13TH STREET CORRIDOR PLAN

DRAFT
Existing Mobility Conditions

APRIL 2024

Prepared For

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1.0 Introduction

1.1 Purpose/Background

The 13th Street Corridor Plan presents a unique opportunity to enhance the quality of life in Imperial Beach. This stretch of road, extending from Bikeway Village to the Naval Outlying Landing Field (NOLF), offers the potential to create a more vibrant, pedestrian-friendly, and safe community hub. This project is funded through a state grant. The project will help the City of Imperial Beach identify opportunities to catalyze investment, increase available housing stock, create positive economic and social benefits, and reduce vehicle miles traveled (VMT) with streetscape improvements and accessible pedestrian connections to public transit.

This Existing Mobility Conditions assessment serves to evaluate the current state of pedestrian, bicycle, transit, and vehicular mobility as related to infrastructure and connectivity, safety, and quality. The findings from this technical analysis, combined with input from community members and project stakeholders, will be used to identify mobility needs and, ultimately, recommendations that support and complement other project components, such as the urban design, land use, and general aesthetics and uses of the public realm.

1.2 Setting

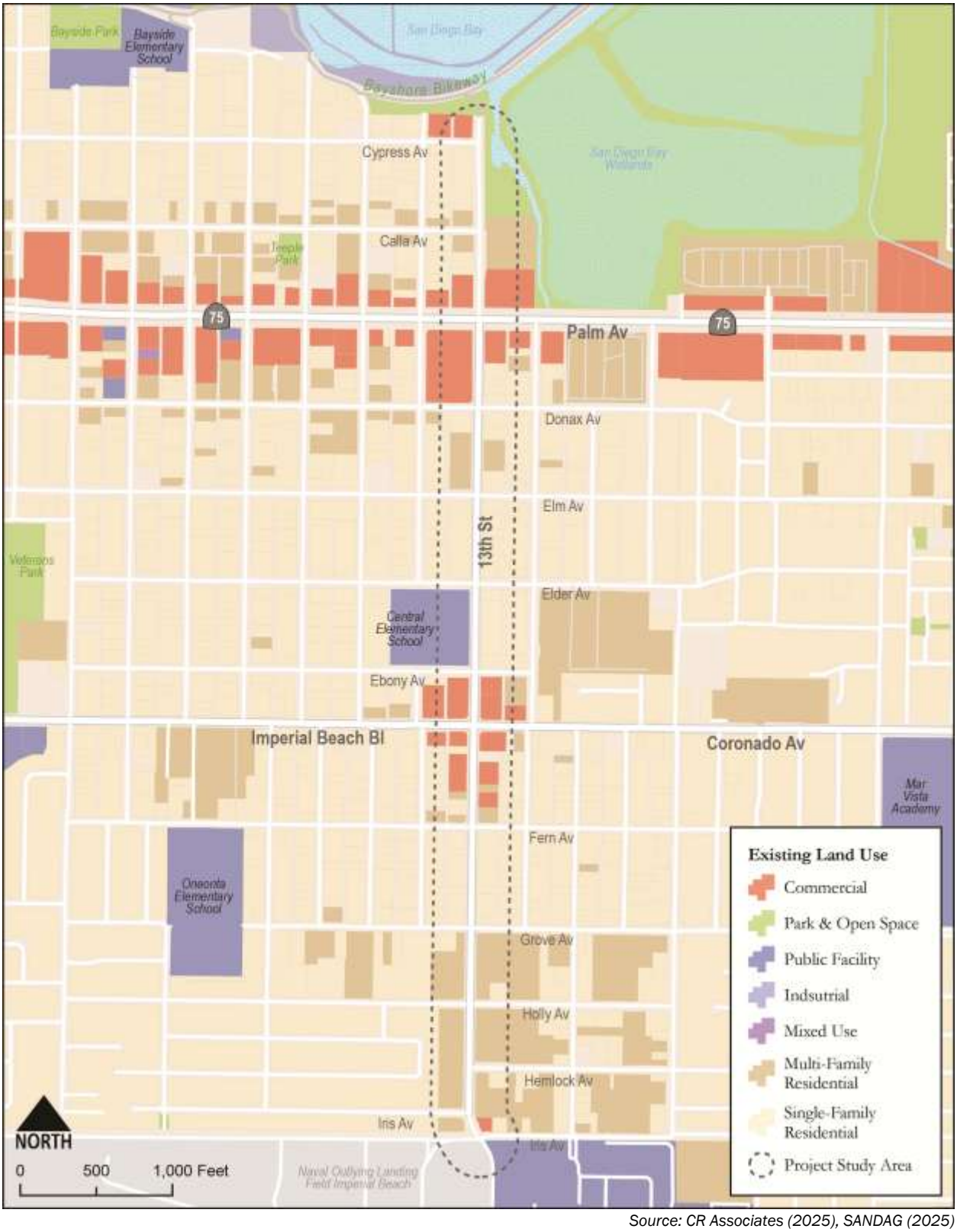
The project spans the length of 13th Street in the City of Imperial Beach, from the Bayshore Bikeway and Bikeway Village at the northern terminus to Iris Avenue and the NOLF at the southern terminus. As shown in **Figure 1.1**, the corridor is primarily fronted by single family homes, with pockets of commercial uses concentrated at intersections with Palm Avenue and Imperial Beach Boulevard, and some multifamily residential uses at the southern end and near the commercial areas.

Central Elementary School fronts the west side of 13th Street, between Elder Avenue and Ebony Avenue. Additional schools, including Oneota Elementary School and Bayside Elementary School are located just west of the corridor. Recreational opportunities include the Bayshore Bikeway and trails near the San Diego Bay as well as Teeple Park. The NOFL entry at the southern end of the corridor serves as the primary access point for many base employees. The commercial uses, schools, recreational locations, and NOFL are the primary trip attracting land uses in and around the study area, drawing employees, customers, students, and visitors using various travel modes to access.

Figure 1.2 displays the existing traffic controls and curb-to-curb measurements. The two signalized intersections are with Circulation Element designated roadways, Palm Avenue and Imperial Beach Boulevard. All other intersections stop-controlled with two-lane local roads. The north and southbound approaches to Grove Avenue also include pedestrian activated signals (HAWKS). Roadway width (measured from curb face to curb face for this figure) ranges from approximately 54’ just north of Palm Avenue to a width of 64’ between Palm Avenue and Hemlock Avenue.

