14	1	1	0	13	6	0	0	0	0	0	0	0	0	21
22:30	0	1	1	2	2	0	0	0	0	0	0	0	0	6	0	0	1	3	0	0	0	0	0	0	0	0	0	4	0	1	2	5	2	0	0	0	0	0	0	0	0	10
22:45	0	1	0	2	1	0	1	0	0	0	0	0	0	5	0	0	1	2	0	0	0	0	0	0	0	0	0	3	0	1	1	4	1	0	1	0	0	0	0	0	0	8
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	3
23:15	0	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3
23:30	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
23:45	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	3
Totals	42	196	519	887	635	124	12	0	0	0	0	0	0	2,415	101	208	543	1,018	507	77	9	0	0	0	0	0	0	2,463	143	404	1,062	1,905	1,142	201	21	0	0	0	0	0	0	4,878
% of Totals	2%	8%	21%	37%	26%	5%	0%	0%	0%	0%	0%	0%	0%	100%	4%	8%	22%	41%	21%	3%	0%	0%	0%	0%	0%	0%	0%	100%	3%	8%	22%	39%	23%	4%	0%	0%	0%	0%	0%	0%	0%	100%

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Maria Ave & N Lucia Ave

Day: Wednesday
Date: 12/4/2024

City: Redondo Beach
Project #: CA24_020421_001

HOURLY BREAKDOWN

Time	NORTHBOUND 5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total	SOUTHBOUND 5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total	TOTALS 5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
0:00	0	0	0	1	0	1	0	0	0	0	0	0	0	**2**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	2	0	1	0	0	0	0	0	0	0	**3**
1:00	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	2	0	1	0	0	0	0	0	0	0	0	0	0	**3**	2	0	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
4:00	1	1	0	1	1	0	0	0	0	0	0	0	0	**4**	0	0	0	1	0	1	0	0	0	0	0	0	0	**2**	1	1	0	2	1	1	0	0	0	0	0	0	0	**6**
5:00	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**	1	0	1	3	2	0	0	0	0	0	0	0	0	**7**	1	1	1	4	3	0	0	0	0	0	0	0	0	**10**
6:00	0	2	4	6	2	1	0	0	0	0	0	0	0	**15**	1	0	9	19	6	5	0	0	0	0	0	0	0	**40**	1	2	13	25	8	6	0	0	0	0	0	0	0	**55**
7:00	0	4	12	43	27	6	0	0	0	0	0	0	0	**92**	3	4	31	68	24	9	0	0	0	0	0	0	0	**139**	3	8	43	111	51	15	0	0	0	0	0	0	0	**231**
8:00	1	6	29	89	35	5	0	0	0	0	0	0	0	**165**	6	28	109	93	33	5	0	0	0	0	0	0	0	**274**	7	34	138	182	68	10	0	0	0	0	0	0	0	**439**
9:00	0	7	5	10	9	2	1	0	0	0	0	0	0	**34**	1	2	8	15	8	1	0	0	0	0	0	0	0	**35**	1	9	13	25	17	3	1	0	0	0	0	0	0	**69**
10:00	0	3	10	23	9	0	0	0	0	0	0	0	0	**45**	1	5	4	14	11	4	1	0	0	0	0	0	0	**40**	1	8	14	37	20	4	1	0	0	0	0	0	0	**85**
11:00	1	9	8	18	11	1	0	0	0	0	0	0	0	**48**	1	3	9	13	11	4	0	0	0	0	0	0	0	**41**	2	12	17	31	22	5	0	0	0	0	0	0	0	**89**
12:00	3	3	9	19	12	3	1	0	0	0	0	0	0	**50**	3	4	7	10	10	2	0	0	0	0	0	0	0	**36**	6	7	16	29	22	5	1	0	0	0	0	0	0	**86**
13:00	1	6	17	49	34	2	0	0	0	0	0	0	0	**109**	2	8	12	22	16	4	0	0	0	0	0	0	0	**64**	3	14	29	71	50	6	0	0	0	0	0	0	0	**173**
14:00	1	3	14	22	16	1	1	0	0	0	0	0	0	**58**	1	4	12	28	10	3	0	0	0	0	0	0	0	**58**	2	7	26	50	26	4	1	0	0	0	0	0	0	**116**
15:00	34	35	43	51	27	7	3	0	0	0	0	0	0	**200**	2	7	25	70	43	12	2	0	0	0	0	0	0	**161**	36	42	68	121	70	19	5	0	0	0	0	0	0	**361**
16:00	0	0	16	41	22	3	2	0	0	0	0	0	0	**84**	0	0	12	34	27	1	0	0	0	0	0	0	0	**74**	0	0	28	75	49	4	2	0	0	0	0	0	0	**158**
17:00	1	1	18	36	23	2	0	0	0	0	0	0	0	**81**	1	0	19	52	20	1	0	0	0	0	0	0	0	**93**	2	1	37	88	43	3	0	0	0	0	0	0	0	**174**
18:00	0	3	20	36	23	5	0	0	0	0	0	0	0	**87**	0	7	10	29	17	6	0	0	0	0	0	0	0	**69**	0	10	30	65	40	11	0	0	0	0	0	0	0	**156**
19:00	1	5	12	22	13	2	0	0	0	0	0	0	0	**55**	3	5	10	19	10	0	0	0	0	0	0	0	0	**47**	4	10	22	41	23	2	0	0	0	0	0	0	0	**102**
20:00	2	2	6	13	9	1	0	0	0	0	0	0	0	**33**	3	4	2	13	3	1	1	0	0	0	0	0	0	**27**	5	6	8	26	12	2	1	0	0	0	0	0	0	**60**
21:00	0	0	22	35	20	3	0	0	0	0	0	0	0	**80**	0	1	5	13	7	2	0	0	0	0	0	0	0	**28**	0	1	27	48	27	5	0	0	0	0	0	0	0	**108**
22:00	0	0	3	9	3	0	0	0	0	0	0	0	0	**15**	1	1	0	2	3	0	0	0	0	0	0	0	0	**7**	1	1	3	11	6	0	0	0	0	0	0	0	0	**22**
23:00	0	0	1	2	0	0	1	0	0	0	0	0	0	**4**	1	1	1	1	2	0	0	0	0	0	0	0	0	**6**	1	1	2	3	2	0	1	0	0	0	0	0	0	**10**
Totals	**46**	**91**	**249**	**529**	**297**	**45**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**1,266**	**33**	**84**	**287**	**520**	**264**	**61**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1,253**	**79**	**175**	**536**	**1,049**	**561**	**106**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**2,519**
% of Totals	4%	7%	20%	42%	23%	4%	1%							100%	3%	7%	23%	42%	21%	5%	0%							100%	3%	7%	21%	42%	22%	4%	1%							100%

STATISTICS

	NORTHBOUND 5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total	SOUTHBOUND 5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total	TOTALS 5-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-99	Total
00:00 - 12:00	3	33	68	194	95	16	1	0	0	0	0	0	0	410	16	42	172	227	96	29	1	0	0	0	0	0	0	583	19	75	240	421	191	45	2	0	0	0	0	0	0	993
%	0%	3%	5%	15%	8%	1%	0%	0%	0%	0%	0%	0%	0%	32%	1%	3%	14%	18%	8%	2%	0%	0%	0%	0%	0%	0%	0%	46%	2%	6%	19%	33%	15%	4%	0%	0%	0%	0%	0%	0%	0%	78%
Peak Hour	11:15	11:00	7:45	7:45	8:00	7:30	8:30	0:00	0:00	0:00	0:00	0:00	0:00	8:00	7:45	7:30	7:45	7:45	7:45	6:30	9:30	0:00	0:00	0:00	0:00	0:00	0:00	7:45	7:45	7:30	7:45	7:45	8:00	6:45	8:30	0:00	0:00	0:00	0:00	0:00	0:00	7:45
Peak Volume	2	9	29	91	35	8	1	0	0	0	0	0	0	165	7	29	113	104	33	11	1	0	0	0	0	0	0	290	8	36	142	195	68	17	1	0	0	0	0	0	0	454
12:00 - 24:00	43	58	181	335	202	29	8	0	0	0	0	0	0	856	17	42	115	293	168	32	3	0	0	0	0	0	0	670	60	100	296	628	370	61	11	0	0	0	0	0	0	1526
%	3%	5%	14%	26%	16%	2%	1%	0%	0%	0%	0%	0%	0%	68%	1%	3%	9%	23%	13%	3%	0%	0%	0%	0%	0%	0%	0%	53%	5%	8%	23%	50%	29%	5%	1%	0%	0%	0%	0%	0%	0%	121%
Peak Hour	15:00	15:00	15:00	15:15	12:45	15:15	15:30	12:00	12:00	12:00	12:00	12:00	12:00	15:15	19:30	12:45	14:45	14:45	15:00	15:00	15:00	12:00	12:00	12:00	12:00	12:00	12:00	14:45	15:00	15:00	15:00	15:15	15:00	15:00	15:30	12:00	12:00	12:00	12:00	12:00	12:00	15:15
Peak Volume	34	35	43	60	35	8	4	0	0	0	0	0	0	211	5	9	26	74	43	12	2	0	0	0	0	0	0	161	36	42	68	126	70	19	6	0	0	0	0	0	0	362
07:00 - 09:00	1	10	41	132	62	11	0	0	0	0	0	0	0	257	9	32	140	161	57	14	0	0	0	0	0	0	0	413	10	42	181	293	119	25	0	0	0	0	0	0	0	670
%	0%	1%	3%	10%	5%	1%	0%	0%	0%	0%	0%	0%	0%	20%	1%	3%	11%	13%	5%	1%	0%	0%	0%	0%	0%	0%	0%	33%	1%	3%	14%	23%	9%	2%	0%	0%	0%	0%	0%	0%	0%	53%
Peak Hour	7:30	7:30	7:45	7:45	8:00	7:30	7:00	7:00	7:00	7:00	7:00	7:00	7:00	8:00	7:45	7:30	7:45	7:45	7:45	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45	7:45	7:30	7:45	7:45	8:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:45
Peak Volume	1	7	29	91	35	8	0	0	0	0	0	0	0	165	7	29	113	104	33	9	0	0	0	0	0	0	0	290	8	36	142	195	68	15	0	0	0	0	0	0	0	454
16:00 - 18:00	1	1	34	77	45	5	2	0	0	0	0	0	0	165	1	0	31	86	47	2	0	0	0	0	0	0	0	167	2	1	65	163	92	7	2	0	0	0	0	0	0	332
%	0%	0%	3%	6%	4%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	2%	7%	4%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	5%	13%	7%	1%	0%	0%	0%	0%	0%	0%	0%	26%
Peak Hour	16:15	17:00	16:30	16:00	16:15	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:30	16:15	16:00	17:00	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	17:00	16:15	17:00	17:00	17:00	16:15	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	17:00
Peak Volume	1	1	19	41	27	3	2	0	0	0	0	0	0	86	1	0	19	52	27	1	0	0	0	0	0	0	0	93	2	1	37	88	53	4	2	0	0	0	0	0	0	174

Direction	Percentiles 15th	50th	Average	85th	95th	ADT
NORTHBOUND	21	27	27	33	35	1266
SOUTHBOUND	21	27	27	33	35	1253
TOTALS	21	27	27	33	35	2519

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Maria Ave & N Lucia Ave

Day: Wednesday
Date: 12/4/2024

City: Redondo Beach
Project #: CA24_020421_001

15-MINUTE BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0:30	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:45	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:30	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
4:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:30	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
4:45	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	1	0	1	0	0	0	0	0	0	0	**2**	1	1	0	1	0	1	0	0	0	0	0	0	0	**4**
5:00	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
5:45	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	1	0	0	1	2	0	0	0	0	0	0	0	0	**4**	1	0	0	2	3	0	0	0	0	0	0	0	0	**6**
6:00	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**	0	0	0	2	1	1	0	0	0	0	0	0	0	**4**	0	0	1	3	1	1	0	0	0	0	0	0	0	**6**
6:15	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	0	0	1	2	0	0	0	0	0	0	0	0	0	**3**	0	0	1	3	1	0	0	0	0	0	0	0	0	**5**
6:30	0	2	0	4	1	0	0	0	0	0	0	0	0	**7**	1	0	0	2	0	1	0	0	0	0	0	0	0	**4**	1	2	0	6	1	1	0	0	0	0	0	0	0	**11**
6:45	0	0	3	0	0	1	0	0	0	0	0	0	0	**4**	0	0	8	13	5	3	0	0	0	0	0	0	0	**29**	0	0	11	13	5	4	0	0	0	0	0	0	0	**33**
7:00	0	1	5	16	18	1	0	0	0	0	0	0	0	**41**	2	2	16	38	12	4	0	0	0	0	0	0	0	**74**	2	3	21	54	30	5	0	0	0	0	0	0	0	**115**
7:15	0	0	2	9	1	2	0	0	0	0	0	0	0	**14**	0	0	3	8	2	3	0	0	0	0	0	0	0	**16**	0	0	5	17	3	5	0	0	0	0	0	0	0	**30**
7:30	0	3	3	8	4	2	0	0	0	0	0	0	0	**20**	0	1	3	8	5	1	0	0	0	0	0	0	0	**18**	0	4	6	16	9	3	0	0	0	0	0	0	0	**38**
7:45	0	0	2	10	4	1	0	0	0	0	0	0	0	**17**	1	1	9	14	5	1	0	0	0	0	0	0	0	**31**	1	1	11	24	9	2	0	0	0	0	0	0	0	**48**
8:00	0	2	7	22	10	1	0	0	0	0	0	0	0	**42**	2	9	47	43	10	0	0	0	0	0	0	0	0	**111**	2	11	54	65	20	1	0	0	0	0	0	0	0	**153**
8:15	1	2	15	38	12	4	0	0	0	0	0	0	0	**72**	3	18	51	32	12	1	0	0	0	0	0	0	0	**117**	4	20	66	70	24	5	0	0	0	0	0	0	0	**189**
8:30	0	1	5	21	6	0	0	0	0	0	0	0	0	**33**	1	0	6	15	6	3	0	0	0	0	0	0	0	**31**	1	1	11	36	12	3	0	0	0	0	0	0	0	**64**
8:45	0	1	2	8	7	0	0	0	0	0	0	0	0	**18**	0	1	5	3	5	1	0	0	0	0	0	0	0	**15**	0	2	7	11	12	1	0	0	0	0	0	0	0	**33**
9:00	0	1	3	3	1	0	0	0	0	0	0	0	0	**8**	0	1	2	1	2	0	0	0	0	0	0	0	0	**6**	0	2	5	4	3	0	0	0	0	0	0	0	0	**14**
9:15	0	2	0	3	3	0	1	0	0	0	0	0	0	**9**	0	0	4	5	0	1	0	0	0	0	0	0	0	**10**	0	2	4	8	3	1	1	0	0	0	0	0	0	**19**
9:30	0	1	0	3	3	0	0	0	0	0	0	0	0	**7**	1	0	0	3	4	0	0	0	0	0	0	0	0	**8**	1	1	0	6	7	0	0	0	0	0	0	0	0	**15**
9:45	0	3	2	1	2	2	0	0	0	0	0	0	0	**10**	0	1	2	6	2	0	0	0	0	0	0	0	0	**11**	0	4	4	7	4	2	0	0	0	0	0	0	0	**21**
10:00	0	2	2	3	1	0	0	0	0	0	0	0	0	**8**	0	2	2	4	4	0	0	0	0	0	0	0	0	**12**	0	4	4	7	5	0	0	0	0	0	0	0	0	**20**
10:15	0	0	6	2	1	0	0	0	0	0	0	0	0	**9**	0	0	0	3	0	2	1	0	0	0	0	0	0	**6**	0	0	6	5	1	2	1	0	0	0	0	0	0	**15**
10:30	0	0	2	7	3	0	0	0	0	0	0	0	0	**12**	1	3	0	6	3	1	0	0	0	0	0	0	0	**14**	1	3	2	13	6	1	0	0	0	0	0	0	0	**26**
10:45	0	1	0	11	4	0	0	0	0	0	0	0	0	**16**	0	0	2	1	4	1	0	0	0	0	0	0	0	**8**	0	1	2	12	8	1	0	0	0	0	0	0	0	**24**
11:00	1	2	2	3	2	1	0	0	0	0	0	0	0	**11**	0	1	4	2	3	1	0	0	0	0	0	0	0	**11**	1	3	6	5	5	2	0	0	0	0	0	0	0	**22**
11:15	0	1	4	5	0	0	0	0	0	0	0	0	0	**10**	1	1	2	2	2	3	0	0	0	0	0	0	0	**11**	1	2	6	7	2	3	0	0	0	0	0	0	0	**21**
11:30	0	1	2	5	6	0	0	0	0	0	0	0	0	**14**	0	1	1	6	2	0	0	0	0	0	0	0	0	**10**	0	2	3	11	8	0	0	0	0	0	0	0	0	**24**
11:45	0	5	0	5	3	0	0	0	0	0	0	0	0	**13**	0	0	2	3	4	0	0	0	0	0	0	0	0	**9**	0	5	2	8	7	0	0	0	0	0	0	0	0	**22**

Prepared by National Data & Surveying Services

SPEED

Diamond St Bet N Maria Ave & N Lucia Ave

Day: Wednesday

Date: 12/4/2024

City: Redondo Beach

Project #: CA24_020421_001

15-MINUTE BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
12:00	2	2	4	2	3	2	0	0	0	0	0	0	0	**15**	0	0	1	3	2	0	0	0	0	0	0	0	0	**6**	2	2	5	5	5	2	0	0	0	0	0	0	0	**21**
12:15	0	0	1	5	3	1	0	0	0	0	0	0	0	**10**	2	1	0	2	2	1	0	0	0	0	0	0	0	**8**	2	1	1	7	5	2	0	0	0	0	0	0	0	**18**
12:30	0	0	1	4	3	0	0	0	0	0	0	0	0	**8**	0	1	2	2	3	0	0	0	0	0	0	0	0	**8**	0	1	3	6	6	0	0	0	0	0	0	0	0	**16**
12:45	1	1	3	8	3	0	1	0	0	0	0	0	0	**17**	1	2	4	3	3	1	0	0	0	0	0	0	0	**14**	2	3	7	11	6	1	1	0	0	0	0	0	0	**31**
13:00	0	3	7	18	14	2	0	0	0	0	0	0	0	**44**	0	1	2	5	7	1	0	0	0	0	0	0	0	**16**	0	4	9	23	21	3	0	0	0	0	0	0	0	**60**
13:15	0	0	5	5	5	0	0	0	0	0	0	0	0	**15**	2	2	4	5	4	1	0	0	0	0	0	0	0	**18**	2	2	9	10	9	1	0	0	0	0	0	0	0	**33**
13:30	0	1	0	20	13	0	0	0	0	0	0	0	0	**34**	0	4	2	9	4	0	0	0	0	0	0	0	0	**19**	0	5	2	29	17	0	0	0	0	0	0	0	0	**53**
13:45	1	2	5	6	2	0	0	0	0	0	0	0	0	**16**	0	1	4	3	1	2	0	0	0	0	0	0	0	**11**	1	3	9	9	3	2	0	0	0	0	0	0	0	**27**
14:00	0	1	2	9	1	0	0	0	0	0	0	0	0	**13**	1	2	4	4	2	2	0	0	0	0	0	0	0	**15**	1	3	6	13	3	2	0	0	0	0	0	0	0	**28**
14:15	0	0	4	5	7	1	0	0	0	0	0	0	0	**17**	0	1	0	6	2	0	0	0	0	0	0	0	0	**9**	0	1	4	11	9	1	0	0	0	0	0	0	0	**26**
14:30	1	1	4	7	4	0	1	0	0	0	0	0	0	**18**	0	0	5	7	3	1	0	0	0	0	0	0	0	**16**	1	1	9	14	7	1	1	0	0	0	0	0	0	**34**
14:45	0	1	4	1	4	0	0	0	0	0	0	0	0	**10**	0	1	3	11	3	0	0	0	0	0	0	0	0	**18**	0	2	7	12	7	0	0	0	0	0	0	0	0	**28**
15:00	0	0	3	6	1	0	1	0	0	0	0	0	0	**11**	0	2	2	12	10	3	0	0	0	0	0	0	0	**29**	0	2	5	18	11	3	1	0	0	0	0	0	0	**40**
15:15	1	2	9	13	8	2	0	0	0	0	0	0	0	**35**	0	3	9	25	13	3	0	0	0	0	0	0	0	**53**	1	5	18	38	21	5	0	0	0	0	0	0	0	**88**
15:30	26	25	22	18	9	4	1	0	0	0	0	0	0	**105**	2	2	12	26	14	4	1	0	0	0	0	0	0	**61**	28	27	34	44	23	8	2	0	0	0	0	0	0	**166**
15:45	7	8	9	14	9	1	1	0	0	0	0	0	0	**49**	0	0	2	7	6	2	1	0	0	0	0	0	0	**18**	7	8	11	21	15	3	2	0	0	0	0	0	0	**67**
16:00	0	0	2	15	3	1	1	0	0	0	0	0	0	**22**	0	0	3	8	7	1	0	0	0	0	0	0	0	**19**	0	0	5	23	10	2	1	0	0	0	0	0	0	**41**
16:15	0	0	5	6	6	2	1	0	0	0	0	0	0	**20**	0	0	1	8	7	0	0	0	0	0	0	0	0	**16**	0	0	6	14	13	2	1	0	0	0	0	0	0	**36**
16:30	0	0	4	11	7	0	0	0	0	0	0	0	0	**22**	0	0	3	8	7	0	0	0	0	0	0	0	0	**18**	0	0	7	19	14	0	0	0	0	0	0	0	0	**40**
16:45	0	0	5	9	6	0	0	0	0	0	0	0	0	**20**	0	0	5	10	6	0	0	0	0	0	0	0	0	**21**	0	0	10	19	12	0	0	0	0	0	0	0	0	**41**
17:00	1	0	3	11	8	0	0	0	0	0	0	0	0	**23**	1	0	1	12	6	1	0	0	0	0	0	0	0	**21**	2	0	4	23	14	1	0	0	0	0	0	0	0	**44**
17:15	0	0	7	9	5	0	0	0	0	0	0	0	0	**21**	0	0	5	13	3	0	0	0	0	0	0	0	0	**21**	0	0	12	22	8	0	0	0	0	0	0	0	0	**42**
17:30	0	0	3	10	4	1	0	0	0	0	0	0	0	**18**	0	0	5	10	2	0	0	0	0	0	0	0	0	**17**	0	0	8	20	6	1	0	0	0	0	0	0	0	**35**
17:45	0	1	5	6	6	1	0	0	0	0	0	0	0	**19**	0	0	8	17	9	0	0	0	0	0	0	0	0	**34**	0	1	13	23	15	1	0	0	0	0	0	0	0	**53**
18:00	0	0	7	10	5	1	0	0	0	0	0	0	0	**23**	0	1	4	7	5	1	0	0	0	0	0	0	0	**18**	0	1	11	17	10	2	0	0	0	0	0	0	0	**41**
18:15	0	1	6	12	11	2	0	0	0	0	0	0	0	**32**	0	1	3	9	5	2	0	0	0	0	0	0	0	**20**	0	2	9	21	16	4	0	0	0	0	0	0	0	**52**
18:30	0	2	3	3	1	1	0	0	0	0	0	0	0	**10**	0	3	2	4	2	0	0	0	0	0	0	0	0	**11**	0	5	5	7	3	1	0	0	0	0	0	0	0	**21**
18:45	0	0	4	11	6	1	0	0	0	0	0	0	0	**22**	0	2	1	9	5	3	0	0	0	0	0	0	0	**20**	0	2	5	20	11	4	0	0	0	0	0	0	0	**42**
19:00	0	2	3	4	3	1	0	0	0	0	0	0	0	**13**	1	0	3	4	3	0	0	0	0	0	0	0	0	**11**	1	2	6	8	6	1	0	0	0	0	0	0	0	**24**
19:15	0	0	2	3	2	1	0	0	0	0	0	0	0	**8**	0	3	5	11	4	0	0	0	0	0	0	0	0	**23**	0	3	7	14	6	1	0	0	0	0	0	0	0	**31**
19:30	1	0	4	11	7	0	0	0	0	0	0	0	0	**23**	2	0	1	1	2	0	0	0	0	0	0	0	0	**6**	3	0	5	12	9	0	0	0	0	0	0	0	0	**29**
19:45	0	3	3	4	1	0	0	0	0	0	0	0	0	**11**	0	2	1	3	1	0	0	0	0	0	0	0	0	**7**	0	5	4	7	2	0	0	0	0	0	0	0	0	**18**
20:00	0	1	1	4	0	1	0	0	0	0	0	0	0	**7**	0	2	0	3	1	0	1	0	0	0	0	0	0	**7**	0	3	1	7	1	1	1	0	0	0	0	0	0	**14**
20:15	1	0	2	4	3	0	0	0	0	0	0	0	0	**10**	3	1	1	4	1	1	0	0	0	0	0	0	0	**11**	4	1	3	8	4	1	0	0	0	0	0	0	0	**21**
20:30	1	0	1	3	0	0	0	0	0	0	0	0	0	**5**	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**	1	0	1	4	0	0	0	0	0	0	0	0	0	**6**
20:45	0	1	2	2	6	0	0	0	0	0	0	0	0	**11**	0	1	1	5	1	0	0	0	0	0	0	0	0	**8**	0	2	3	7	7	0	0	0	0	0	0	0	0	**19**
21:00	0	0	4	5	4	1	0	0	0	0	0	0	0	**14**	0	0	0	4	1	0	0	0	0	0	0	0	0	**5**	0	0	4	9	5	1	0	0	0	0	0	0	0	**19**
21:15	0	0	8	2	6	1	0	0	0	0	0	0	0	**17**	0	0	3	3	2	1	0	0	0	0	0	0	0	**9**	0	0	11	5	8	2	0	0	0	0	0	0	0	**26**
21:30	0	0	7	19	5	1	0	0	0	0	0	0	0	**32**	0	1	1	2	4	0	0	0	0	0	0	0	0	**8**	0	1	8	21	9	1	0	0	0	0	0	0	0	**40**
21:45	0	0	3	9	5	0	0	0	0	0	0	0	0	**17**	0	0	1	4	0	1	0	0	0	0	0	0	0	**6**	0	0	4	13	5	1	0	0	0	0	0	0	0	**23**
22:00	0	0	1	4	1	0	0	0	0	0	0	0	0	**6**	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	1	4	2	0	0	0	0	0	0	0	0	**7**
22:15	0	0	2	4	1	0	0	0	0	0	0	0	0	**7**	1	0	0	2	2	0	0	0	0	0	0	0	0	**5**	1	0	2	6	3	0	0	0	0	0	0	0	0	**12**
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
22:45	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
23:00	0	0	0	0	0	0	1	0	0	0	0	0	0	**1**	0	1	1	1	2	0	0	0	0	0	0	0	0	**5**	0	1	1	1	2	0	1	0	0	0	0	0	0	**6**
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
23:30	0	0	0	2	0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	2	0	0	0	0	0	0	0	0	0	**2**
23:45	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
Totals	**46**	**91**	**249**	**529**	**297**	**45**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**1,266**	**33**	**84**	**287**	**520**	**264**	**61**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1,253**	**79**	**175**	**536**	**1,049**	**561**	**106**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**2,519**
% of Totals	4%	7%	20%	42%	23%	4%	1%	0%	0%	0%	0%	0%	0%	**100%**	3%	7%	23%	42%	21%	5%	0%	0%	0%	0%	0%	0%	0%	**100%**	3%	7%	21%	42%	22%	4%	1%	0%	0%	0%	0%	0%	0%	**100%**

D. TIMS CRASH DATA

City of Redondo Beach
Traffic Engineering

From 10/09/19 to 10/09/24

Total Collisions: 5
Injury Collisions: 4 Total Injured: 4
Fatal Collisions: 0 Total Killed: 0

Collision Summary Report

10/9/24

DIAMOND ST from PACIFIC COAST HWY to PROSPECT AV

8968738 **11/05/19** **18:01** Tuesday DIAMOND ST - LUCIA AV 0' Direction: Not Stated Dark - Street Ligh Clear Pty at Fault:1
Broadside Bicycle Improper Turning 22107 Hit & Run: Felony Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver East Making Right Turn Not Sta Age: 0 OTHER - TRUCK Pickups & Panels No Injury
Veh Type: Pickup Truck Sobriety: Impairment Not Kno Assoc Factor: Not Stated Unknown Not Stated
Party 2 Bicyclist East Proceeding Straight Male Age: 15 0 - Bicycle No Injury
Veh Type: Bicycle Sobriety: HNBD Assoc Factor: Not Stated Not Stated Not Stated

9020599 **12/12/19** **11:20** Thursday PACIFIC COAST HWY - DIAMOND ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Broadside Other Motor Vehicle Traffic Signals and Signs 21453A Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver South Proceeding Straight Male Age: 87 2015 MERCEDES-BENZ Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Passenger Car Sobriety: HNBD Assoc Factor: Not Stated Air Bag Not Deployed Not Stated
Party 2 Driver East Proceeding Straight Female Age: 28 2005 TOYOTA Passenger Car, Station Wagon, Jeep Complaint of Pain
Veh Type: Passenger Car Sobriety: HNBD Assoc Factor: Not Stated Air Bag Not Deployed Not Stated

24-000021 **01/02/24** **05:05** Tuesday HELBERTA AV - DIAMOND ST 0' Direction: Not Stated Dark - Street Ligh Clear Pty at Fault:1
Head-On Parked Motor Vehicle Unsafe Speed 22350 Hit & Run: Misde Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver NORT Other Not Sta Age: 2013 Toyota Highlander Sport Utility Vehicle
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated
Party 2 Parked Vehicle SOUT Parked Not Sta Age: 2022 Subaru Forester Sport Utility Vehicle
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated

24-000145 **01/08/24** **09:19** Monday DIAMOND ST - GUADALUPE AV 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Sideswipe Bicycle Improper Turning 22107 Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver WEST Making Right Turn F Age: 65 2020 FORD EDGE Sport Utility Vehicle
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist WEST Proceeding Straight F Age: 15 2020 RAD POWER BIK EBIKE Bicycle
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Bicycle Helmet Driver - Y Cell Phone Not In Use

24-000383 **01/19/24** **08:30** Friday DIAMOND ST - GUADALUPE AV 0' Direction: Not Stated Daylight Cloudy Pty at Fault:1
Sideswipe Bicycle Improper Turning 22107 Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver WEST Making Right Turn F Age: 45 2004 Acura TI Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: HNBD Assoc Factor: Violation Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist WEST Proceeding Straight F Age: 17 BIRD Electric Bicycle
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Bicycle Helmet Driver - Y Cell Phone Not In Use

Segment Length: 0.68 miles (3,601')

Collisions per mile: 7.33

Settings for Query:

Segment: DIAMOND ST between PACIFIC COAST HWY and PROSPECT AV
Include Intersection Related at Limit 1 (PACIFIC COAST HWY): True
Include Intersection Related at Limit 2 (PROSPECT AV): True
Include Intersection Related at Intermediate Intersections: True
Sorted By: Date and Time

Transportation Injury Mapping System (TIMS) Crash Data (Dec 2019 – June 2024)

CASE_ID	ACCIDENT_YEAR	PROC_DATE	JURIS	COLLISION_DATE	COLLISION_TIME	Time_format	OFFICER_ID
8968738	2019	2/7/2020	1956	11/5/2019	1801	18:01	1206
9020599	2019	3/9/2020	1956	12/12/2019	1120	11:20	1328
9221408	2021	2/23/2021	1956	1/21/2021	2108	21:08	1272
9402944	2022	2/10/2022	1956	1/6/2022	1056	10:56	1292
9392789	2022	2/1/2022	1956	1/8/2022	825	8:25	1379
9379708	2022	2/4/2022	1956	1/8/2022	1232	12:32	1379
9414543	2022	3/24/2022	1956	3/5/2022	1904	19:04	1362
9440021	2022	5/12/2022	1956	4/7/2022	1535	15:35	1335
9442115	2022	5/17/2022	1956	4/29/2022	810	8:10	1370
9442118	2022	5/17/2022	1956	4/29/2022	752	7:52	1372
9536515	2022	1/20/2023	1956	10/15/2022	2303	23:03	1292
9536151	2022	1/3/2023	1956	10/28/2022	1540	15:40	1390
9577181	2023	5/26/2023	1956	4/27/2023	1544	15:44	1292
9683231	2023	5/16/2024	1956	9/18/2023	330	3:30	1372
9652652	2024	3/28/2024	1956	1/8/2024	919	9:19	1372
9667460	2024	3/30/2024	1956	1/19/2024	830	8:30	1384
				1/2/2024	505	5:05	

CASE_ID	REPORTING_DISTRICT	DAY_OF_WEEK	CHP_SHIFT	POPULATION	CNTY_CITY_LOC	SPECIAL_COND	BEAT_TYPE
8968738	26	2	5	5	1956	0	0
9020599	20	4	5	5	1956	0	0
9221408	20	4	5	5	1956	0	0
9402944	26	4	5	5	1956	0	0
9392789		6	5	5	1956	0	0
9379708		6	5	5	1956	0	0
9414543	25-Feb	6	5	5	1956	0	0
9440021	28	4	5	5	1956	0	0
9442115	26	5	5	5	1956	0	0
9442118	23	5	5	5	1956	0	0
9536515	20	6	5	5	1956	0	0
9536151	23	5	5	5	1956	0	0
9577181	25	4	5	5	1956	0	0
9683231	9	1	5	5	1956	0	0
9652652	25	1	5	5	1956	0	0
9667460	25	5	5	5	1956	0	0
		2			1956		

CASE_ID	CHP_BEAT_TYPE	CITY_DIVISION_LAPD	CHP_BEAT_CLASS	BEAT_NUMBER	PRIMARY_RD	SECONDARY_RD
8968738		0		0	2 DIAMOND ST	LUCIA AV
9020599		0		0	2 RT 1	DIAMOND ST
9221408		0		0	2 RT 1	DIAMOND ST
9402944		0		0	2 N PROSPECT AV	DIAMOND ST
9392789		0		0	2 FRANCISCA AV	DIAMOND ST
9379708		0		0	RT 1	DIAMOND ST
9414543		0		0	2 PACIFIC COAST HWY	DIAMOND ST
9440021		0		0	2 PROSPECT AV	DAIMOND ST
9442115		0		0	2 DIAMOND ST	MARIA AV
9442118		0		0	2 DIAMOND ST	FRANCISCA AV
9536515		0		0	2 RT 1	DIAMOND ST
9536151		0		0	2 DIAMOND ST	PACIFIC COAST HWY
9577181		0		0	2 DIAMOND ST	IRENA AVE
9683231		0		0	1 DIAMOND AV	JUANITA AV
9652652		0		0	2 DIAMOND ST	GUADALUPE AV
9667460		0		0	2 DIAMOND ST	GUADALUPE AV
					HELBERTA AV	DIAMOND ST

CASE_ID	DISTANCE	DIRECTION	INTERSECTION	WEATHER_1	WEATHER_2	STATE_HWY_IND	CALTRANS_COUNTY
8968738	0		Y	A	-	N	
9020599	0		Y	A	-	Y	LA
9221408	0		Y	A	-	Y	LA
9402944	75	S	N	A	-	N	
9392789	0		Y	A	-	N	
9379708	0		N	A	-	Y	LA
9414543	0		Y	A	-	Y	LA
9440021	47	N	N	A	-	N	
9442115	0		Y	A	-	N	
9442118	10	E	N	A	-	N	
9536515	0		Y	B	-	Y	LA
9536151	0		Y	A	-	Y	LA
9577181	69	E	N	B	-	N	
9683231	0		Y	A	-	N	
9652652	0		Y	A	-	N	
9667460	0		Y	B	-	N	
	0		Y			N	

CASE_ID	RAMP_INTERSECTION	SIDE_OF_HWY	TOW_AWAY	COLLISION_SEVERITY	NUMBER_KILLED	NUMBER_INJURED
8968738			N	4	0	1
9020599		5 S	Y	4	0	1
9221408		5 N	Y	3	0	2
9402944			Y	3	0	3
9392789			N	4	0	1
9379708		5 N	Y	4	0	1
9414543		5 N	Y	4	0	1
9440021			N	4	0	1
9442115			N	4	0	1
9442118			N	3	0	1
9536515		5 S	Y	3	0	1
9536151		6 N	N	4	0	1
9577181			N	3	0	1
9683231				3	0	1
9652652			N	3	0	1
9667460			N	3	0	1
				0	0	0

CASE_ID	PARTY_COUNT	PRIMARY_COLL_FACTOR	PCF_CODE_OF_VIOL	PCF_VIOL_CATEGORY	PCF_VIOLATION
8968738	2	A	-	8	22107
9020599	2	A	-	12	21453
9221408	2	A	-	9	21801
9402944	2	A	-	3	22350
9392789	2	A	-	12	22450
9379708	2	A	-	9	21801
9414543	2	A	-	9	21801
9440021	2	A	-	8	22107
9442115	2	A	-	9	21802
9442118	2	A	-	9	21801
9536515	2	A	-	2	22400
9536151	2	A	-	3	22350
9577181	2	A	-	0	21760
9683231	2	A	-	12	22450
9652652	2	A	-	8	22107
9667460	2	A	-	8	22107
	2	A		3	22350

CASE_ID	PCF_VIOL_SUBSECTION	HIT_AND_RUN	TYPE_OF_COLLISION	MVIW	PED_ACTION	ROAD_SURFACE	ROAD_COND_1
8968738		F	D	G	A	A	H
9020599	A	N	D	C	A	A	H
9221408	A	N	D	C	A	A	H
9402944		N	C	C	A	A	H
9392789	A	N	D	G	A	A	H
9379708	A	N	D	C	A	A	H
9414543	A	N	A	C	A	A	H
9440021		N	B	C	A	A	H
9442115	A	N	D	C	A	A	H
9442118	A	N	D	G	A	A	H
9536515	A	N	C	C	A	A	A
9536151		F	G	G	F	A	H
9577181	C	N	B	G	A	A	H
9683231	A	F	G	-	B	A	H
9652652		N	B	G	A	A	H
9667460		N	H	G	A	A	A
		M	A				

CASE_ID	ROAD_COND_2	LIGHTING	CONTROL_DEVICE	CHP_ROAD_TYPE	PEDESTRIAN_ACCIDENT	BICYCLE_ACCIDENT
8968738	-	C	D		0	Y
9020599	-	A	A		0	
9221408	-	C	A		0	
9402944	-	A	A		0	
9392789	-	A	D		0	Y
9379708	-	A	A		0	
9414543	-	C	A		0	
9440021	-	A	D		0	
9442115	-	A	-		0	
9442118	-	A	A		0	Y
9536515	H	C	-		0	
9536151	-	A	D		0 Y	Y
9577181	-	A	D		0	Y
9683231	-	A	A		0 Y	Y
9652652	-	A	D		0	Y
9667460	-	A	D		0	Y