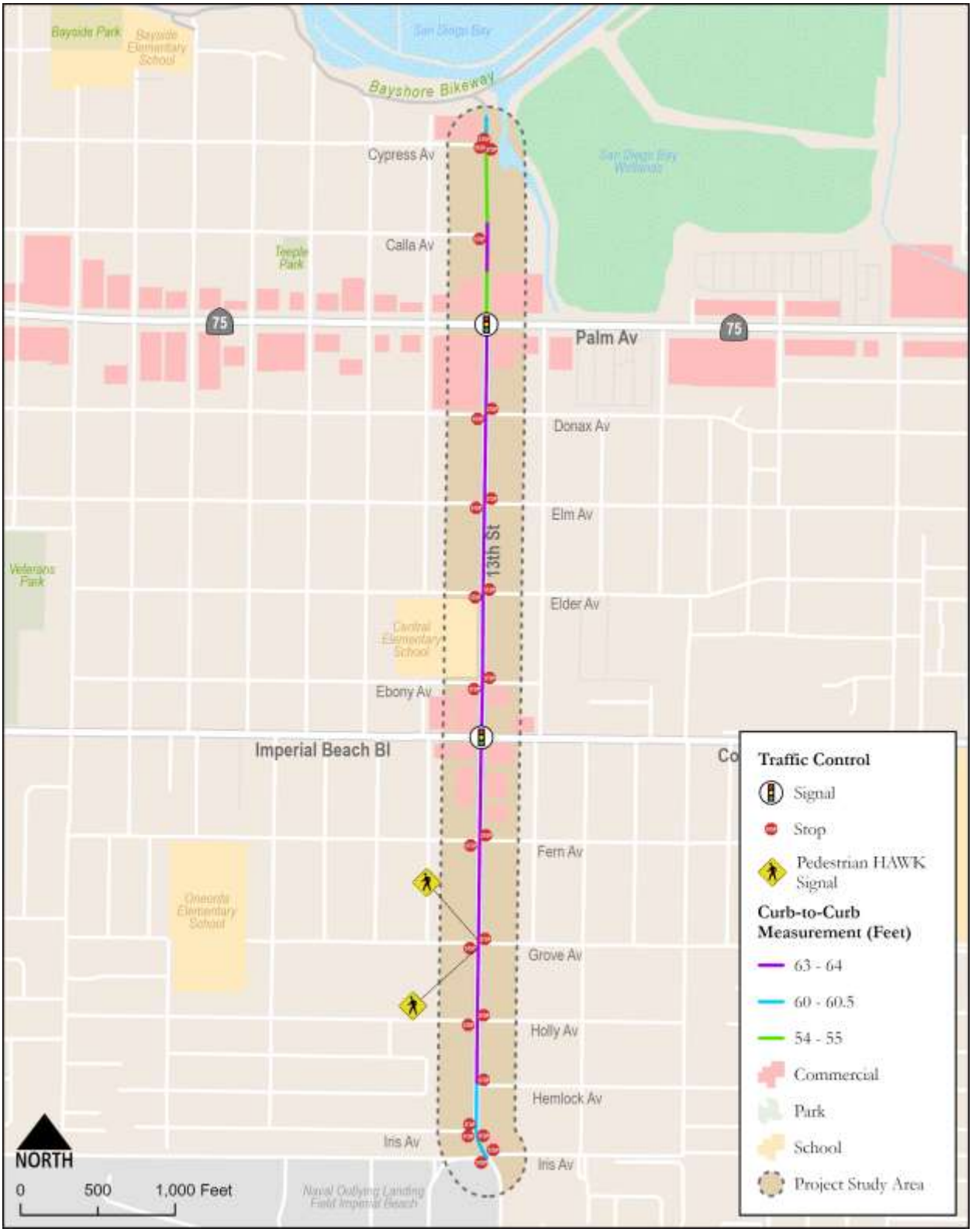
The built environment is comprised of a strong gridded street network, short blocks, relatively small parcel sizes, and flat topography – characteristics that contribute to an environment where walking, bicycling, and transit use can be feasible travel options.

Figure 1.1 - Existing Land Uses



Source: CR Associates (2025), SANDAG (2025)

Figure 1.2 - Existing Traffic Controls and Curb-to-Curb Measurements



Source: CR Associates (2025)

Streetlights are an important feature in a transportation network, enhancing visibility for all roadway users when natural lighting is limited or non-existent. Sufficient lighting contributes to multimodal safety and mobility, as well as general personal security and comfort. **Figure 1.3** displays the existing streetlight locations along the corridor. Two or more streetlights are present at all intersections with four approaches/crossing locations, while four streetlights at both Palm Avenue and Imperial Beach Boulevard, which have relatively wider intersections. A single streetlight is present at the two intersections north of Palm Avenue due to these locations having only three approaches/crossing locations.

1.3 Document Review

A document review was performed to identify previously planned mobility recommendations and language intended to guide mobility planning along 13th Street. The review findings are summarized below:

- **City of Imperial Beach General Plan Mobility Element (2019)**
  - Designates the corridor as a Multimodal Boulevard. Multimodal Boulevards are 2- and 4-lane roadways providing the primary access to the City's commercial core, coastal areas, and other key destinations. They are utilized by local residents and visitors alike and are designed for the safe mobility of all transportation modes. This typology is designed to support high levels of pedestrians, public transit riders, and bicyclists through traffic calming measures, attractive landscaping, and multimodal facilities. Wayfinding signs should be scaled and designed to appeal to all transportation modes and users.
  - The corridor is also designated as a Truck Route south of Palm Avenue. The Truck Route Overlay emphasizes the importance of enhanced safety and efficient truck and freight movement throughout Imperial Beach. The Truck Route Overlay acknowledges that additional design considerations must be made to ensure roadways can accommodate truck traffic. Designated Truck Routes maintain truck traffic to prime, major, and collector roadways and aim to limit the amount of heavy traffic and noise through residential neighborhoods. Lane widths, parking restrictions, turning radii, and access to the various land uses trucks serve should be required when designing or modifying roadways identified with the Truck Route Overlay area.
  - The length of the corridor is also designated as providing Class II Bike Lanes.

- **City of Imperial Beach Local Roadway Safety Plan (2021)**
  - 13th Street is one of two roadways identified as a "priority corridor" for the LRSP, citing the following: This corridor poses safety concerns due to its proximity to schools in the area, the Naval Outlying Landing Field entrance points, commercial centers, and bike/pedestrian activity. Enhancements to the active transportation environment would greatly benefit the community along this roadway.

Figure 1.3 - Streetlight Locations

Source: City of Imperial Beach (2025)

- Goals for the two priority corridors include:
  - Reduce the frequency and severity of crashes at signalized and unsignalized intersections
  - Incorporate Complete Streets principles where applicable
  - Enhance emergency response times prior to implementing in-road features
  - Facilitate enhanced pedestrian crossings
- Strategies/countermeasures to help achieve the identified goals on the priority corridors include:
  - High visibility crosswalks
  - Install advance stop bar before crosswalk (bike box)
  - Install pedestrian countdown signal heads
  - Modify signal phasing to implement an LPI
  - Install raised medians/refuge islands
  - Curb extensions (Roadway)
  - Curb extensions (Non-Signalized Intersection)

- **City of Imperial Beach Palm Avenue Complete Multimodal Corridor Project (On-Going)**
  - A design project is underway to provide a separated bike facility along Palm Avenue, which may include infrastructure recommendations at the 13th Street/Palm Avenue intersection. Recommendations will be coordinated between the two efforts.

- **SANDAG Border to Bayshore Bikeway Project (On-Going)**
  - Construction of the Border to Bayshore Bikeway Project is underway. This includes an improved buffered bike lane with green paint along 13th Street from Grove Avenue to the northern terminus. Intersection improvements at Grove Avenue, Imperial Beach Boulevard, and Palm Avenue are also under construction, including curb extensions, curb ramps with truncated domes, high visibility crosswalks, advance stop bars, green conflict paint through the intersections, and enhanced signage. The under-construction improvements were assumed as existing for the purposes of the evaluations within this document.

1.4 Document Organization

Following this introductory chapter, the remainder of this Existing Conditions assessment is organized into the following chapters:

- ***Chapter 2:*** documents the existing transportation infrastructure and transit services.
- ***Chapter 3:*** presents an assessment of multimodal collision history.
- ***Chapter 4:*** describes the quality of the infrastructure and services.
- ***Chapter 5:*** summarizes the key mobility issues and opportunities.

2.0 Infrastructure & Connectivity

This chapter documents the existing physical infrastructure and services available for pedestrians, bicyclists, transit users, and drivers.

2.1 Pedestrian

Pedestrian infrastructure within the area is depicted in **Figure 2.1**, consisting of sidewalks and intersection crossing features such as marked crosswalks, curb ramps, and curb extensions. Sidewalks are present throughout the study area, without any documented gaps. The two signalized intersections at Palm Avenue and Imperial Beach Boulevard have high visibility marked crosswalks, however, only Imperial Beach Boulevard has pedestrian countdown signal heads. The intersection with Palm Avenue includes pedestrian signal heads with a flashing hand, which does not indicate the amount of time remaining to cross the street – important information for pedestrians, especially when crossing a 6-lane roadway.

The pedestrian signal (or HAWK) located at Grove Avenue facilitates east-west pedestrian crossings by controlling north- and southbound traffic via a push button. A raised crosswalk is present on the north leg of the intersection with Ebony Avenue, facilitating pedestrian crossings to Central Elementary School.

Curb extensions shorten the crossing distance for pedestrians, help make pedestrians more visible to drivers, and encourage slower vehicle turning speeds. Curb extensions are present at the intersections with Cypress Avenue, Elder Avenue, Ebony Avenue, and Grove Avenue, as well as newly constructed curb extensions at Imperial Beach Boulevard and Palm Avenue.

2.2 Bicycle

As shown in **Figure 2.2**, bicycle facilities are present along the length of the corridor. A Class I bike path (also referred to as a multi-use path) connects the Bayshore Bikeway to 13th Street at the northern terminus of the corridor, continuing as a standard Class II bike lane at Cypress Avenue and then transitioning to a buffered bike lane south of Calla Avenue to the southern terminus. The southbound facility transitions to a Class III bike route between Iris Avenue and Hemlock Avenue to make room for an additional southbound vehicle lane.

Green conflict paint was recently added to the buffered bike lane, north of Grove Avenue, as part of the Border to Bayshore Bikeway project. The paint serves to emphasize intersection crossing areas and locations where vehicles transition over the bike lane to access on-street parking. Bike parking is provided at the Bayshore Bikeway trailhead, enabling bicyclists to secure their bike while visiting the Bikeway Village retail center, nearby exercise equipment, and bayfront land.

Intersecting facilities are provided along Palm Avenue (Class II buffered bike lane west of 13th Street and Class II standard bike lane to the east) and Imperial Beach Boulevard (standard Class II bike lane). Additionally, Grove Avenue east of the corridor was recently classified as a Class III bike route with signage and sharrow markings through the Border to Bayshore Bikeway project.

Figure 2.1 - Pedestrian Infrastructure

Source: CR Associates (2025), SANDAG Border to Bayshore Bikeway Improvement Plans (2022)

Figure 2.2 - Existing Bicycle Facilities

Source: CR Associates (2025), SANDAG Border to Bayshore Bikeway Improvement Plans (2022)

2.3 Transit

As shown in **Figure 2.3**, the 13th Street corridor is served by bus routes 933/934, 901, and Rapid 227. Routes 933/934 operate along 13th Street between Iris Avenue and Imperial Beach Boulevard, however, no service runs directly on the corridor north of Imperial Beach Boulevard. The graphic also depicts ¼- and ½-mile travelsheds from each transit stop, demonstrating nearly the entirety of 13th Street is within ¼-mile walk from a transit stop, as well as much of the surrounding areas. This is facilitated by the strong grided street network and short block sizes.

Routes 933/934 connect 13th Street to western Imperial Beach, as well as the Palm Avenue Trolley Station and Iris Avenue Transit Center. Route 901 intersects with 13th Street, running between the Iris Avenue Transit Center and Downtown San Diego via Imperial Beach Boulevard and SR-75. Rapid 227 offers connections from western Imperial Beach to the Iris Avenue Transit Center and Otay Mesa Transit Center/Otay Mesa Port of Entry with limited stop service at high frequencies (every 7.5- to 15-minutes during peak travel times, seven days a week).

Average daily transit ridership (year 2023) is presented for each stop, with the greatest total ridership within the study area reported at Rapid 227 stop just west of 13th Street with 158 daily transit riders.