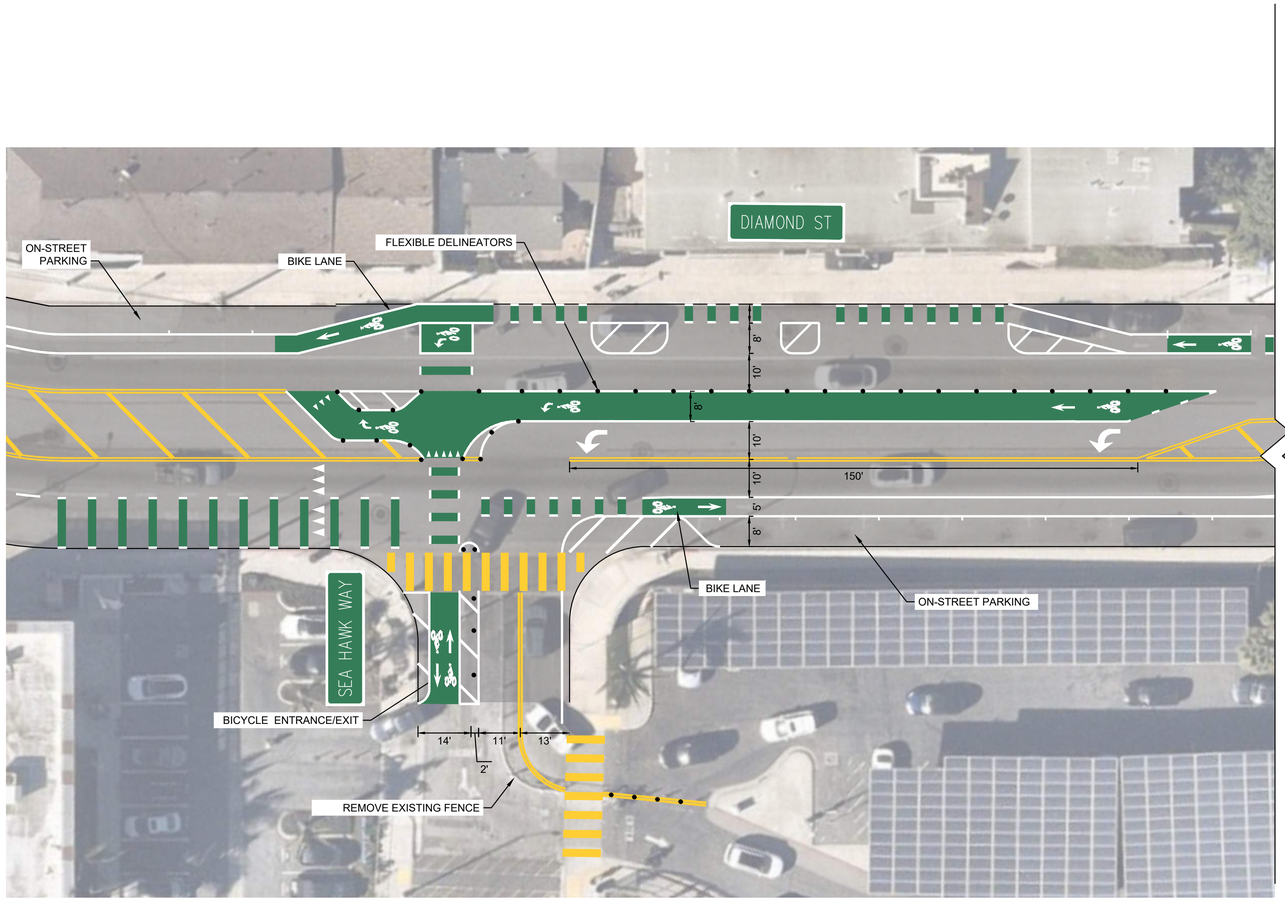
CASE_ID	MOTORCYCLE_ACCIDENT	TRUCK_ACCIDENT	NOT_PRIVATE_PROPERTY	ALCOHOL_INVOLVED	STWD_VEHTYPE_AT_FAULT
8968738			Y		D
9020599			Y		A
9221408			Y		A
9402944			Y		A
9392789			Y		L
9379708			Y		D
9414543			Y		A
9440021			Y		A
9442115			Y		A
9442118			Y		L
9536515	Y		Y	Y	C
9536151			Y		L
9577181			Y		A
9683231			Y		L
9652652			Y		A
9667460			Y		A
			Y		A

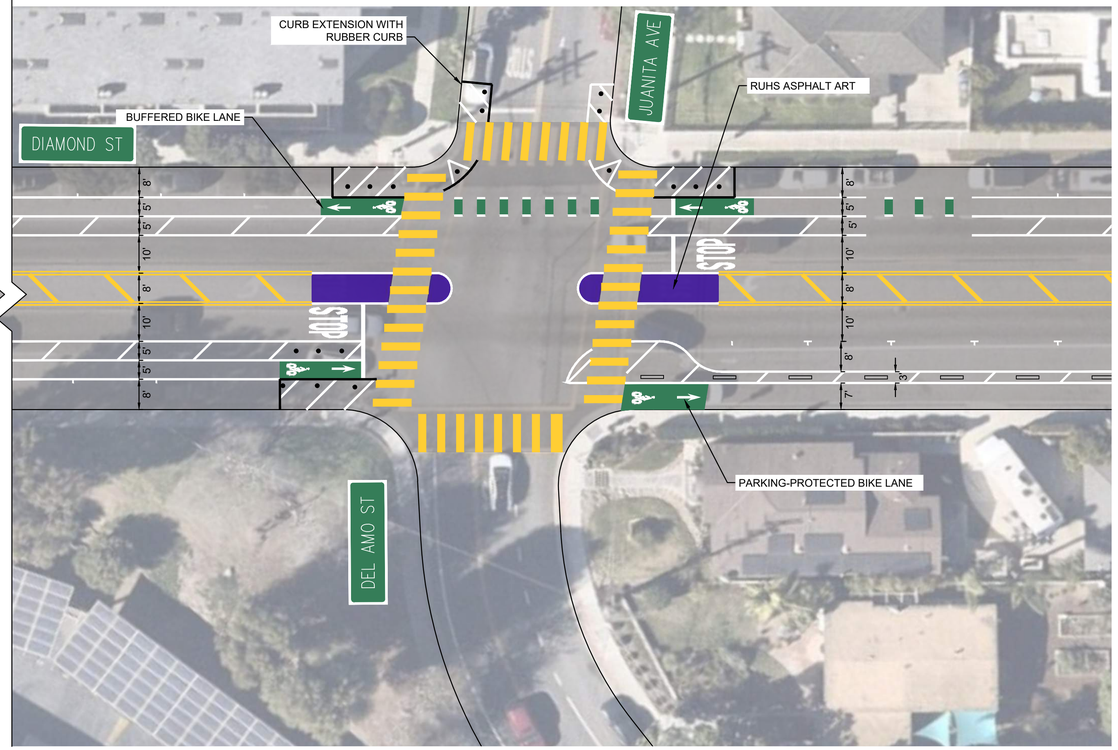
CASE_ID	CHP_VEHTYPE_AT_FAULT	COUNT_SEVERE_INJ	COUNT_VISIBLE_INJ	COUNT_COMPLAINT_PAIN	COUNT_PED_KILLED
8968738	22	0	0	1	0
9020599	1	0	0	1	0
9221408	1	0	2	0	0
9402944	1	0	1	2	0
9392789	4	0	0	1	0
9379708	22	0	0	1	0
9414543	7	0	0	1	0
9440021	1	0	0	1	0
9442115	1	0	0	1	0
9442118	4	0	1	0	0
9536515	2	0	1	0	0
9536151	4	0	0	1	0
9577181	1	0	1	0	0
9683231	4	0	1	0	0
9652652	7	0	1	0	0
9667460	1	0	1	0	0
	7	0	0	0	0

CASE_ID	COUNT_PED_INJURED	COUNT_BICYCLIST_KILLED	COUNT_BICYCLIST_INJURED	COUNT_MC_KILLED	COUNT_MC_INJURED
8968738	0	0	1	0	0
9020599	0	0	0	0	0
9221408	0	0	0	0	0
9402944	0	0	0	0	0
9392789	0	0	1	0	0
9379708	0	0	0	0	0
9414543	0	0	0	0	0
9440021	0	0	0	0	0
9442115	0	0	0	0	0
9442118	0	0	1	0	0
9536515	0	0	0	0	1
9536151	1	0	0	0	0
9577181	0	0	1	0	0
9683231	1	0	0	0	0
9652652	0	0	1	0	0
9667460	0	0	1	0	0
	0	0	0	0	0

CASE_ID	PRIMARY_RAMP	SECONDARY_RAMP	LATITUDE	LONGITUDE	COUNTY	CITY	POINT_X	POINT_Y
8968738	-	-			LOS ANGELES	REDONDO BEACH	-118.38155	33.8494911
9020599	-	-			LOS ANGELES	REDONDO BEACH	-118.38726	33.8449707
9221408	-	-			LOS ANGELES	REDONDO BEACH	-118.38726	33.8449707
9402944	-	-			LOS ANGELES	REDONDO BEACH	-118.37879	33.8516388
9392789	-	-	33.84568024	-118.3863907	LOS ANGELES	REDONDO BEACH	-118.38638	33.8456955
9379708	-	-	33.84497833	-118.3872833	LOS ANGELES	REDONDO BEACH	-118.38726	33.8449821
9414543	-	-	33.84497833	-118.3872833	LOS ANGELES	REDONDO BEACH	-118.38726	33.8449821
9440021	-	-	33.85174942	-118.3786697	LOS ANGELES	REDONDO BEACH	-118.3789	33.8517303
9442115	-	-	33.8502388	-118.3805313	LOS ANGELES	REDONDO BEACH	-118.38053	33.8502884
9442118	-	-	33.84568024	-118.2863922	LOS ANGELES	REDONDO BEACH	-118.38636	33.8457184
9536515	-	-			LOS ANGELES	REDONDO BEACH	-118.38726	33.8449821
9536151	-	-	33.84497833	-118.3872833	LOS ANGELES	REDONDO BEACH	-118.38726	33.8449821
9577181	-	-			LOS ANGELES	REDONDO BEACH	-118.38319	33.8481789
9683231	-	-	33.84878922	-118.3824692	LOS ANGELES	REDONDO BEACH	-118.38246	33.8487473
9652652	-	-			LOS ANGELES	REDONDO BEACH	-118.38518	33.8466797
9667460	-	-	33.84674072	-118.3852463	LOS ANGELES	REDONDO BEACH	-118.38518	33.8466797
					LOS ANGELES	REDONDO BEACH		

E. DIAMOND STREET PREFERRED DESIGN AND PROPOSED TREATMENTS





0 20' 40' 60'

SCALE IN FEET

TOOLE DESIGN

THIS IS A PRELIMINARY CONCEPT. FIELD VERIFICATION, SITE CONDITION ASSESSMENTS, ENGINEERING ANALYSIS AND DESIGN ARE NECESSARY PRIOR TO IMPLEMENTING ANY OF THE RECOMMENDATIONS CONTAINED HEREIN.

PREFERRED ALTERNATIVE

REDONDO UNION HIGH ACCESS STUDY AND DESIGN
10/14/25

PRELIMINARY CONCEPT - NOT FOR CONSTRUCTION

A BIKE LANE, NO BUFFER

B PARKING-PROTECTED BIKE LANE

C BUFFERED BIKE LANE

D BICYCLE PARKING

E CURB EXTENSIONS AND ASPHALT ART AT ALL-WAY STOP INTERSECTIONS

F BICYCLE CONFLICT MARKINGS

TOOLE DESIGN

THIS IS A PRELIMINARY CONCEPT. FIELD VERIFICATION, SITE CONDITION ASSESSMENTS, ENGINEERING ANALYSIS AND DESIGN ARE NECESSARY PRIOR TO IMPLEMENTING ANY OF THE RECOMMENDATIONS CONTAINED HEREIN.

PROPOSED TREATMENTS

REDONDO UNION HIGH ACCESS STUDY AND DESIGN

PRELIMINARY CONCEPT - NOT FOR CONSTRUCTION

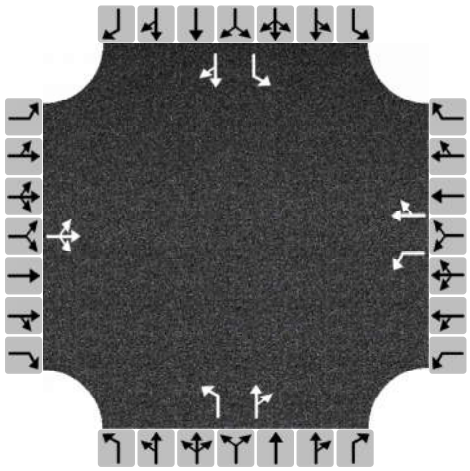
F. HCS REPORT EXISTING AND PROPOSED CONDITIONS - DEL AMO STREET/ N. JUANITA AVENUE AND DIAMOND STREET

HCS All-Way Stop Control Report

General and Site Information

Analyst	EK
Agency/Co.	Toole Design
Date Performed	3/17/2025
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Existing AM Peak
Project Description	Redondo Union High Access Study an...
Intersection	Diamond St at Del Amo St/Juanita Ave
Jurisdiction	Redondo Beach
East/West Street	Del Amo St/Juanita Ave
North/South Street	Diamond St
Peak Hour Factor	0.70

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	6	72	43	123	36	6	22	145	131	24	201	11
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		L	TR		L	TR	
Flow Rate, v (veh/h)	174			176	60		32	396		34	304	
Percent Heavy Vehicles	2			2	2		2	2		2	2	
Initial Departure Headway, h_d (s)	3.20			3.20	3.20		3.20	3.20		3.20	3.20	
Initial Degree of Utilization, x	0.154			0.157	0.054		0.028	0.352		0.031	0.270	
Final Departure Headway, h_d (s)	7.13			7.74	7.13		7.15	6.30		7.28	6.73	
Final Degree of Utilization, x	0.344			0.379	0.119		0.063	0.693		0.070	0.569	
Move-Up Time, m (s)	2.0			2.3	2.3		2.3	2.3		2.3	2.3	
Service Time, t_s (s)	5.13			5.44	4.83		4.85	4.00		4.98	4.43	

Capacity, Delay and Level of Service

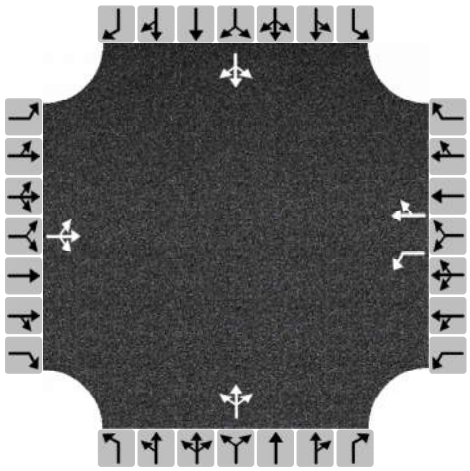
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		L	TR		L	TR	
Flow Rate, v (veh/h)	174			176	60		32	396		34	304	
Capacity (veh/h)	505			465	505		504	571		495	535	
95% Queue Length, Q_{95} (veh)	1.6			1.8	0.4		0.2	6.3		0.2	3.8	
95% Queue Length, Q_{95} (ft)	40.6			45.7	10.2		5.1	160.0		5.1	96.5	
Control Delay (s/veh)	13.9			15.1	10.8		10.3	22.9		10.5	18.2	
Level of Service, LOS	B			C	B		B	C		B	C	
Approach Delay (s/veh) | LOS	13.9	B		14.0	B		22.0	C		17.4	C	
Intersection Delay (s/veh) | LOS	17.9						C					

HCS All-Way Stop Control Report

General and Site Information

Analyst	CB
Agency/Co.	Toole Design
Date Performed	3/25/2025
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Rerouting AM Peak
Project Description	Redondo Union High Access Study an...
Intersection	Diamond St at Del Amo St/Juanita Ave
Jurisdiction	Redondo Beach
East/West Street	Del Amo St/Juanita Ave
North/South Street	Diamond St
Peak Hour Factor	0.70

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	6	72	43	207	36	76	22	41	96	24	201	11
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	174			297	161		228			339		
Percent Heavy Vehicles	2			2	2		2			2		
Initial Departure Headway, h_d (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.154			0.264	0.143		0.203			0.301		
Final Departure Headway, h_d (s)	6.65			7.23	6.23		6.29			6.33		
Final Degree of Utilization, x	0.321			0.596	0.278		0.399			0.595		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, t_s (s)	4.65			4.93	3.93		4.29			4.33		

Capacity, Delay and Level of Service

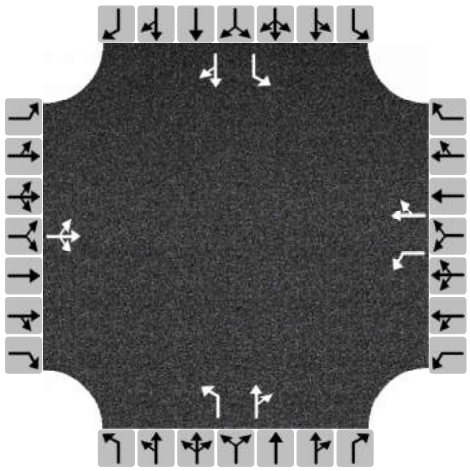
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	174			297	161		228			339		
Capacity (veh/h)	541			498	578		572			569		
95% Queue Length, Q_{95} (veh)	1.4			4.3	1.1		2.0			4.3		
95% Queue Length, Q_{95} (ft)	35.6			109.2	27.9		50.8			109.2		
Control Delay (s/veh)	12.8			20.4	11.3		13.4			18.5		
Level of Service, LOS	B			C	B		B			C		
Approach Delay (s/veh) | LOS	12.8	B		17.2	C		13.4	B		18.5	C	
Intersection Delay (s/veh) | LOS	16.2						C					

HCS All-Way Stop Control Report

General and Site Information

Analyst	CB
Agency/Co.	Toole Design
Date Performed	3/25/2025
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Existing PM Peak
Project Description	Redondo Union High Access Study an...
Intersection	Diamond St at Del Amo St/Juanita Ave
Jurisdiction	Redondo Beach
East/West Street	Del Amo St/Juanita Ave
North/South Street	Diamond St
Peak Hour Factor	0.70

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	9	46	18	120	50	20	9	100	124	17	127	15
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		L	TR		L	TR	
Flow Rate, v (veh/h)	105			172	100		13	321		24	204	
Percent Heavy Vehicles	2			2	2		2	2		2	2	
Initial Departure Headway, h_d (s)	3.20			3.20	3.20		3.20	3.20		3.20	3.20	
Initial Degree of Utilization, x	0.093			0.153	0.089		0.011	0.286		0.022	0.181	
Final Departure Headway, h_d (s)	6.44			6.78	6.07		6.57	5.67		6.70	6.12	
Final Degree of Utilization, x	0.187			0.324	0.169		0.024	0.506		0.045	0.346	
Move-Up Time, m (s)	2.0			2.3	2.3		2.3	2.3		2.3	2.3	
Service Time, t_s (s)	4.44			4.48	3.77		4.27	3.37		4.40	3.82	

Capacity, Delay and Level of Service

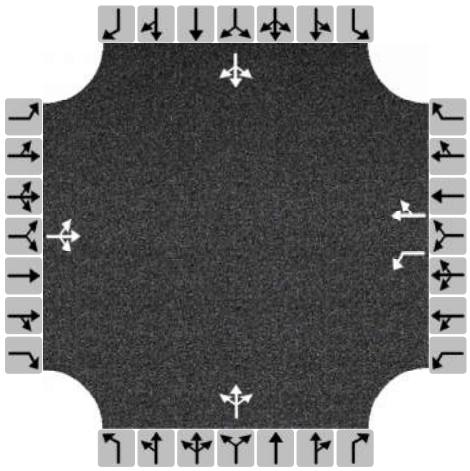
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		L	TR		L	TR	
Flow Rate, v (veh/h)	105			172	100		13	321		24	204	
Capacity (veh/h)	559			531	593		548	635		537	588	
95% Queue Length, Q_{95} (veh)	0.7			1.4	0.6		0.1	3.0		0.1	1.6	
95% Queue Length, Q_{95} (ft)	17.8			35.6	15.2		2.5	76.2		2.5	40.6	
Control Delay (s/veh)	10.9			12.7	10.0		9.4	14.2		9.7	12.1	
Level of Service, LOS	B			B	B		A	B		A	B	
Approach Delay (s/veh) | LOS	10.9	B		11.7	B		14.0	B		11.8	B	
Intersection Delay (s/veh) | LOS	12.5						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	CB
Agency/Co.	Toole Design
Date Performed	3/25/2025
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Rerouting PM Peak
Project Description	Redondo Union High Access Study an...
Intersection	Diamond St at Del Amo St/Juanita Ave
Jurisdiction	Redondo Beach
East/West Street	Del Amo St/Juanita Ave
North/South Street	Diamond St
Peak Hour Factor	0.70

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	9	46	18	172	50	50	9	56	109	17	127	15
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	105			247	143		250			228		
Percent Heavy Vehicles	2			2	2		2			2		
Initial Departure Headway, h_d (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.093			0.219	0.128		0.222			0.203		
Final Departure Headway, h_d (s)	5.97			6.56	5.70		5.36			5.70		
Final Degree of Utilization, x	0.174			0.449	0.227		0.372			0.361		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, t_s (s)	3.97			4.26	3.40		3.36			3.70		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	105			247	143		250			228		
Capacity (veh/h)	603			549	632		672			631		
95% Queue Length, Q_{95} (veh)	0.6			2.4	0.9		1.8			1.7		
95% Queue Length, Q_{95} (ft)	15.2			61.0	22.9		45.7			43.2		
Control Delay (s/veh)	10.2			14.6	10.1		11.5			11.9		
Level of Service, LOS	B			B	B		B			B		
Approach Delay (s/veh) | LOS	10.2	B		12.9	B		11.5	B		11.9	B	
Intersection Delay (s/veh) | LOS	12.0						B					

G. HCS REPORT EXISTING AND PROPOSED CONDITIONS - FRANCISCA AVENUE AND DIAMOND ST

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	204	5	22	183	15	1	0	0	12	0	21
Future Vol, veh/h	15	204	5	22	183	15	1	0	0	12	0	21
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	304	7	33	273	22	1	0	0	18	0	31
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay, s/veh	11	10.6	8.8	8.6
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	100%	0%	100%	0%	36%
Vol Thru, %	0%	0%	98%	0%	92%	0%
Vol Right, %	0%	0%	2%	0%	8%	64%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	15	209	22	198	33
LT Vol	1	15	0	22	0	12
Through Vol	0	0	204	0	183	0
RT Vol	0	0	5	0	15	21
Lane Flow Rate	1	22	312	33	296	49
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.002	0.034	0.425	0.05	0.4	0.07
Departure Headway (Hd)	5.743	5.428	4.909	5.431	4.875	5.142
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	622	661	736	661	739	696
Service Time	3.79	3.15	2.631	3.152	2.596	3.179
HCM Lane V/C Ratio	0.002	0.033	0.424	0.05	0.401	0.07
HCM Control Delay, s/veh	8.8	8.3	11.2	8.4	10.8	8.6
HCM Lane LOS	A	A	B	A	B	A
HCM 95th-tile Q	0	0.1	2.1	0.2	1.9	0.2

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	204	5	22	183	15	1	0	0	12	0	21
Future Vol, veh/h	15	204	5	22	183	15	1	0	0	12	0	21
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	304	7	33	273	22	1	0	0	18	0	31
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.4	10.3	8.7	8.5
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	7%	10%	36%
Vol Thru, %	0%	91%	83%	0%
Vol Right, %	0%	2%	7%	64%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	224	220	33
LT Vol	1	15	22	12
Through Vol	0	204	183	0
RT Vol	0	5	15	21
Lane Flow Rate	1	334	328	49
Geometry Grp	1	1	1	1
Degree of Util (X)	0.002	0.409	0.4	0.069
Departure Headway (Hd)	5.656	4.4	4.386	5.056
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	631	819	821	707
Service Time	3.703	2.419	2.405	3.097
HCM Lane V/C Ratio	0.002	0.408	0.4	0.069
HCM Control Delay, s/veh	8.7	10.4	10.3	8.5
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0	2	1.9	0.2

Intersection	
Intersection Delay, s/veh	21
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	145	131	24	201	11	123	36	6	6	72	43
Future Vol, veh/h	22	145	131	24	201	11	123	36	6	6	72	43
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	216	196	36	300	16	184	54	9	9	107	64
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	25.5	20.4	18.5	14.3
HCM LOS	D	C	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	77%	0%	7%	10%	5%
Vol Thru, %	23%	0%	49%	85%	60%
Vol Right, %	0%	100%	44%	5%	36%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	159	6	298	236	121
LT Vol	123	0	22	24	6
Through Vol	36	0	145	201	72
RT Vol	0	6	131	11	43
Lane Flow Rate	237	9	445	352	181
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.517	0.017	0.752	0.636	0.363
Departure Headway (Hd)	7.837	6.72	6.09	6.496	7.233
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	458	528	592	553	500
Service Time	5.631	4.514	4.177	4.589	5.233
HCM Lane V/C Ratio	0.517	0.017	0.752	0.637	0.362
HCM Control Delay, s/veh	18.8	9.6	25.5	20.4	14.3
HCM Lane LOS	C	A	D	C	B
HCM 95th-tile Q	2.9	0.1	6.6	4.4	1.6

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	196	1	9	169	16	4	0	14	11	0	22
Future Vol, veh/h	15	196	1	9	169	16	4	0	14	11	0	22
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	284	1	13	245	23	6	0	20	16	0	32
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay, s/veh	10.6	10.4	8.2	8.4
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	22%	100%	0%	100%	0%	33%
Vol Thru, %	0%	0%	99%	0%	91%	0%
Vol Right, %	78%	0%	1%	0%	9%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	15	197	9	185	33
LT Vol	4	15	0	9	0	11
Through Vol	0	0	196	0	169	0
RT Vol	14	0	1	0	16	22
Lane Flow Rate	26	22	286	13	268	48
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.036	0.033	0.392	0.02	0.366	0.067
Departure Headway (Hd)	4.967	5.447	4.941	5.473	4.91	5.019
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	718	658	728	655	732	712
Service Time	3.014	3.175	2.669	3.201	2.638	3.062
HCM Lane V/C Ratio	0.036	0.033	0.393	0.02	0.366	0.067
HCM Control Delay, s/veh	8.2	8.4	10.8	8.3	10.5	8.4
HCM Lane LOS	A	A	B	A	B	A
HCM 95th-tile Q	0.1	0.1	1.9	0.1	1.7	0.2

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	100	124	17	127	15	120	50	20	9	46	18
Future Vol, veh/h	9	100	124	17	127	15	120	50	20	9	46	18
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	145	180	25	184	22	174	72	29	13	67	26
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	14.5	12.2	14.5	11.4
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	71%	0%	100%	0%	100%	0%	12%
Vol Thru, %	29%	0%	0%	45%	0%	89%	63%
Vol Right, %	0%	100%	0%	55%	0%	11%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	20	9	224	17	142	73
LT Vol	120	0	9	0	17	0	9
Through Vol	50	0	0	100	0	127	46
RT Vol	0	20	0	124	0	15	18
Lane Flow Rate	246	29	13	325	25	206	106
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.461	0.046	0.024	0.521	0.047	0.357	0.196
Departure Headway (Hd)	6.73	5.663	6.683	5.781	6.829	6.245	6.677
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	535	629	534	620	522	574	534
Service Time	4.492	3.424	4.446	3.544	4.598	4.013	4.758
HCM Lane V/C Ratio	0.46	0.046	0.024	0.524	0.048	0.359	0.199
HCM Control Delay, s/veh	15.2	8.7	9.6	14.7	9.9	12.5	11.4
HCM Lane LOS	C	A	A	B	A	B	B
HCM 95th-tile Q	2.4	0.1	0.1	3	0.1	1.6	0.7

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	196	1	9	169	16	4	0	14	11	0	22
Future Vol, veh/h	15	196	1	9	169	16	4	0	14	11	0	22
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	284	1	13	245	23	6	0	20	16	0	32
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.1	9.7	8.1	8.3
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	7%	5%	33%
Vol Thru, %	0%	92%	87%	0%
Vol Right, %	78%	0%	8%	67%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	212	194	33
LT Vol	4	15	9	11
Through Vol	0	196	169	0
RT Vol	14	1	16	22
Lane Flow Rate	26	307	281	48
Geometry Grp	1	1	1	1
Degree of Util (X)	0.035	0.377	0.343	0.065
Departure Headway (Hd)	4.869	4.42	4.397	4.924
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	734	814	818	726
Service Time	2.911	2.441	2.419	2.963
HCM Lane V/C Ratio	0.035	0.377	0.344	0.066
HCM Control Delay, s/veh	8.1	10.1	9.7	8.3
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.1	1.8	1.5	0.2

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	100	124	17	127	15	120	50	20	9	46	18
Future Vol, veh/h	9	100	124	17	127	15	120	50	20	9	46	18
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	145	180	25	184	22	174	72	29	13	67	26
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	13.2	11.9	14.1	10.4
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	71%	0%	4%	11%	12%
Vol Thru, %	29%	0%	43%	80%	63%
Vol Right, %	0%	100%	53%	9%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	20	233	159	73
LT Vol	120	0	9	17	9
Through Vol	50	0	100	127	46
RT Vol	0	20	124	15	18
Lane Flow Rate	246	29	338	230	106
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.452	0.045	0.489	0.361	0.178
Departure Headway (Hd)	6.601	5.531	5.21	5.638	6.045
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	544	645	689	634	590
Service Time	4.358	3.288	3.268	3.704	4.119
HCM Lane V/C Ratio	0.452	0.045	0.491	0.363	0.18
HCM Control Delay, s/veh	14.7	8.6	13.2	11.9	10.4
HCM Lane LOS	B	A	B	B	B
HCM 95th-tile Q	2.3	0.1	2.7	1.6	0.6

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	145	131	24	201	11	123	36	6	6	72	43
Future Vol, veh/h	22	145	131	24	201	11	123	36	6	6	72	43
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	216	196	36	300	16	184	54	9	9	107	64
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	26.4	20	19	15.7
HCM LOS	D	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	77%	0%	100%	0%	100%	0%	5%
Vol Thru, %	23%	0%	0%	53%	0%	95%	60%
Vol Right, %	0%	100%	0%	47%	0%	5%	36%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	159	6	22	276	24	212	121
LT Vol	123	0	22	0	24	0	6
Through Vol	36	0	0	145	0	201	72
RT Vol	0	6	0	131	0	11	43
Lane Flow Rate	237	9	33	412	36	316	181
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.526	0.017	0.068	0.76	0.076	0.624	0.388
Departure Headway (Hd)	7.975	6.859	7.494	6.641	7.65	7.099	7.725
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	451	519	476	544	467	506	464
Service Time	5.753	4.637	5.265	4.411	5.424	4.873	5.816
HCM Lane V/C Ratio	0.525	0.017	0.069	0.757	0.077	0.625	0.39
HCM Control Delay, s/veh	19.3	9.8	10.8	27.6	11.1	21	15.7
HCM Lane LOS	C	A	B	D	B	C	C
HCM 95th-tile Q	3	0.1	0.2	6.7	0.2	4.2	1.8

H. STAKEHOLDER ENGAGEMENT SUMMARY

TOOLE DESIGN

742 SOUTH HILL STREET
SUITE 600
LOS ANGELES, CA 90014

213.257.8680
TOOLEDESIGN.COM

MEMORANDUM

January 17, 2025

To: Ryan Liu
Organization: City of Redondo Beach
From: Sofia Pollmann, PE
Project: Redondo Union High School Access Study and Design

Re: Stakeholder Meeting Summary

Attendees

1/8/2025 – General Stakeholder Meeting

Ryan Liu – Redondo Beach

Sofia Pollmann – Toole Design

Adam Vest – Toole Design

Nikki Vasquez – PTA/Resident

Annette Alpern – Deputy Superintendent/RBUSD

Brian Regan – Division Chief RBFD

Liam Wash – South Bay Bicycle Coalition.

Chuck Prestia – RBPD

1/16/2025 – Student Stakeholder Meeting

Ryan Liu

Sofia Pollmann

Vincent Huynh – RUHS Student, takes bus and is driven by his parent to school

Kaia Weiss – RUHS Student, walks to school

Kick-off Question: What would make Diamond Street a safer, more enjoyable place to travel?

Improvements for Diamond Street Safety: 🚴 Protected bike lanes 🚸 Safer crossings 🌳 Beautification

Takeaways

Stop Signs

- Nikki highlighted the issue of teenagers not stopping at stop signs, causing anxiety for drivers.
- Participants discussed the effectiveness of stop signs and the behavior of teenagers at intersections. The consensus was that the main issue is not the lack of stop signs but the teenagers' disregard for them, leading to potential accidents and conflicts (though in many of the crashes reported, the driver was at fault and the person biking ended up injured)

Conflicts

- Participants discussed specific concerns along the study area, including the intersection **of** Del Amo and Diamond Street. **S**eparating bike and car traffic was mentioned as a potential solution.
- Nikki suggested a crossing guard might help with conflicts at Del Amo and Diamond, but Chuck mentioned that crossing guards are prioritized for elementary and middle schools.
- Students go to Starbucks after school and bike and park on the sidewalk causing bike and pedestrian conflicts.

Bond Measure

School District Plans

- Annette discussed the bond measure that passed, which includes plans to convert a portion of the Redondo Union High School campus (Francisca Ave) into a vehicular turn-around drop-off area. This is expected to alleviate some of the traffic congestion on Diamond Street.
- The proposed turn-around drop-off area will involve converting part of the sidewalk to create a larger space for vehicles to enter, turn around, and exit. This will also include restriping parking spaces for staff and creating a designated drop-off zone for parents.

Traffic Circulation

- Annette shared her personal experience of navigating the school area and suggested that the new drop-off zone would help families coming from the north or south to use Pacific Coast Highway for drop-offs, reducing congestion on Diamond Street.
- The school board would need to approve any alternative proposals for the turn-around drop-off area. While the current plan is written into the facility master plan, the board is open to considering other options if presented.
- Annette mentioned that changes to the circulation on Sea Hawk Way, such as making it one-way during certain hours, was one of their goals already.

Bike Parking

- Annette mentioned that the school district is open to adding more bike parking to reduce conflicts between bikes and vehicles and the school would like to keep bike parking around the perimeter of the campus for safety reasons.

Student Input

Beautification

- Updating the outdated fences bordering the sidewalk/parking lot on Diamond St. and repainting the wall.
- The parking lot by the pool entrance also needs beautification.
- Adding more trees along Diamond Street would enhance the area

Pick-Up and Drop-Off Areas

- The Del Amo entrance to the school parking lot is less congested and easier to navigate.
- On game days when the parking lot is full, walking through the parking lot is tricky.
- The students suggested creating additional drop-off locations, particularly near the faculty parking lot (Francisca Ave), to alleviate congestion and improve traffic flow.

E-Bike Safety Concerns

- The students shared that while some E-bike drivers are responsible, others are reckless, causing safety concerns for pedestrians and drivers.
- While E-bikes can be an issue due to reckless riders, the main issue with E-bikes is the overcrowding and traffic congestion caused by having a single central parking spot for E-bikes. Vincent suggested creating multiple parking spots to distribute the traffic and reduce congestion.

Bus Transportation Issues

- Long lines for the express bus are due to its limited availability and the fact that it bypasses the transit center, making it the fastest option for students who live far from the school. Vincent mentioned that the normal bus route takes an extra 20 minutes due to the transit center stop.
- Recommendation to add more than one express bus to accommodate the high demand and reduce the long lines. Vincent noted that this would help students who have classes on the other side of the school and find it difficult to make it to the express bus stop on time.
- Kaia mentioned that her friend's schedule is dictated by the bus schedule, and she sometimes has to miss tutoring sessions to ensure she catches the express bus.
- There is a need for better bus transportation options to accommodate students' schedules.

Parking Lot Challenges

- The students highlighted issues with the parking lot near the pool entrance, including difficulty navigating when crowded and the need for an additional entrance and exit to improve traffic flow.
- Kaia observed that cars often double park in the parking lot, which further complicates navigation and contributes to congestion.

Speeding and Crashes

- The students mentioned speeding issues, particularly on Juanita and downhill towards PCH.
- E-bike riders tend to speed downhill towards PCH, often performing wheelies and other stunts. This behavior creates a dangerous situation for both pedestrians and cars, especially at the crosswalk for the bus stop at Helena.

Next Steps

- Schedule Community Meeting - Encourage meeting participants to attend and share the word about the upcoming public meeting
- ~~Meet with students to gather their perspectives~~
- Focus on: limiting conflict points, improving predictability and encouraging better behavior through design.
- Think about: how to best get each user thinking about the other modes' perspective.

I. COMMUNITY ENGAGEMENT SUMMARY

Redondo Union High Access Study

Community Meeting

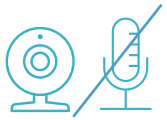
February 19, 2025

TOOLE DESIGN

REDONDO BEACH

Meeting Format

Today's meeting is being recorded



Attendee cameras are encouraged, and microphones are muted.

Questions can be submitted throughout the presentation using the chat function.

Mentimeter – interactive polling software to gather your input throughout the presentation.

TOOLE DESIGN

Agenda

- Introductions
- Project Overview
- Existing Conditions
- Concepts and Discussion
- Next Steps

TOOLE DESIGN

Introductions

Presenters

Todd Loewenstein

City of Redondo Beach

Council Member

Ryan Liu

City of Redondo Beach

Project Manager

Adam Vest

Toole Design

Principal Engineer

Sofia Pollmann

Toole Design

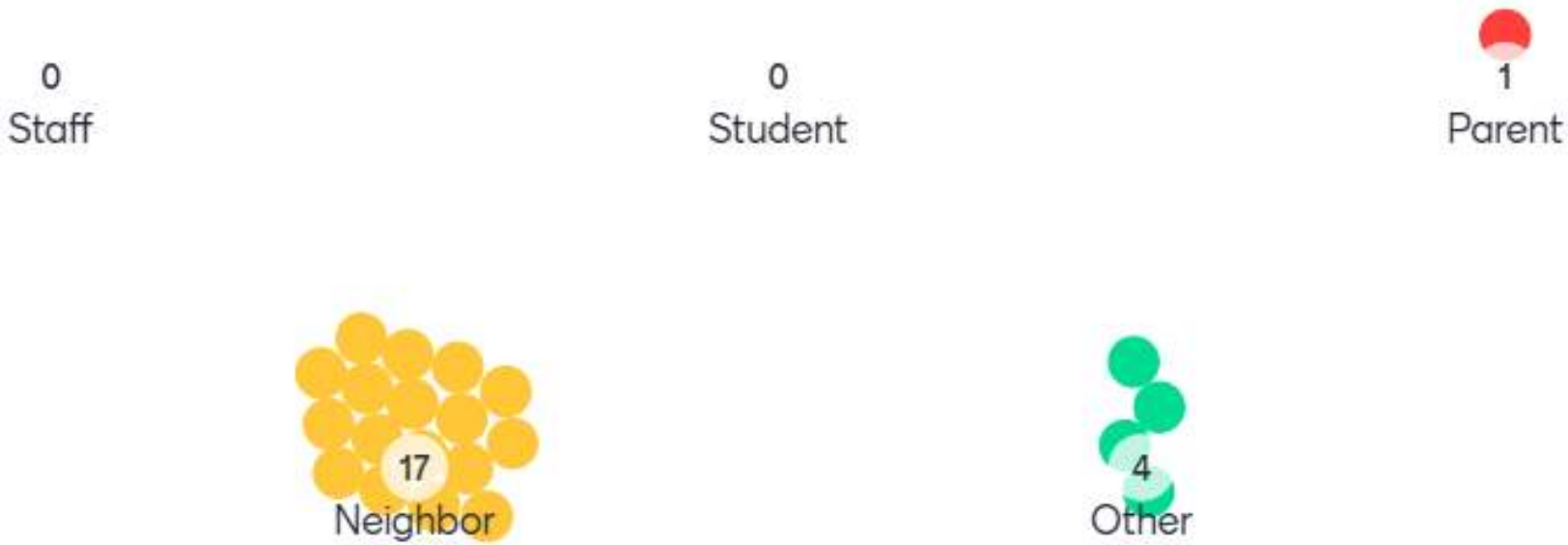
Project Manager (Engineer)

TOOLE DESIGN

Join at menti.com | use code 9536 5554

Mentimeter

What's your relation to the school? (staff, student, parent, neighbor, etc)



Join at menti.com | use code 9536 5554

Mentimeter

How do you get to and from the Redondo Union High School area?