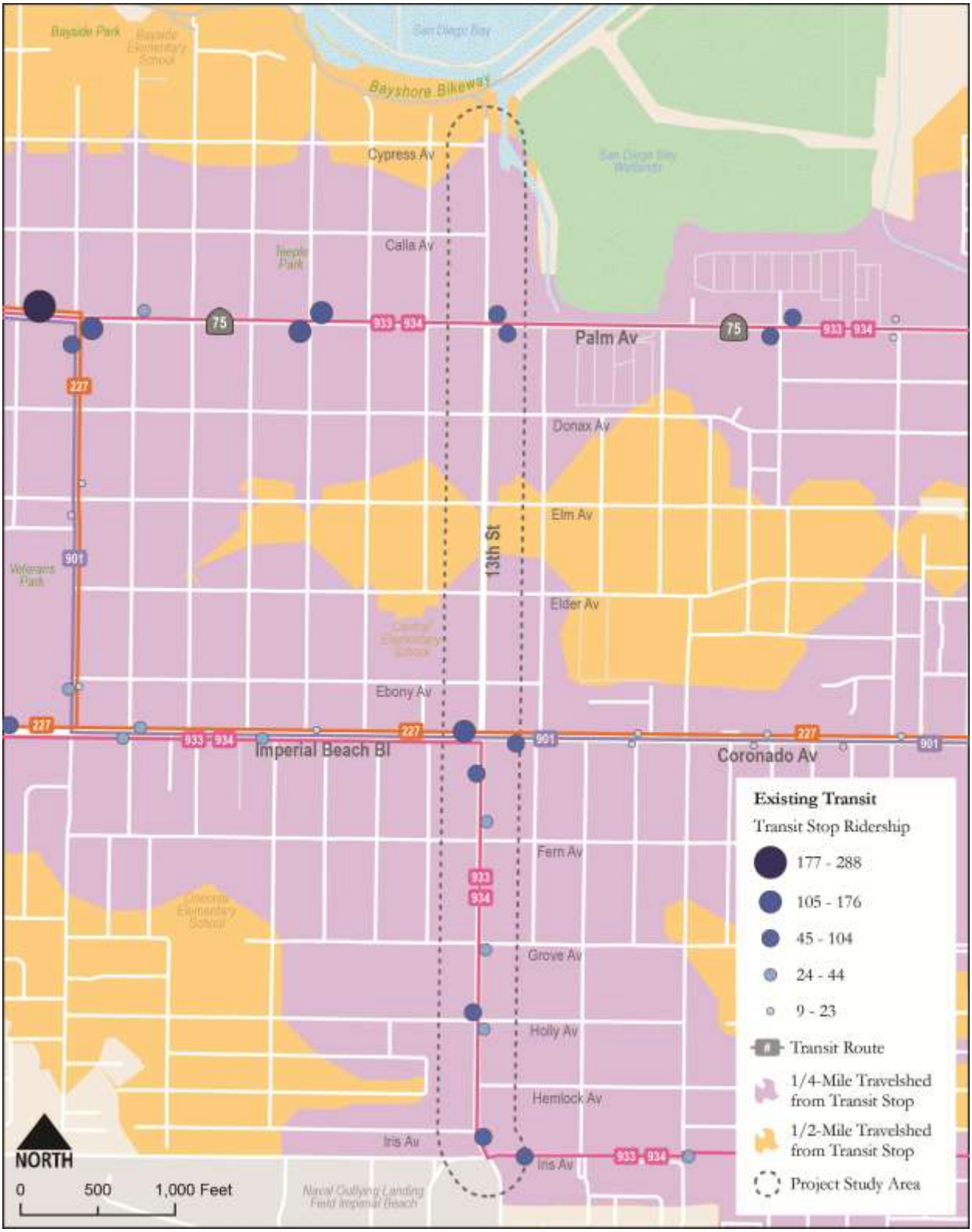
2.4 Vehicle

Figure 2.4 displays the existing roadway geometry. The roadway provides one vehicular travel lane in each direction and a continuous center left-turn lane from Calla Avenue to Hemlock Avenue. North of Calla Avenue, the roadway narrows and the turn lane is removed. South of Hemlock Avenue, a second southbound through lane is provided in place of the center left-turn lane to facilitate access to the NOLF.

Posted speed limits, shown in **Figure 2.5**, are low along 13th Street, posted as 30 miles per hour from Hemlock Avenue to Palm Avenue and 25 miles per hour at the northern and southern ends.

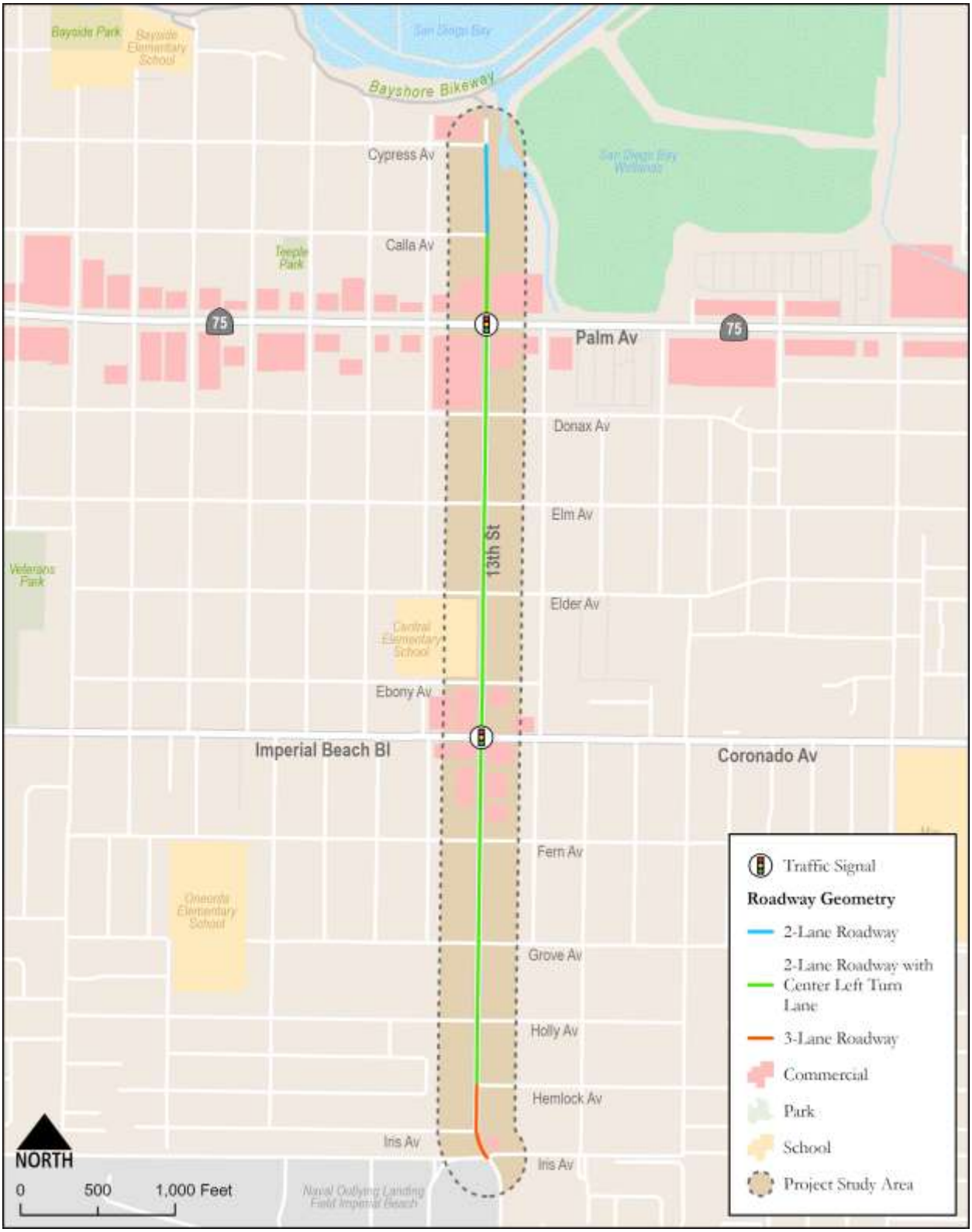
On-street parking is depicted in **Figure 2.6**. Parking is available throughout the corridor. Recent striping modifications to accommodate the continuous buffered bike lane also increased the availability of on-street parking, particularly near the commercial centers at Palm Avenue and Imperial Beach Boulevard. Off-street parking is available on most parcels and accessible to vehicles via the frequent driveways, however, these locations can pose a conflict for vehicles with pedestrians and bicyclists.

Figure 2.3 - Existing Transit Service and Ridership



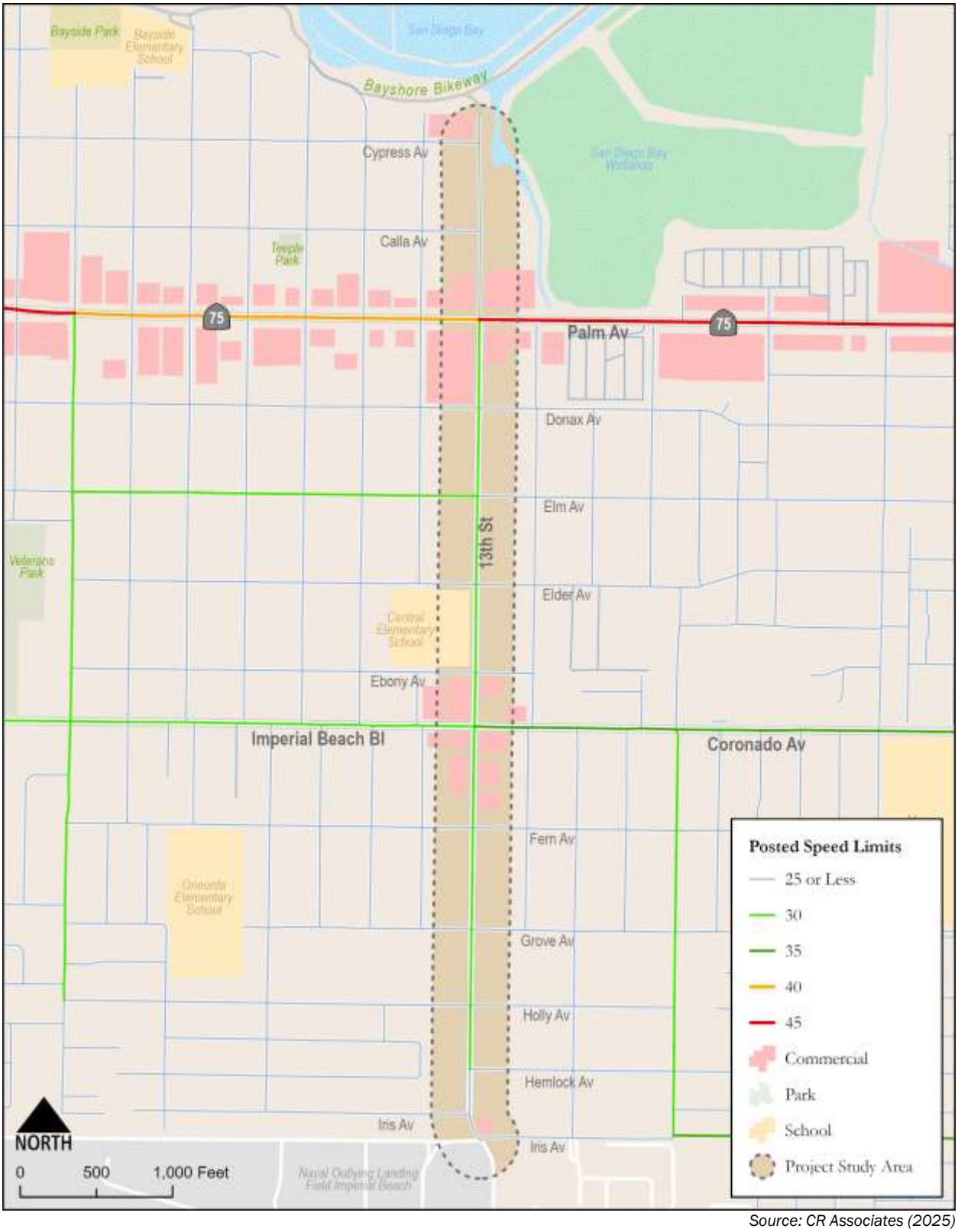
Source: CR Associates (2025), SANDAG (2025), MTS (2023)

Figure 2.4 - Existing Roadway Geometry



Source: CR Associates (2025), SANDAG Border to Bayshore Bikeway Improvement Plans (2022)

Figure 2.5 - Posted Speed Limits



Source: CR Associates (2025)

Figure 2.6 - Presence of On-Street Parking

Source: CR Associates (2025), SANDAG Border to Bayshore Bikeway Improvement Plans (2022)

3.0 Safety

This chapter presents collision data for pedestrians, bicyclists, and drivers for the five-year period from January 1, 2019 through December 31, 2023. Data was obtained from SANDAG's Regional Vision Zero collision database which draws from the Statewide Integrated Traffic Records System (SWITRS), as collected and maintained by the California Highway Patrol. A total of 31 collisions were reported within the study area during the five-year period.

Table 3.1 summarizes the primary collision factor and collision type. Automobile right-of-way violations were the leading collision factor or cause, followed by unsafe speeds. Broadside collisions were the leading crash type for all collisions and those resulting from automobile right-of-way violations. Rear end collisions were the second most frequently reported crash type.

Table 3.1 - Collisions by Primary Collision Factor and Crash Type

	Broadside	Head-On	Hit Object	Other	Rear End	Sideswipe	Pedestrian	Total
Automobile Right-Of-Way	6	-	-	-	-	1	-	**7**
Unsafe Speed	-	-	1	-	3	-	-	**4**
Pedestrian Violation	-	-	-	1	-	-	2	**3**
Other Improper Driving	-	1	-	1	1	-	-	**3**
Under Influence	1	-	-	-	1	1	-	**3**
Following Too Closely	-	-	-	-	3	-	-	**3**
Improper Turning	2	-	-	-	-	-	-	**2**
Unknown/Not Stated	1	-	-	-	1	-	-	**2**
Improper Passing	-	-	-	-	-	1	-	**1**
Brakes	-	-	-	1	-	-	-	**1**
Wrong Side Of Road	-	-	-	-	-	1	-	**1**
Traffic Signals And Signs	-	-	-	-	-	1	-	**1**
Total	**10**	**1**	**1**	**3**	**9**	**5**	**2**	**31**