39 responses

Project Overview

Purpose

- Gather **data and community input** on the experience of traveling in the study area
- Identify short-term treatments that create a **safer and more accessible Diamond Street**
- Provide **recommendations** on **pickup and drop-off zones** at RUHS
- Potentially **implement "quick-build" changes** as part of Diamond Street repaving.

TOOLE DESIGN

Project Timeline

TOOLE DESIGN

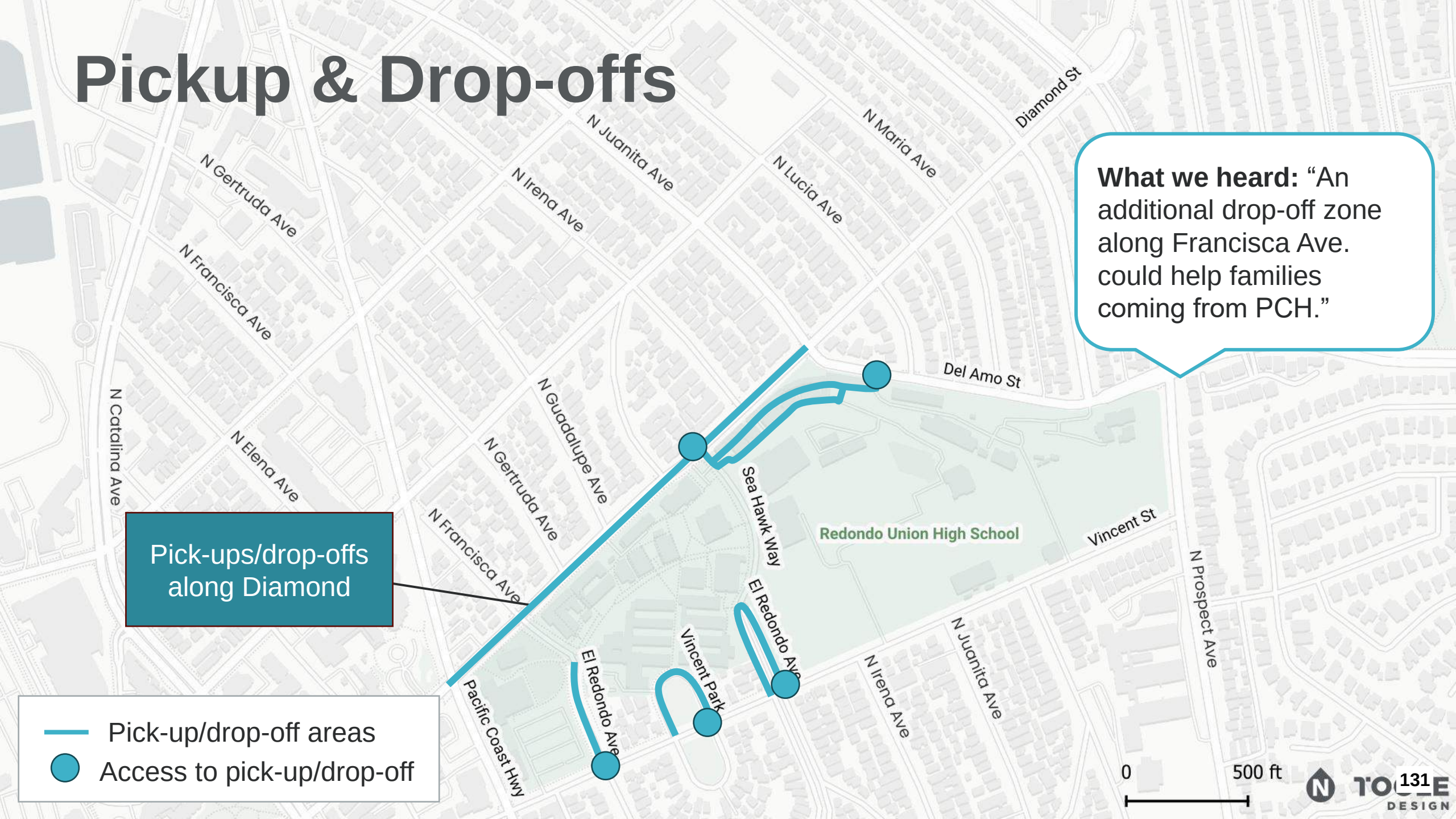
What does the RUHS area look like today?

Project Area

Diamond Street between N Helberta Avenue and N Irena Ave

TOOLE DESIGN

Pickup & Drop-offs



What we heard: "An additional drop-off zone along Francisca Ave. could help families coming from PCH."

Pick-ups/drop-offs along Diamond

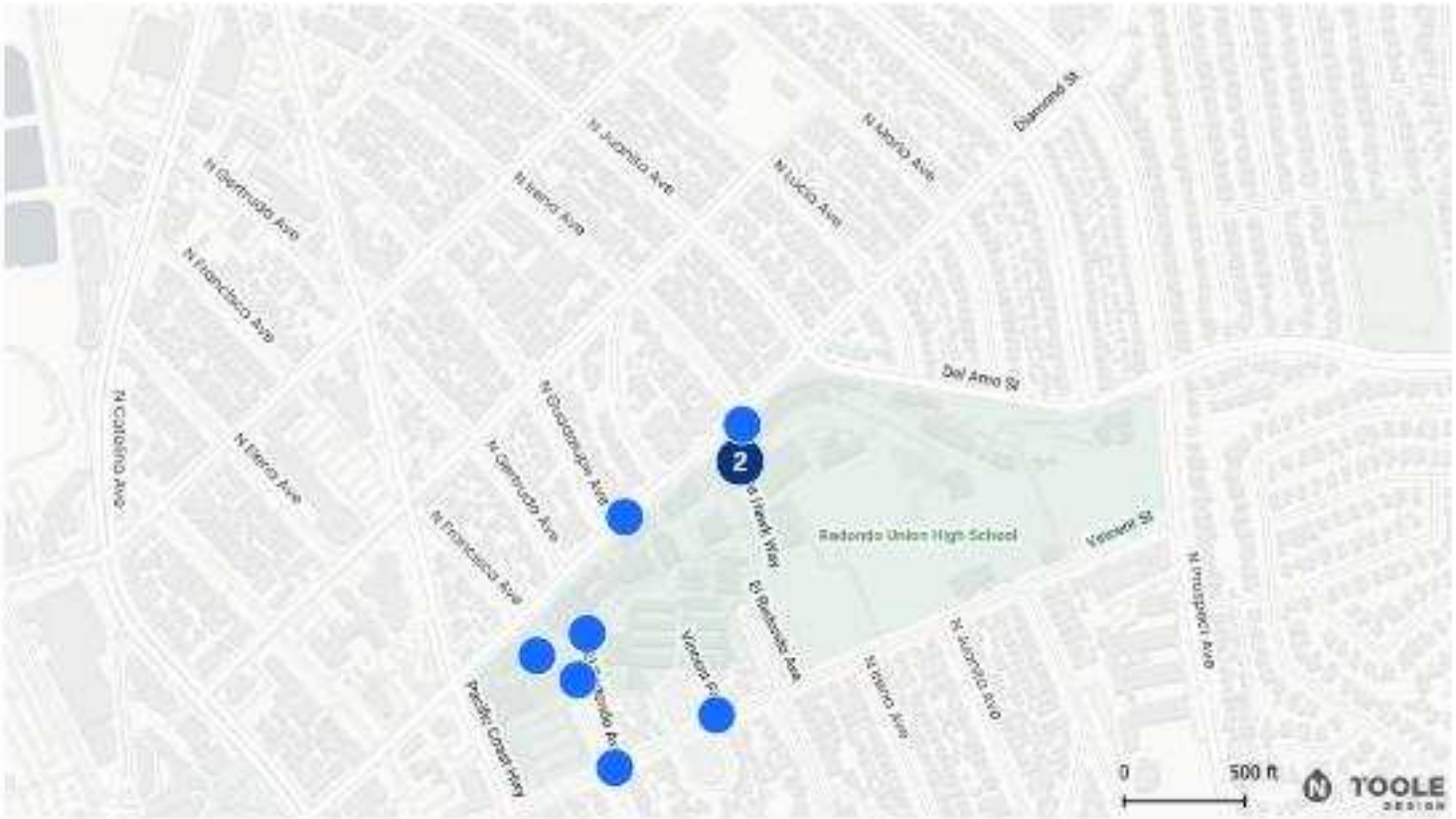
Pick-up/drop-off areas

Access to pick-up/drop-off

Join at menti.com | use code 9536 5554

Mentimeter

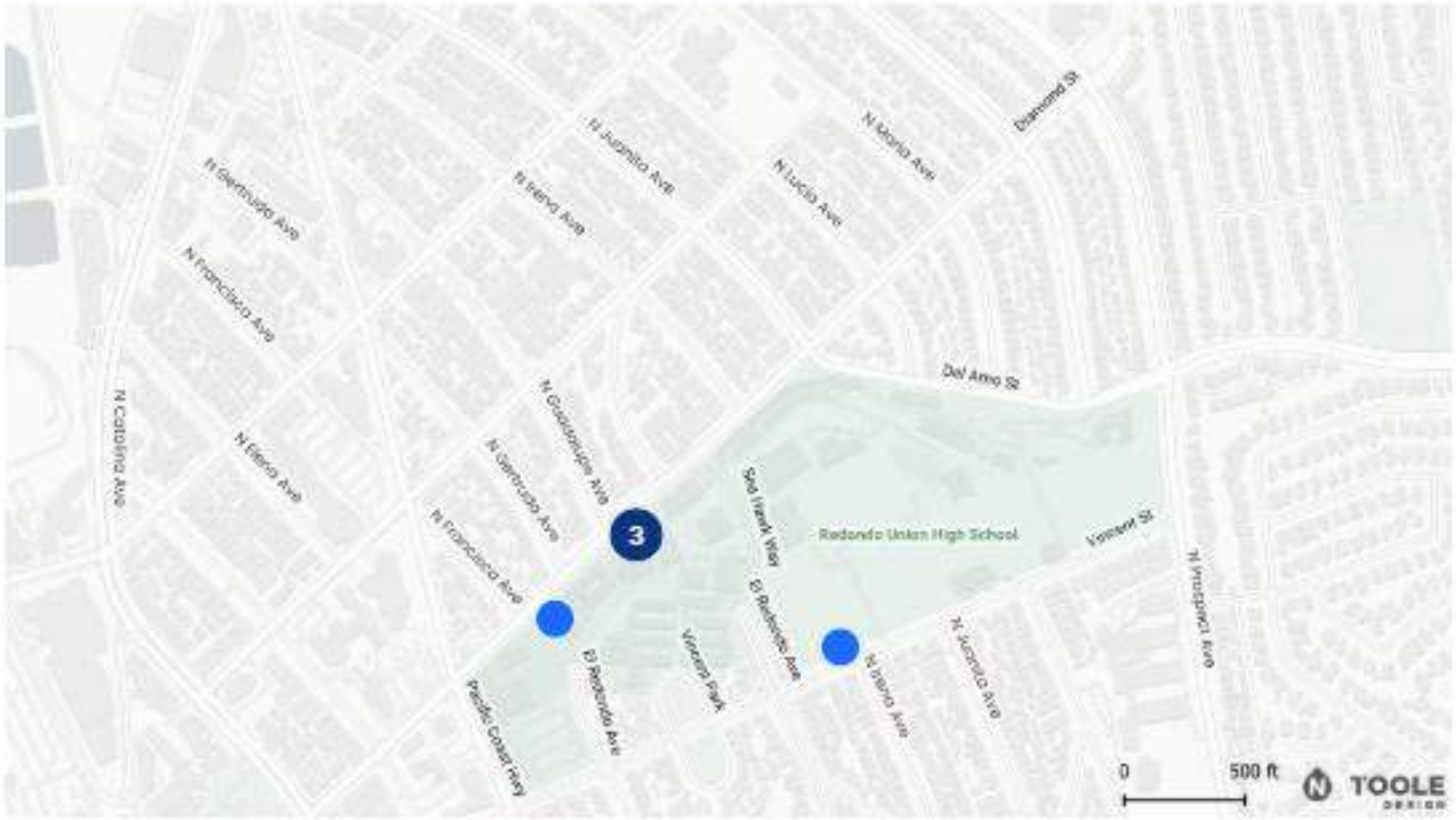
Parents: Where do you prefer to pick up students?



Join at menti.com | use code 9536 5554

Mentimeter

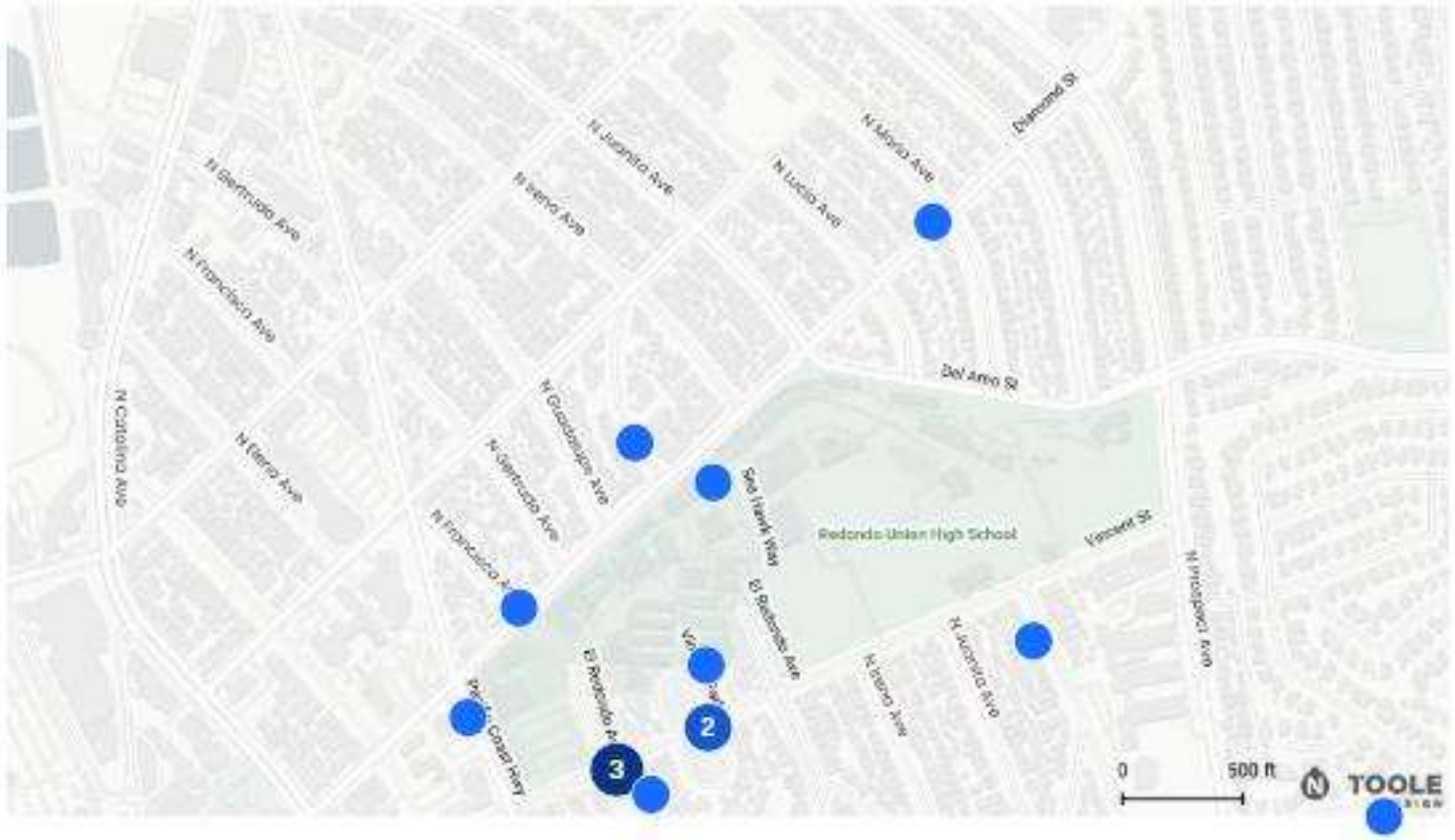
Parents: Where do you prefer to drop off students?



Join at menti.com | use code 9536 5554

Mentimeter

Neighbors: Where do you typically see traffic backups during school hours?



Bike Count

	2022 – 2023[1]	2023 – 2024[2]
Bikes	162 bikes (121 e-bikes)	~300 bikes
Enrollment	3,005 students	2,971 students

[1] 2023 Beach Cities Health District Report

[2] 2024 October Field Visit

TOOLE DESIGN

Bicycling

What we heard: “The Sea Hawk Way entrance is overcrowded with people trying to enter and exit (bikes, vehicles)”

Join at menti.com | use code 9536 5554

Mentimeter

Students biking: Where would you want to see additional bike parking?

Note: based on the results, these dots were placed by neighbors, not students

Bike Lanes

Bike Lane

\+ Designated lane for bikes

– Conflicts – parking, door zone, double parking

Buffered Bike Lane

\+ Designated lane for bikes, more space

– Conflicts – parking, double parking

Protected Bike Lane

\+ More protection, less conflicts

– Loss of parking at intersections and driveways

TOOLE DESIGN

Bike Lane

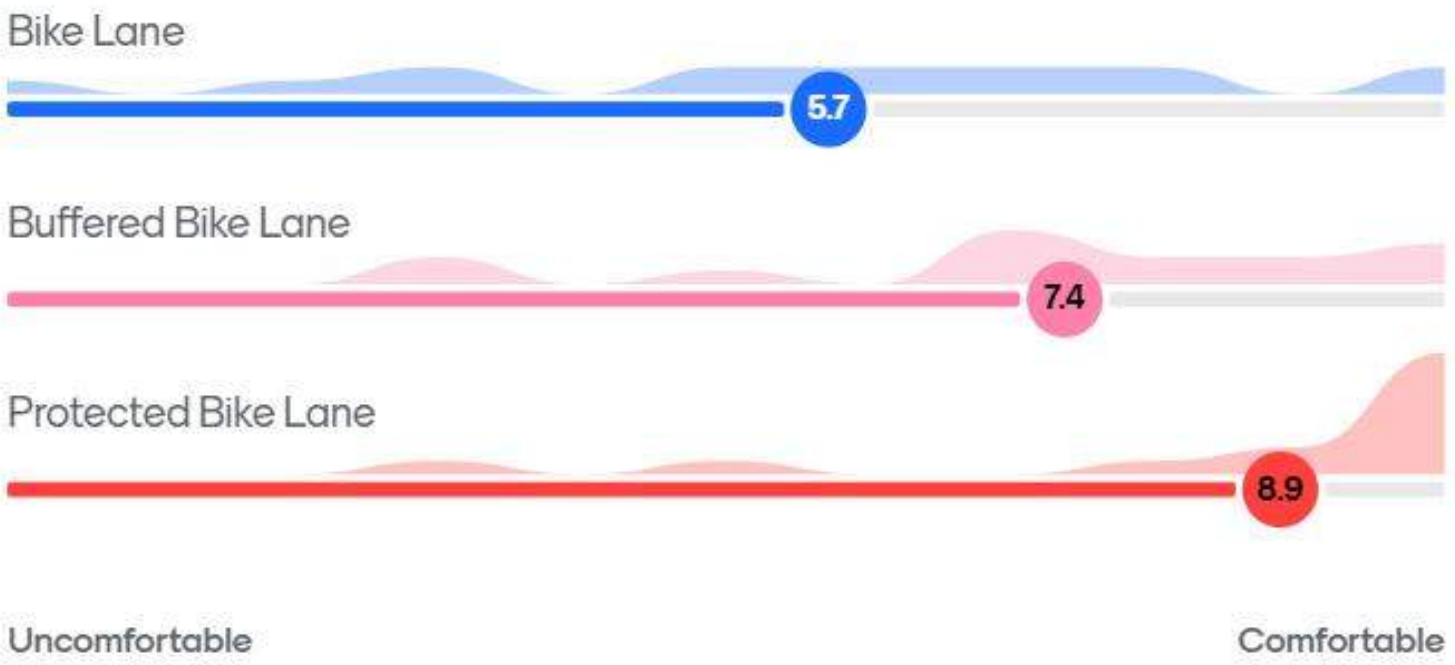
Buffered Bike Lane

Protected Bike Lane

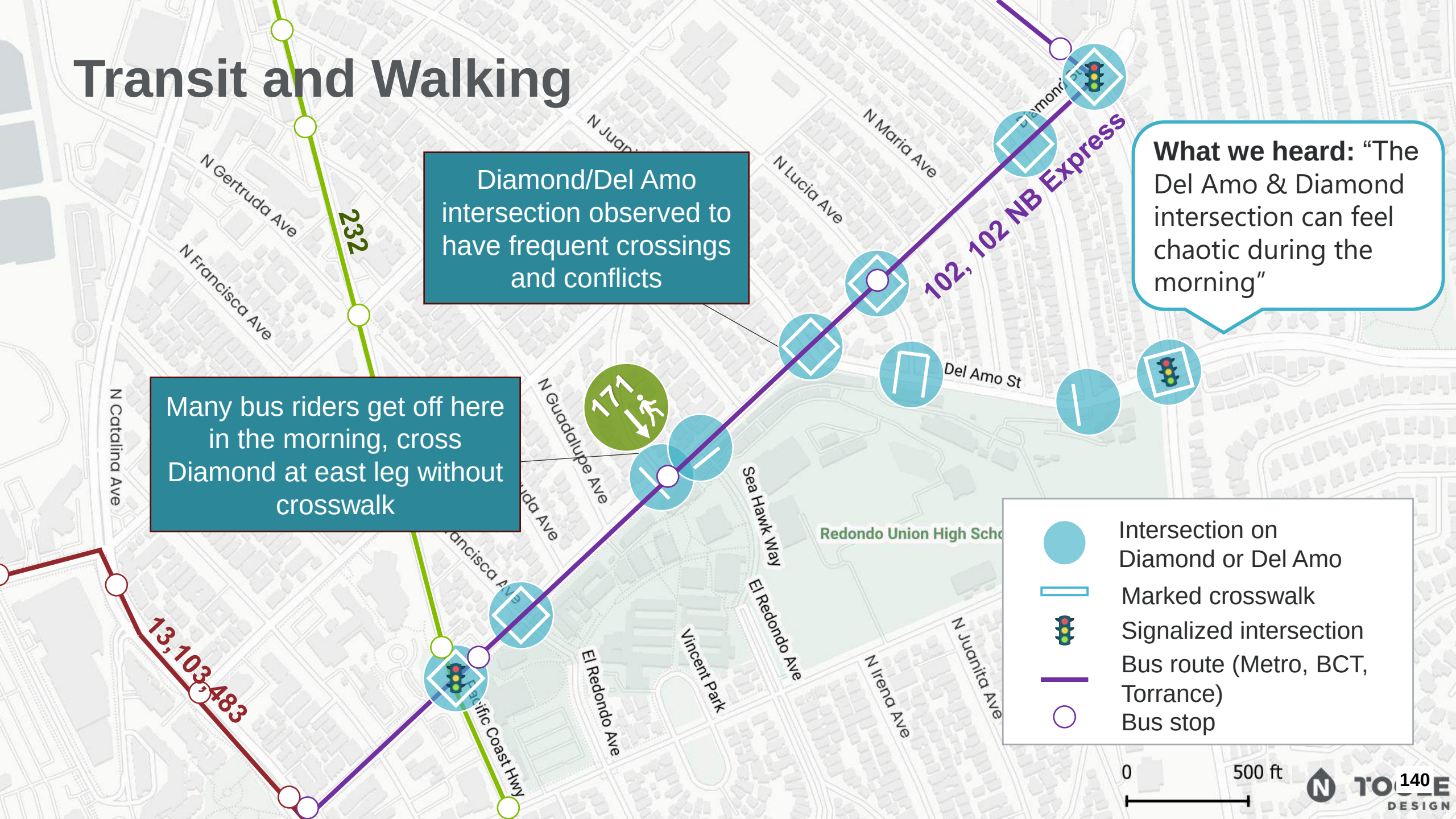
Join at menti.com | use code 9536 5554

Mentimeter

Everyone: how comfortable would you feel biking in or driving next to:



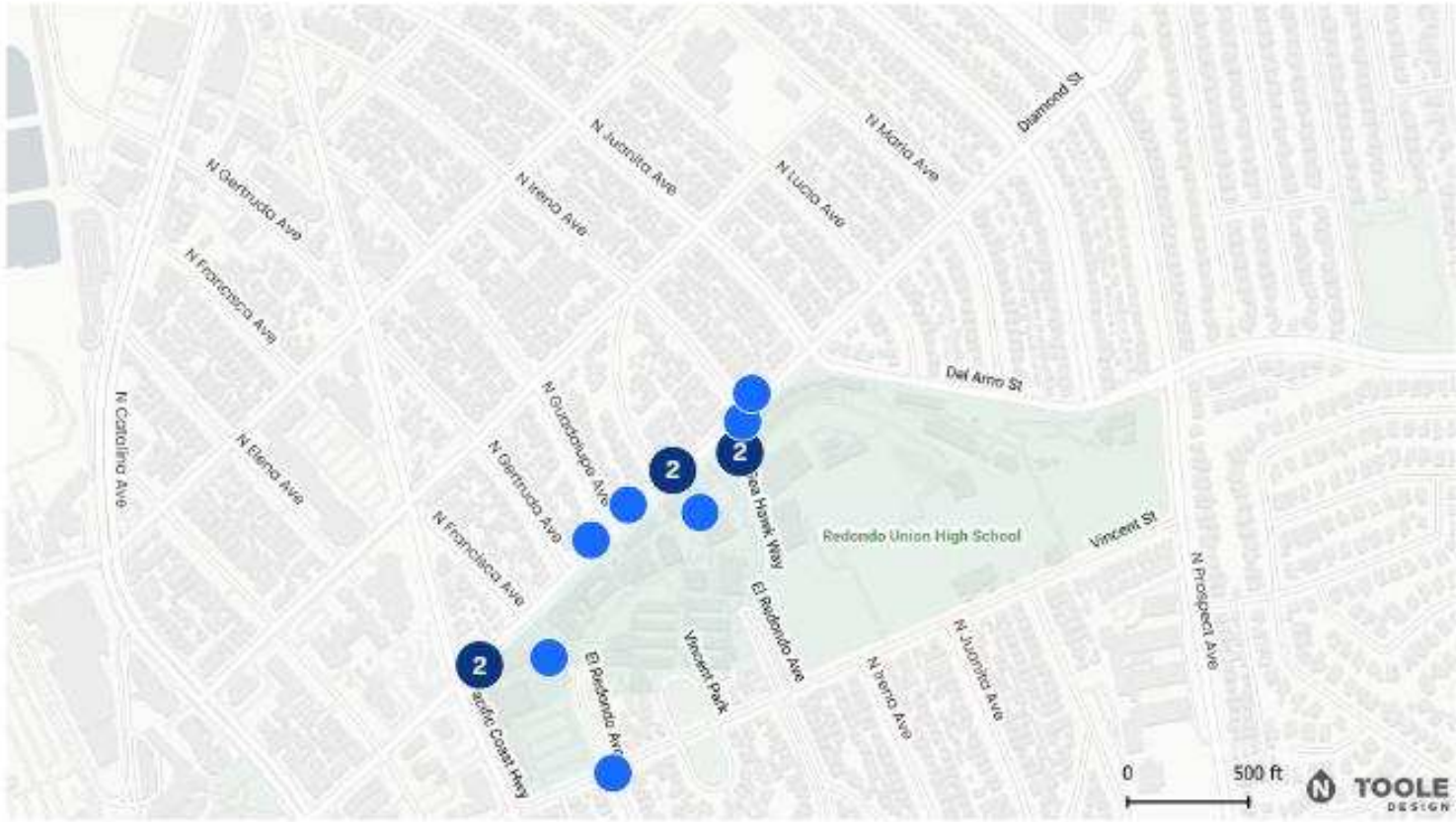
Transit and Walking



Join at menti.com | use code 9536 5554

Mentimeter

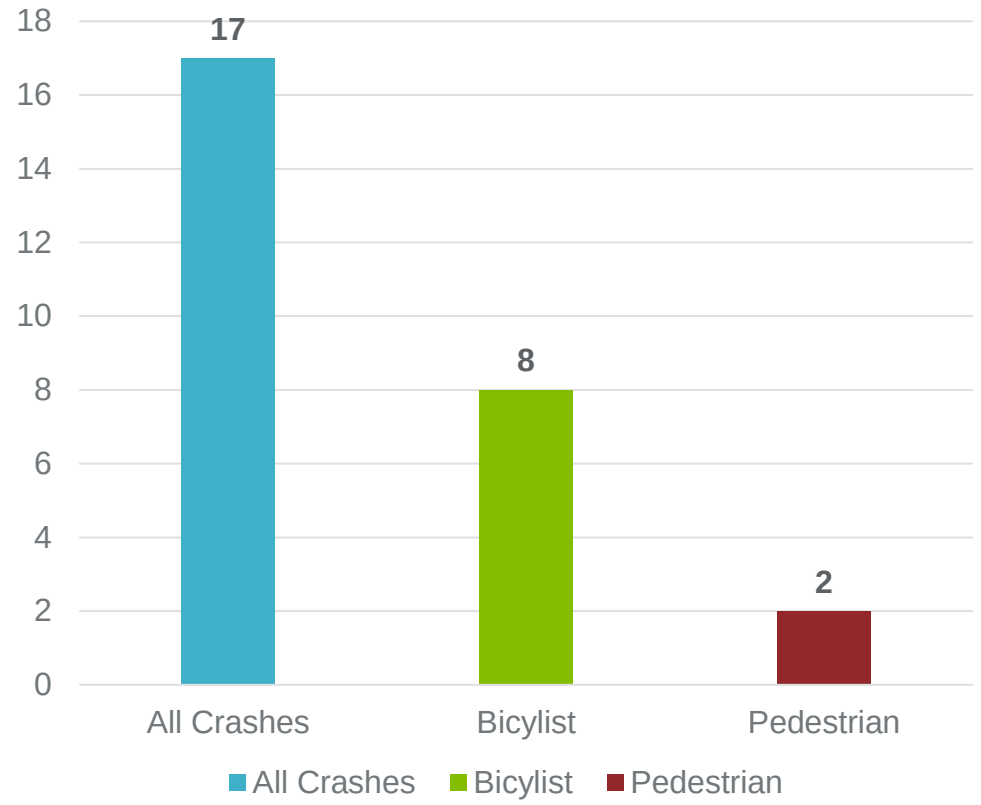
People walking and taking bus: Which intersection do you feel needs the most improvement?



13

Crashes on Diamond Street

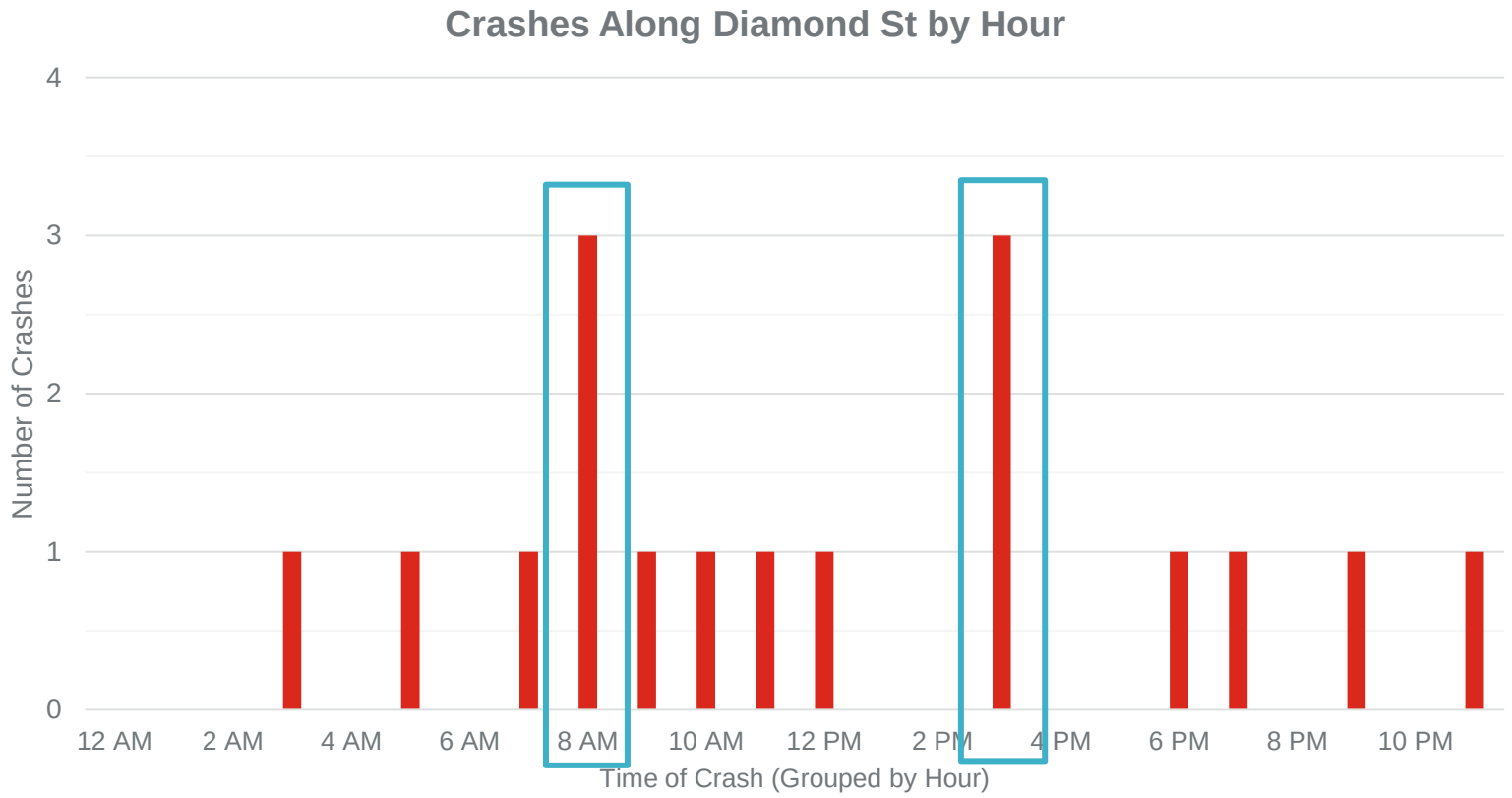
Crashes involving bicyclists and pedestrians made up **47%** of total crashes recorded along Diamond St between Dec. 2019 and June 2024.



Source: Transportation Injury Mapping System (TIMS) Crash Data (Dec 2019 – June 2024); Redondo Beach Traffic Engineering

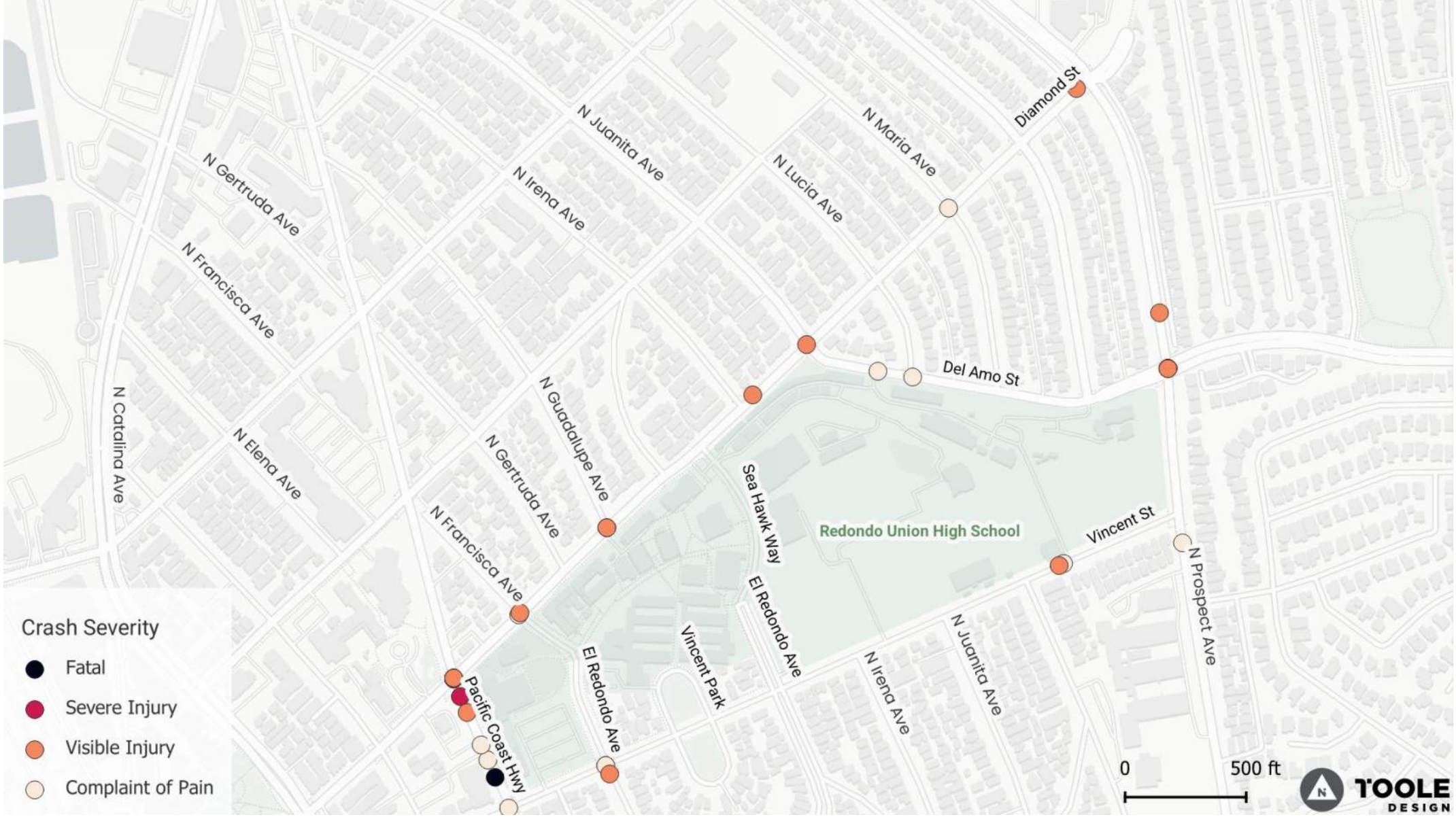
Crashes on Diamond Street

6 crashes occurred during school arrival and dismissal times, between Dec. 2019 and June 2024.