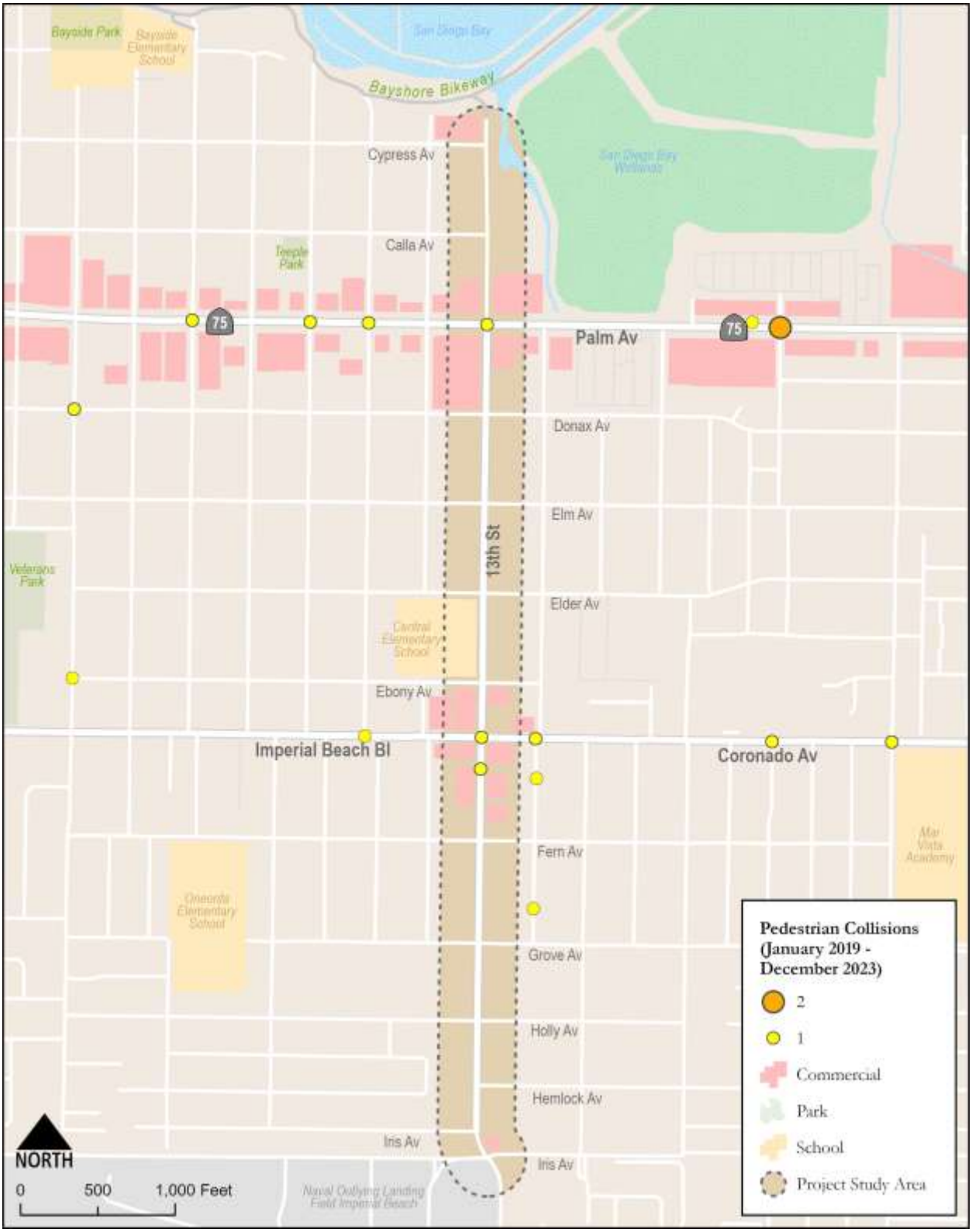
Source: CR Associates (2025), SANDAG (2024)

3.1 Pedestrian

Pedestrian collisions are shown in **Figure 3.1**, consisting of three reported collisions on 13th Street. Two of the records resulted in severe injuries: one collision at Palm Avenue and another just south of Imperial Beach Boulevard. All three collisions were due to pedestrian violations. The two collisions near Imperial Beach Boulevard occurred when it was dark, however, streetlights are present and were reported as working. The collision at the intersection with Palm Avenue occurred during daylight conditions.

When combining collisions within the study area and those just outside, a concentration of five pedestrian collisions is exhibited near the intersection with Imperial Beach Boulevard, where there are several commercial businesses and Central Elementary School nearby. The records potentially reflect relatively higher pedestrian activity in this area which may warrant additional safety considerations.

Figure 3.1 - Pedestrian Involved Collisions (2019 – 2023)



Source: CR Associates (2025), SANDAG (2024)

The corridor is lined with small parcels, most of which have curb cuts for driveway access. These serve as potential points of conflict for drivers with pedestrians and/or bicyclists. Reducing driveway frequencies could contribute to improved safety and comfort for active transportation users.