TOOLE DESIGN

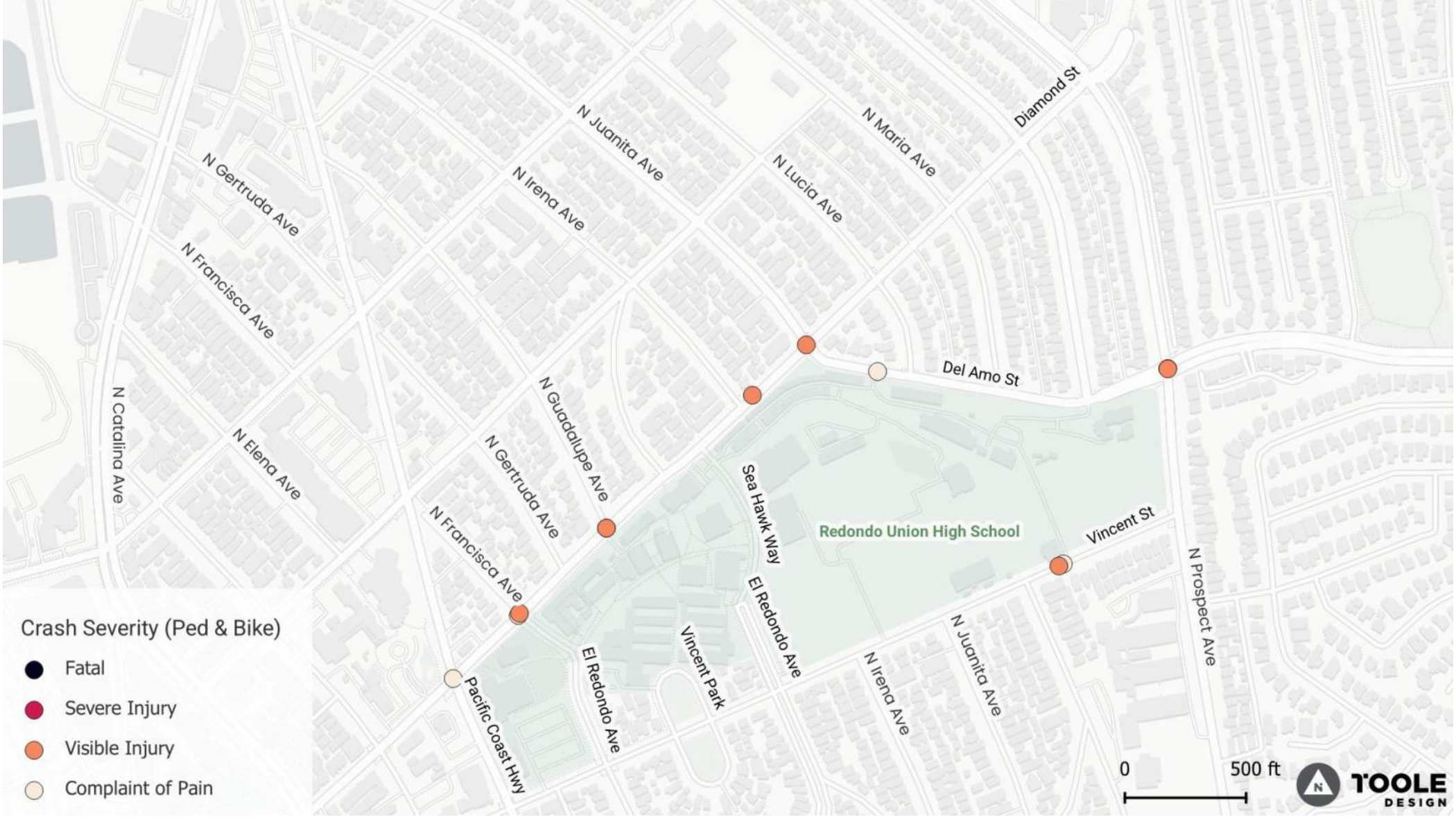
Source: Transportation Injury Mapping System (TIMS) Crash Data (Dec 2019 – June 2024); Redondo Beach Traffic Engineering



All Crashes in the Redondo Union High Study Area

TOOLE DESIGN

Source: Transportation Injury Mapping System (TIMS) Crash Data (Dec 2019 – June 2024)



Ped and Bicyclist Injury Crashes in the Redondo Union High Study Area

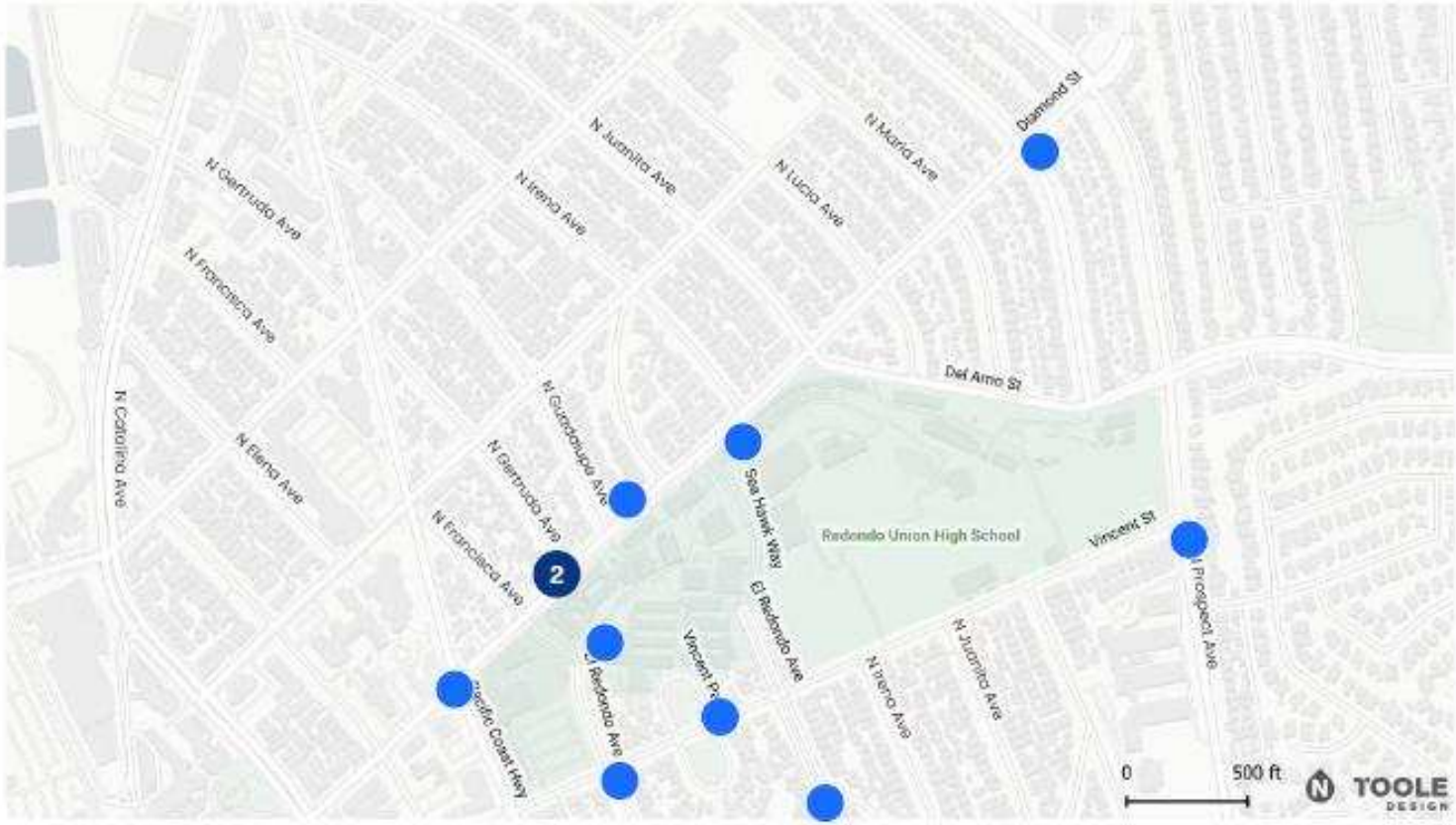
TOOLE DESIGN

Source: Transportation Injury Mapping System (TIMS) Crash Data (Dec 2019 – June 2024)

Join at menti.com | use code 9536 5554

Mentimeter

Everyone: Please identify any locations along Diamond Street that you experienced or witnessed a near-miss.

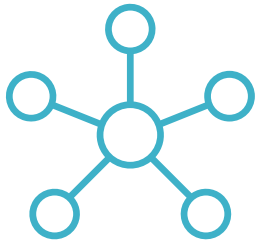


Diamond Street Preliminary Concepts

How we reached these preliminary concepts

Safety

Reducing conflicts between people biking, driving, and walking

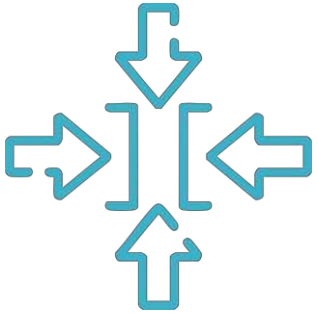


Access

Ensuring facilities meet the needs of all users

Guidance

Using latest national and state guidance



Constraints

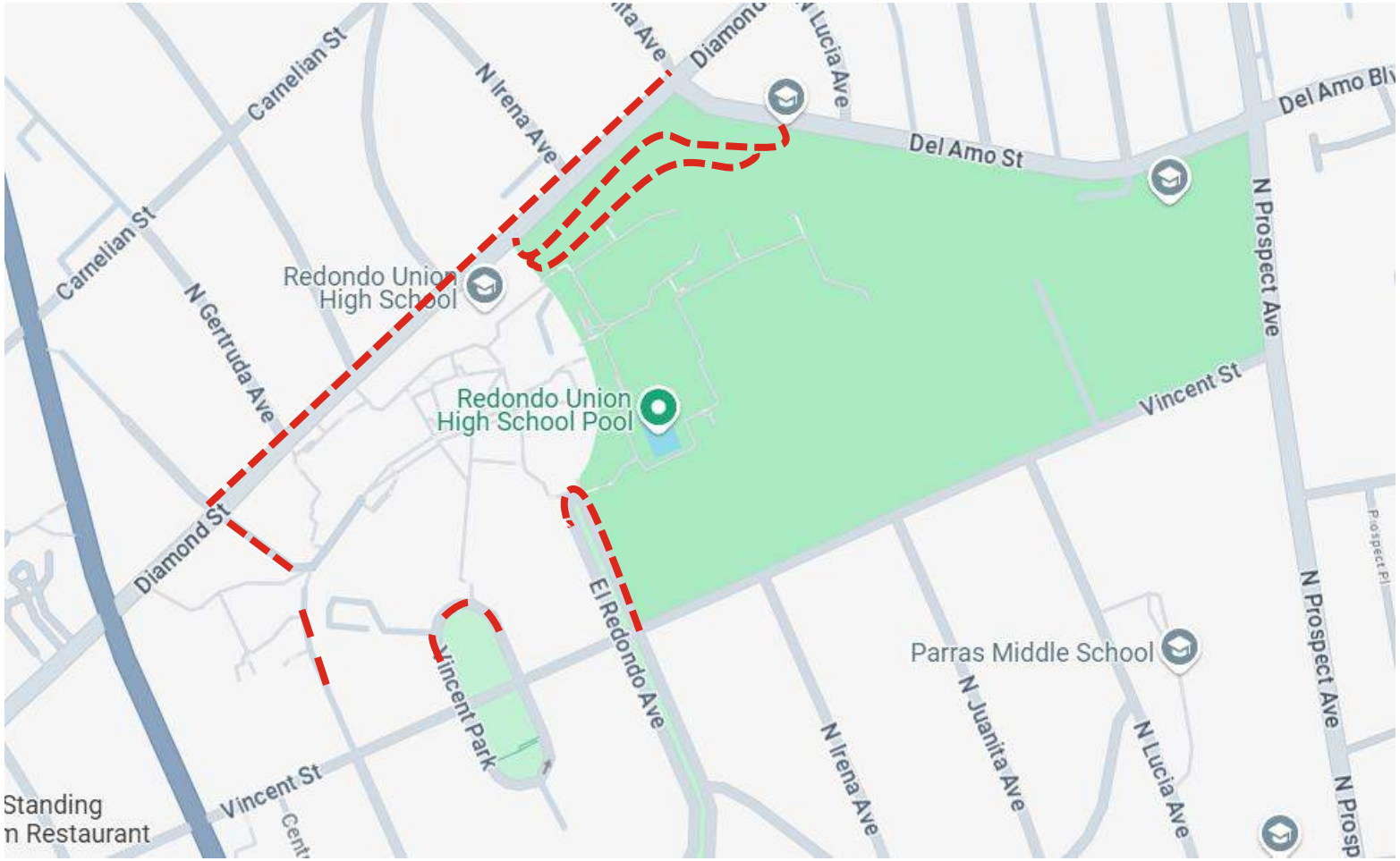
Working within the available space

TOOLE DESIGN

Pickup and Drop-off Considerations

Currently looking to add:

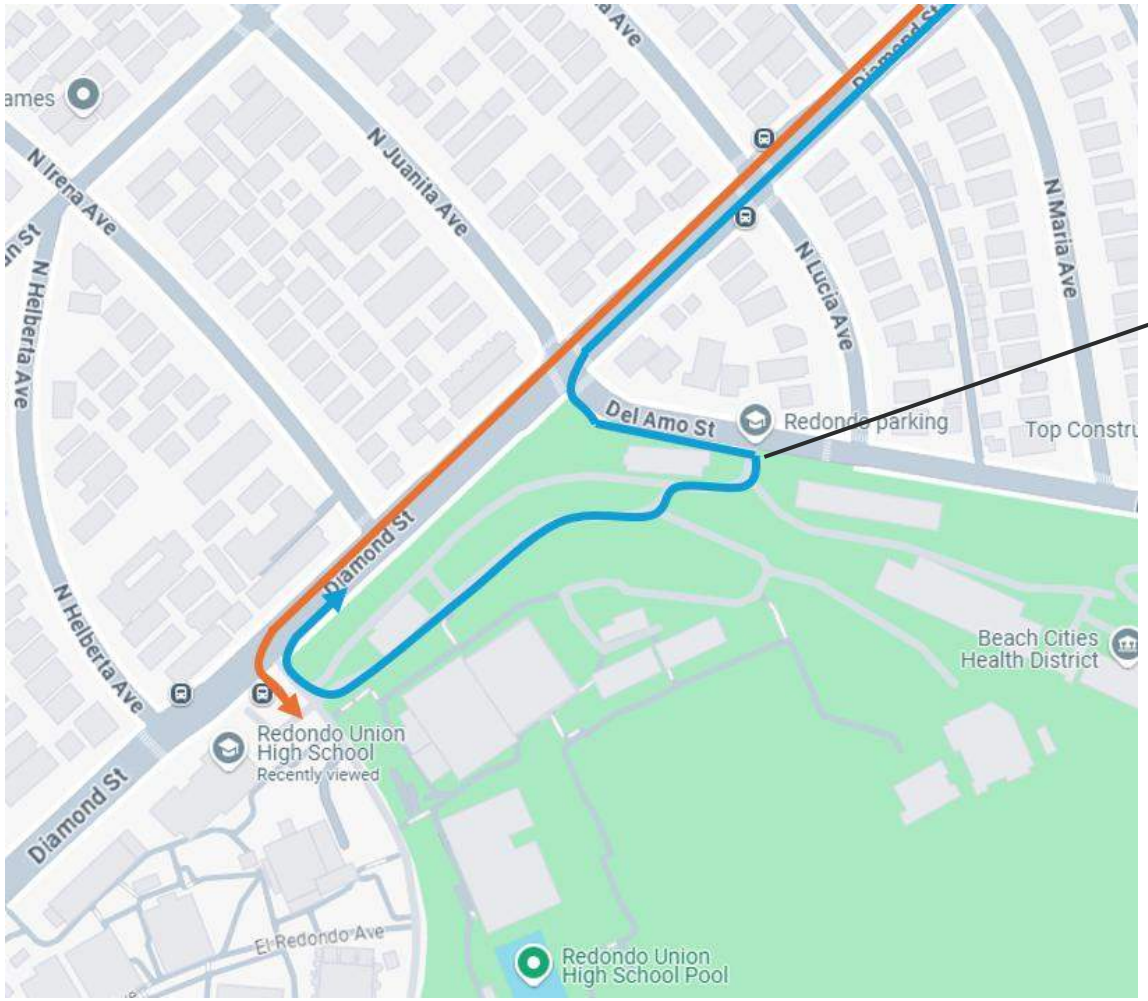
- Additional pickup/ drop-off zones at Francisca Ave. and on Diamond St.
- Expanded pickup and drop-off zones south of campus



TOOLE DESIGN

Circulation Option – Alternative 1

Bikes Vehicles



Del Amo driveway: entrance only’

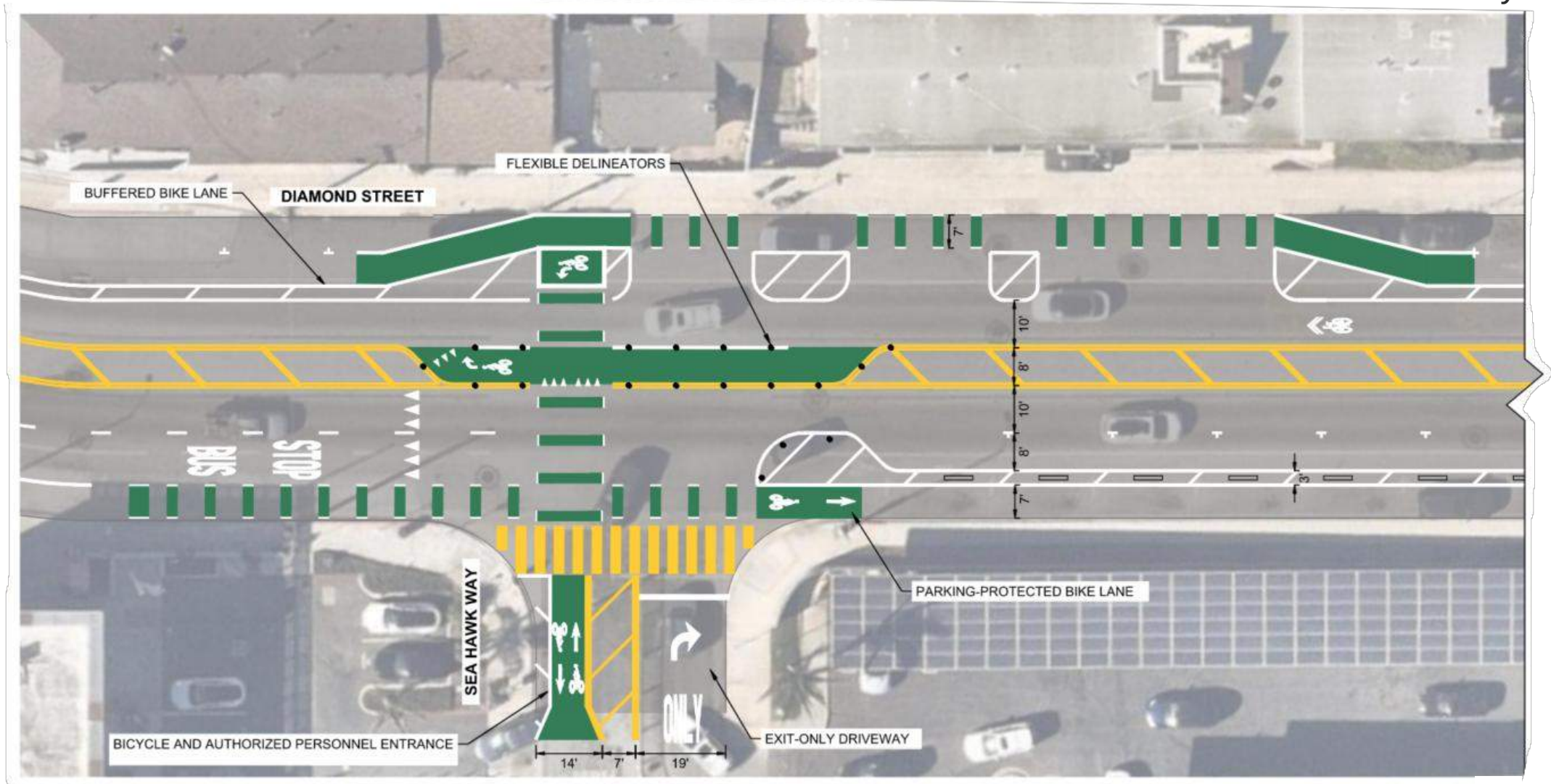
TOOLE DESIGN

Alternative 1

Diamond St at Sea Hawk Way

Issues Today:

- Vehicles and bikes turning conflicts
- People walking have a hard time crossing Sea Hawk Way



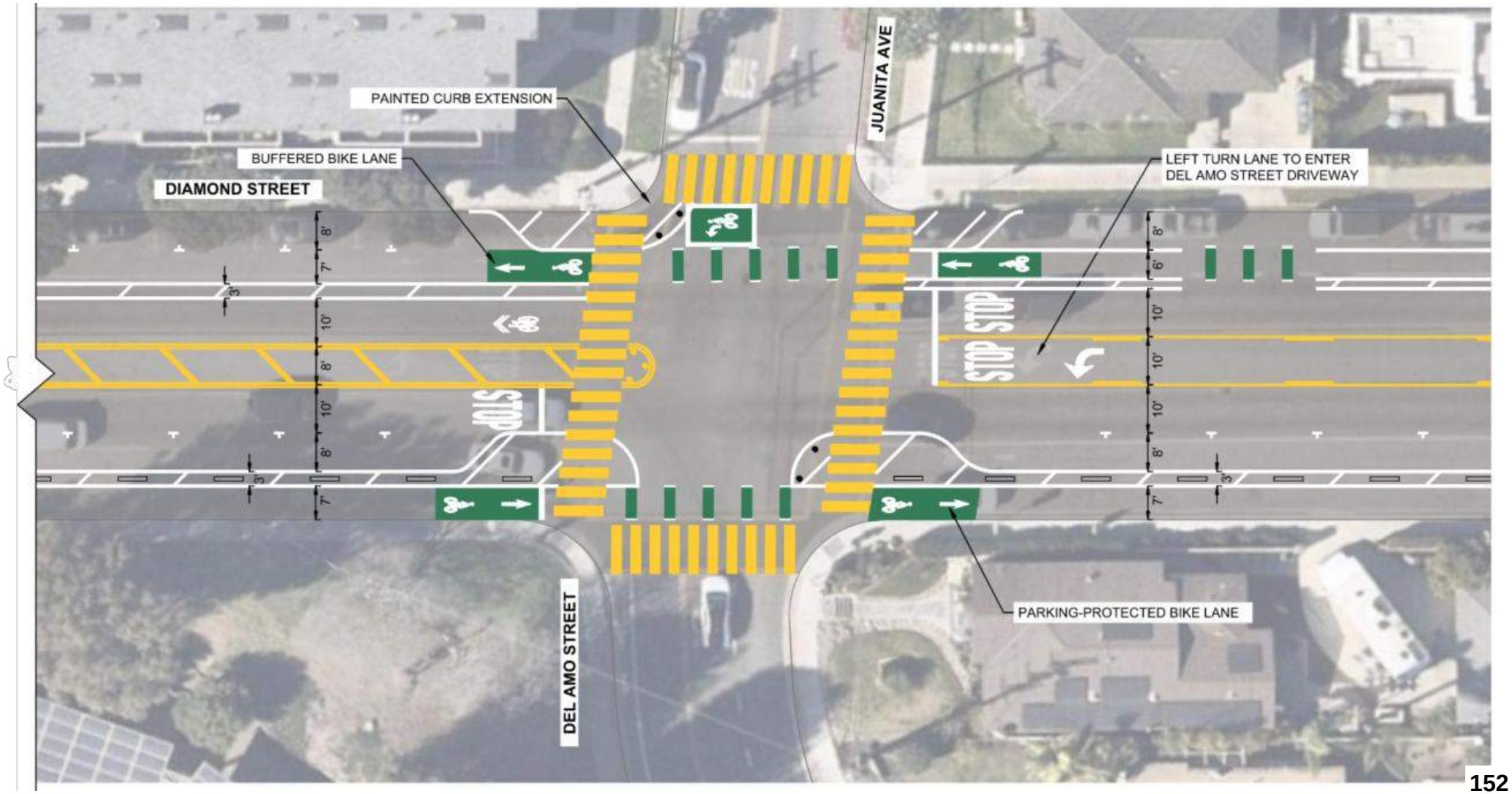
TOOLE DESIGN

Alternative 1

Diamond St at Del Amo St

Issues Today:

- Long crossing distances for people walking
- Confusing intersection, too many lanes



TOOLE DESIGN

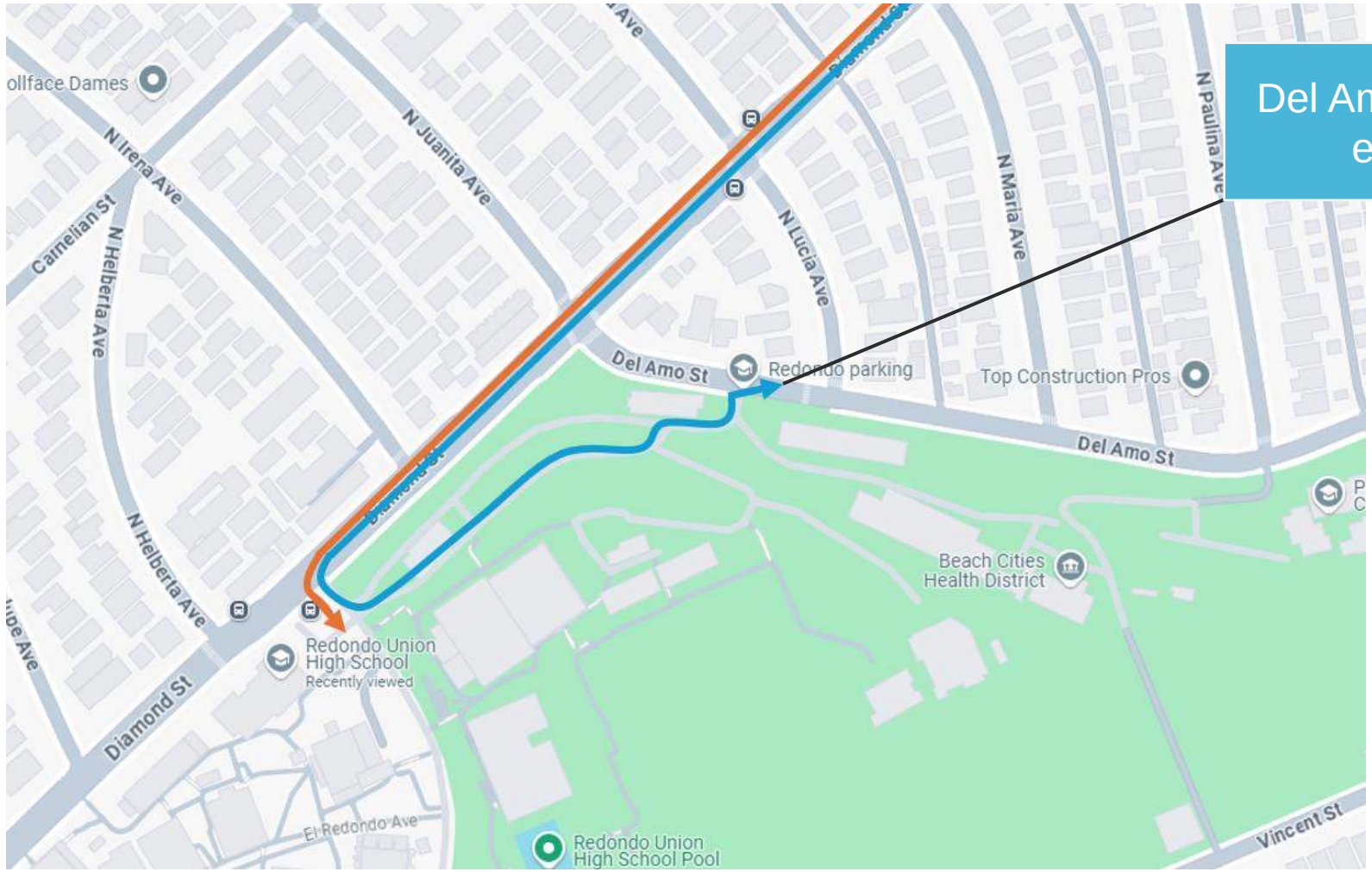
Alternative 1

Del Amo St Driveway

TOOLE DESIGN

Circulation Option – Alternative 2

Bikes Vehicles

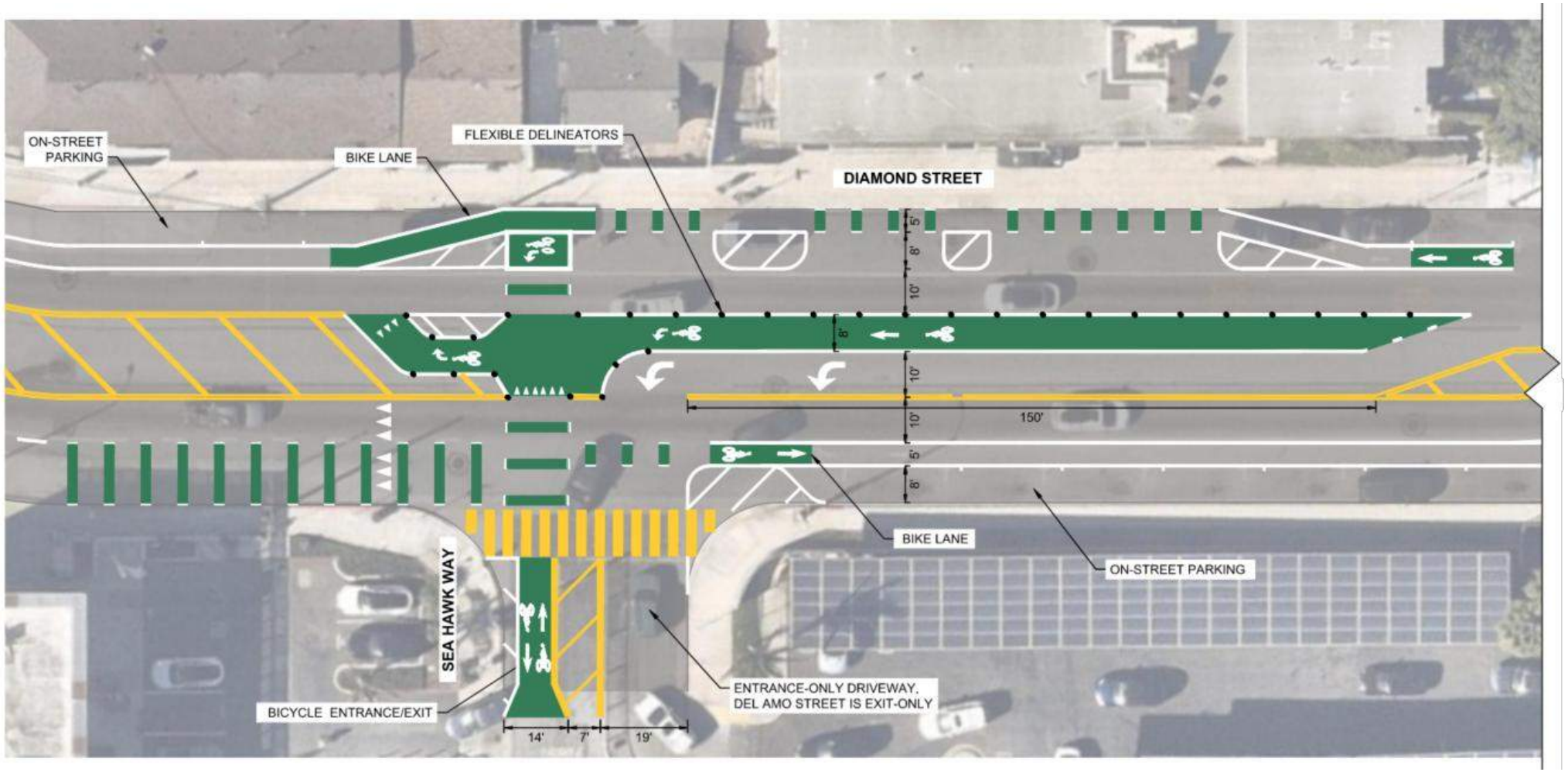


Alternative 2

Diamond St at Sea Hawk Way

Issues Today:

- Vehicles and bikes turning conflicts
- People walking have a hard time crossing the driveway



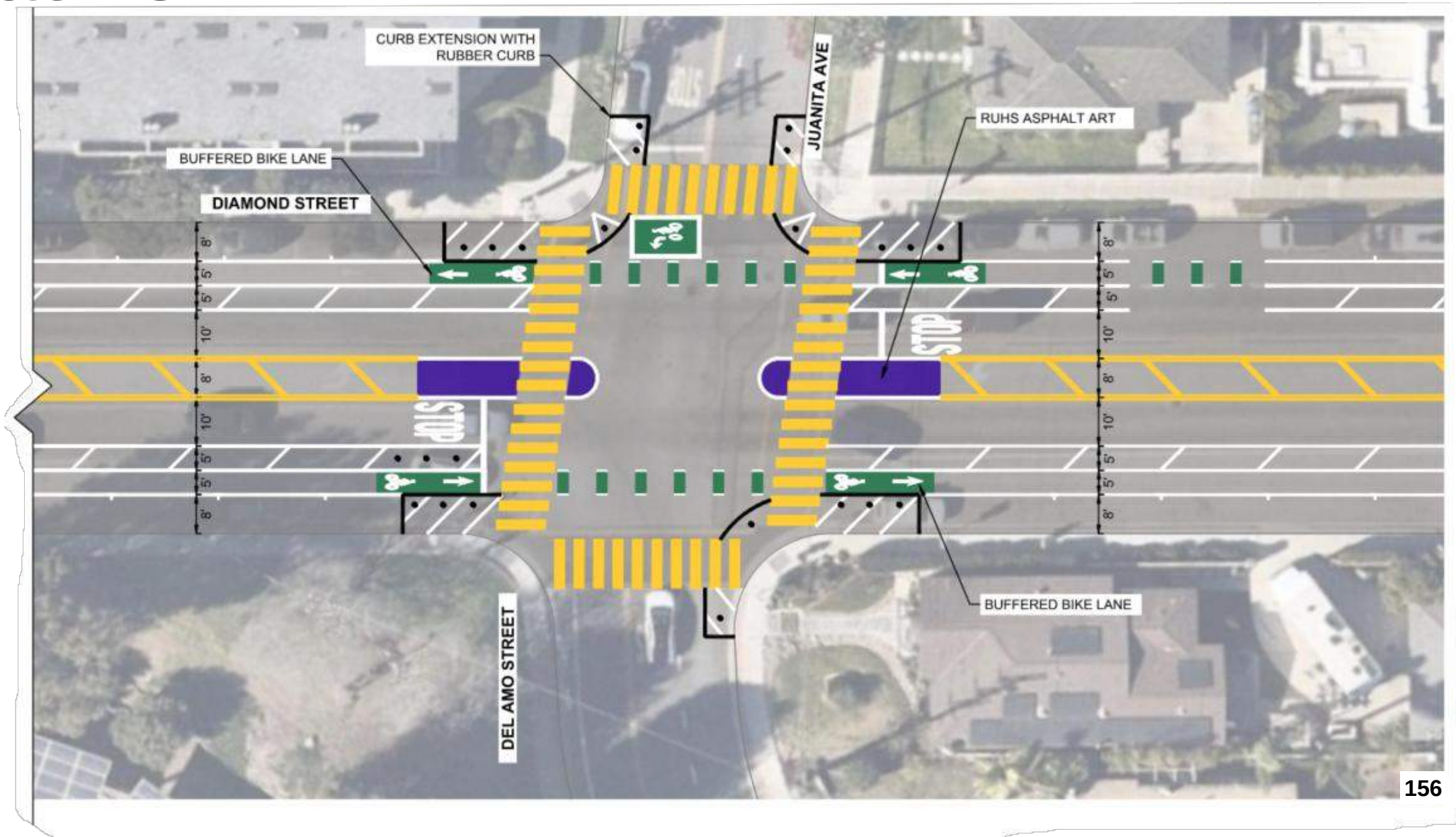
TOOLE DESIGN

Alternative 2

Diamond St at Del Amo St

Issues Today:

- Long crossing distances for people walking
- Confusing intersection, too many lanes



TOOLE DESIGN

Alternative 2

Del Amo St Driveway

TOOLE DESIGN

Thank you!

Ryan Liu, TrafficEngineering@redondo.org

Administrative Report

J.4., **File #** PWS25-1478 **Meeting Date:** 10/27/2025

To: **PUBLIC WORKS AND SUSTAINABILITY COMMISSION**

From: DEPARTMENT OF PUBLIC WORKS

TITLE

DISCUSSION AND POSSIBLE ACTION REGARDING UPCOMING PUBLIC WORKS AND SUSTAINABILITY COMMISSION MEETING DATES

EXECUTIVE SUMMARY

It is recommended that the Public Works and Sustainability Commission ("Commission") discuss the schedule for the upcoming regular meetings to ensure there is a quorum. The regular November meeting falls on Monday, November 24, 2025 which is the week of Thanksgiving when many people may be traveling or unavailable. The regular meeting in December falls on December 22, 2025, which is the only day the City is open that week due to the Christmas Holiday and therefore might not be the best option for a meeting.

The Commission options for the upcoming regular meetings include:

1. Hold its regular November Meeting on Monday, November 24, 2025 (if there is a quorum).

2. Reschedule the regular November meeting to one of the open dates in December for a Special November/December Meeting. Dates available:
    - Monday, December 15, 2025
    - Wednesday, December 17, 2025

3. Cancel regular November and December Meetings due to lack of quorum without rescheduling. The next regular meeting would be January 26, 2026.

4. At this time, there are no traffic items anticipated for business through the end of the year. All other reports and updates can be addressed in a single meeting.

It is recommended to determine if the Commission will have a quorum for the regular November and December Meetings, reschedule to one of the available December dates and hold a Special Meeting, or cancel the regular November and December Meeting due to lack of quorum without scheduling a Special Meeting.