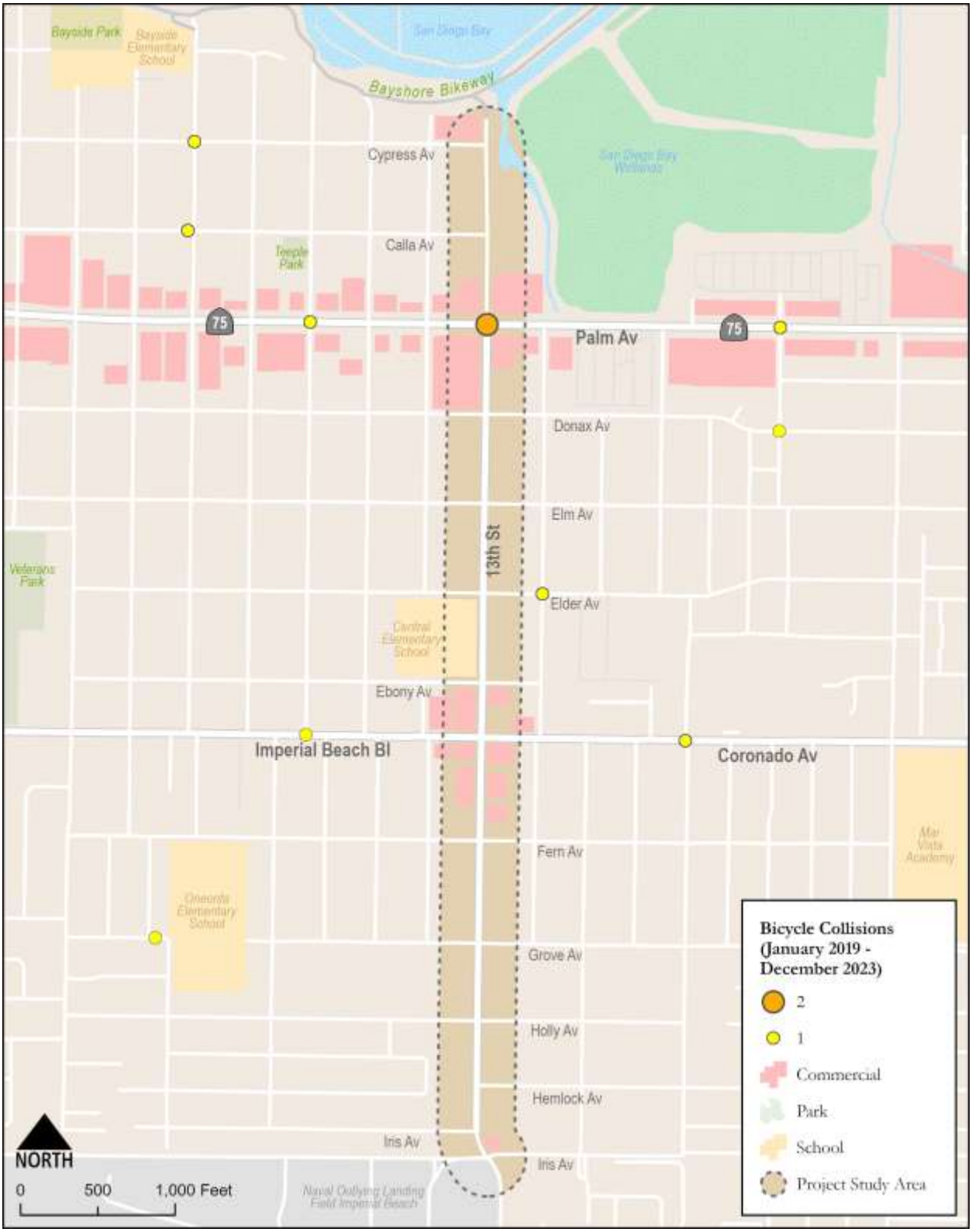
3.2 Bicycle

Figure 3.2 displays bicycle involved collisions, with two reported along 13th Street. Both bicycle collisions occurred at the intersection with Palm Avenue, resulting in minor injuries. The bicyclist was reported as at fault for both collisions. In one record, a bicyclist travelling eastbound collided with a stopped bus due to brake issues. The other collision was due to a northbound bicyclist violating the right of way of a right-turning vehicle.

3.3 Vehicle

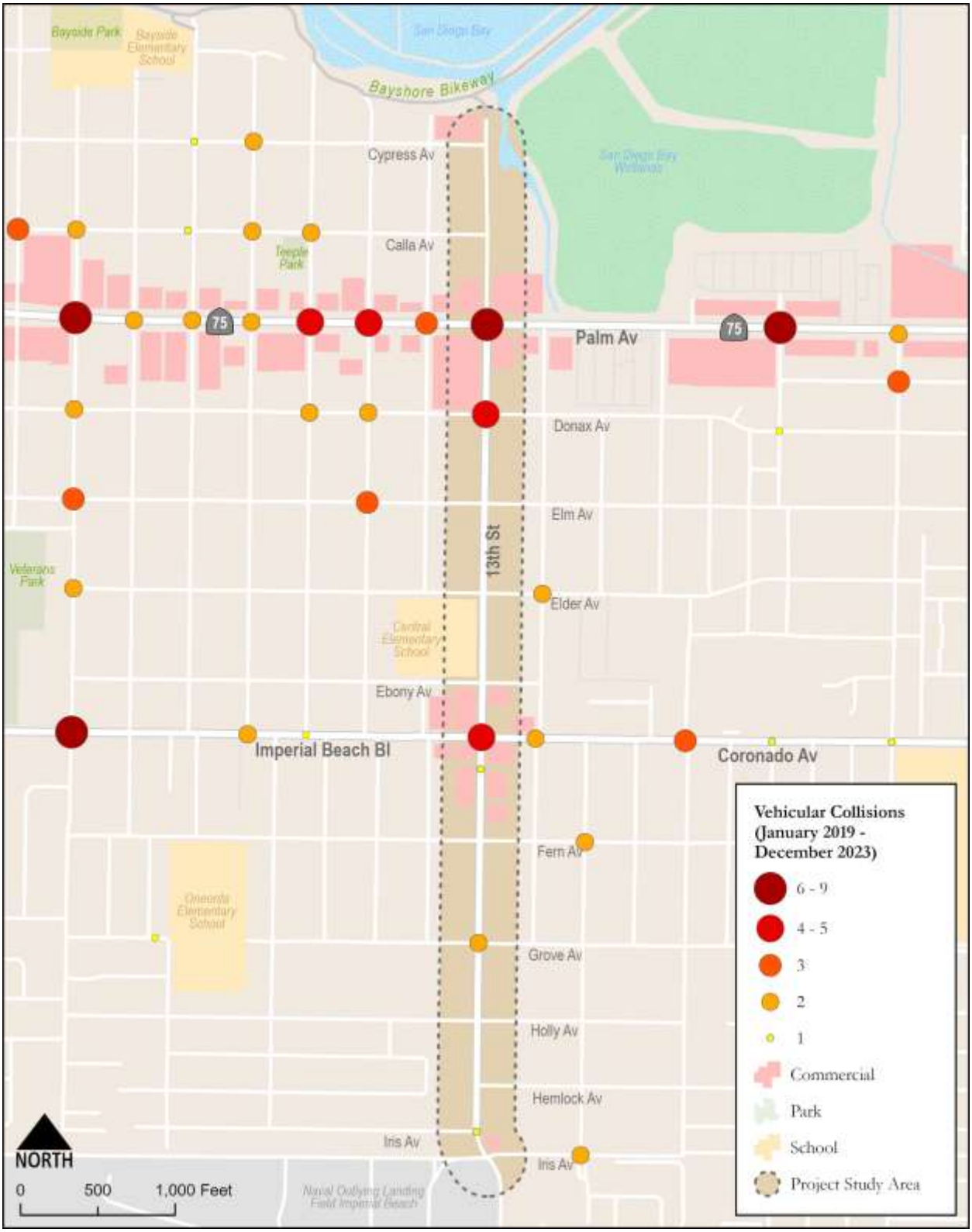
Figure 3.3 displays the 26 vehicle-only collisions reported within the study area. All but one of the vehicle collisions were reported within intersections or less than 100' from the intersection, with the exception being a collision approximately 200' south of Imperial Beach Boulevard. Thirteen collisions resulted in minor injuries and 13 resulted in property damage only. The greatest collision concentration was reported at the intersection with Palm Avenue with seven collisions due to a variety of causes (e.g., following too closely, unsafe speeds, traffic signal violations, driving under the influence, improper driving).

Figure 3.2 - Bicycle Involved Collisions (2019 – 2023)



Source: CR Associates (2025), SANDAG (2024)

Figure 3.3 - Vehicle Collisions (2019 – 2023)



Source: CR Associates (2025), SANDAG (2024)

4.0 Quality

This chapter describes the quality of the environment from the pedestrian, bicyclist, and transit user perspective. The chapter concludes with an assessment of where conditions are most supportive of multimodal trips. Vehicular operations were not evaluated due to the low traffic volumes and multimodal focus of the corridor, as designated by the adopted Mobility Element.

4.1 Pedestrian

A Pedestrian Environment Score (PES) methodology was used to assess the quality of segments and street crossings from the pedestrian perspective. For segments, this approach considers the presence and width of sidewalks, obstructions, posted speed limit, number of travel lanes, lighting, separation from traffic, presence of traffic calming treatments, and tree canopy. Intersection evaluation variables include traffic control, crossing length, curb ramp presence, sight distance (intersection daylighting), and additional crossing features such as turn restrictions, curb extensions, high visibility crosswalk presence, and operational enhancements at signals.

Figure 4.1 depicts the PES results for 13th Street segments, all intersections legs where pedestrians can legally cross (marked and unmarked), and the first block of each intersecting roadway. All but two of the 13th Street segments evaluated exhibit medium and high conditions, largely due to the low posted speeds (25 – 30 miles per hour) and single travel lane in each direction. The low score for the segment along the west side of 13th Street between Hemlock Avenue and Iris Avenue, was due to the additional travel lane in the southbound direction, while the low score for the southernmost segment along the east side of 13th Street was due to a lack of separation from the vehicular travel lane.

A total of 50 intersection crossing legs were evaluated, with 22 legs exhibiting conditions associated with high scores, 14 medium, 10 low, and 4 very low. Very low scores were typically due to unmarked crosswalks, with uncontrolled approaches and missing truncated domes on one or both curb ramps (Holly Avenue and Elm Avenue).

4.2 Bicycle

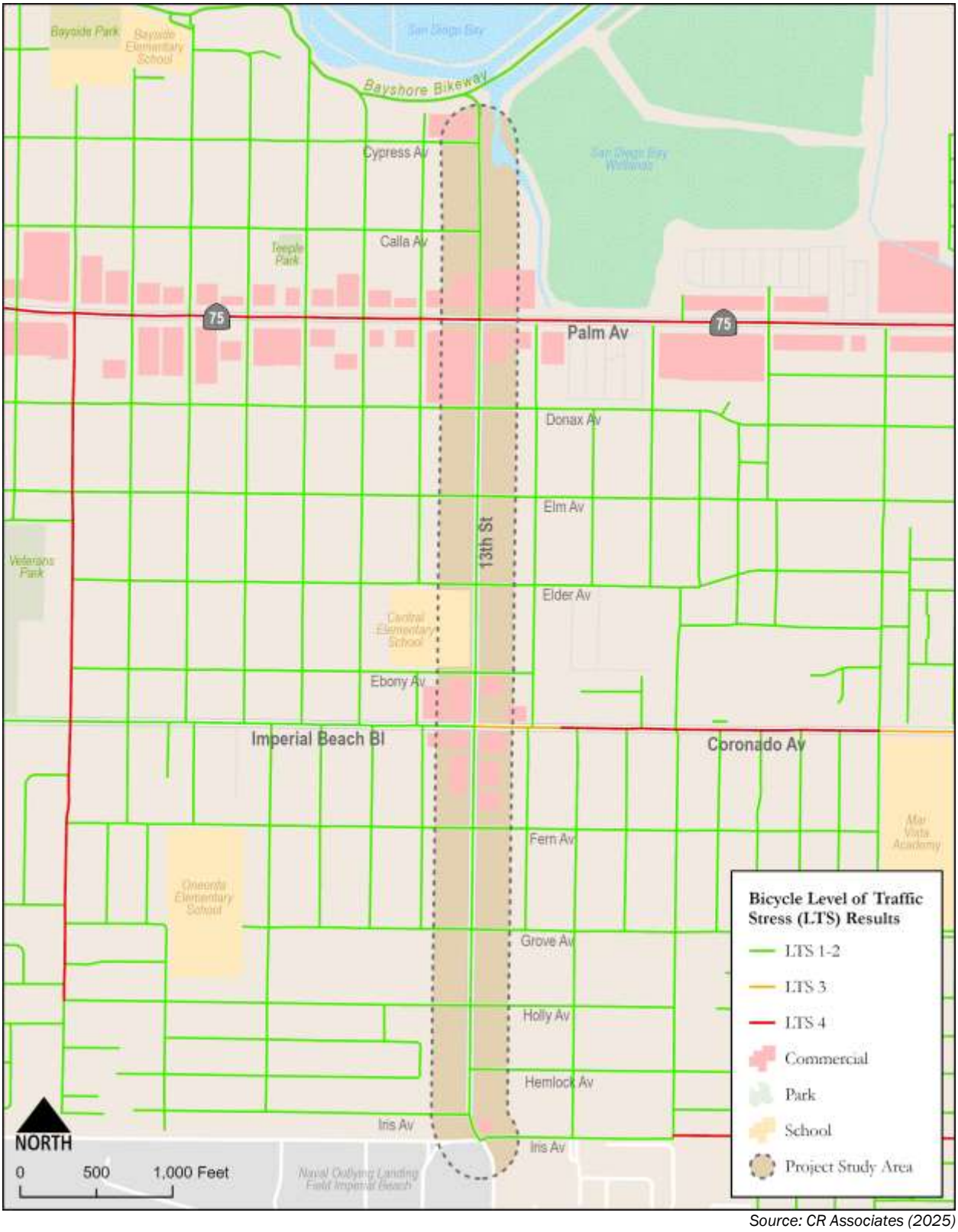
The quality of the roadway network was assessed using the bicycle Level of Traffic Stress (LTS) methodology for characterizing cycling environments, as developed by Mekuria, et al. (2012) of the Mineta Transportation Institute and reported in Low-Stress Bicycling and Network Connectivity. LTS classifies the street network into categories according to the level of stress it causes cyclists, taking into consideration a cyclist's physical separation from vehicular traffic, vehicular traffic speeds along the roadway segment, number of travel lanes, and factors related to intersection approaches with dedicated right-turn lanes and unsignalized crossings. LTS scores range from 1 (lowest stress) to 4 (highest stress) and correspond to roadways that different populations may find suitable for riding on, considering their stress tolerance.

Figure 4.2 illustrates the entirety of the corridor exhibits low stress conditions (LTS 1-2) that most people would be comfortable bicycling within. Similar to the PES evaluation, the scoring is a result of the low posted speeds (25 – 30 miles per hour), single travel lane in each direction, and absence of right-turn only lanes at intersections which typically result in drivers crossing over the bike lane.

Figure 4.1 - Pedestrian Environment Score

Source: CR Associates (2025)

Figure 4.2 - Bicycle Level of Traffic Stress



Source: CR Associates (2025)

4.3 Transit

Transit quality was evaluated for each transit stop in terms of the quality of the pedestrian and bicycle environment within ¼-mile. A ratio was developed by taking the distance of quality segments (high scoring PES segments or high scoring LTS segments) within a ¼-mile of each transit stop and dividing it by the area of ¼-mile crow flies buffer from the transit stop. A higher ratio represents greater access via high quality facilities.

Figure 4.3 depicts the quality walking ratio results, while **Figure 4.4** displays the quality biking ratio results. The transit stops with the highest walking ratio include at Grove Avenue (northbound), both stops at Holly Avenue, Fern Avenue (northbound), and Rapid 221 at Imperial Beach Boulevard (westbound).

The highest scoring biking ratios were fairly consistent with the walking ratio results, including stops at Holly Avenue (north and southbound), Grove Avenue (northbound), and Fern Avenue (northbound). Maximizing the quality of facilities people use to access transit can help contribute to a safer and more comfortable first-/last-mile journey.

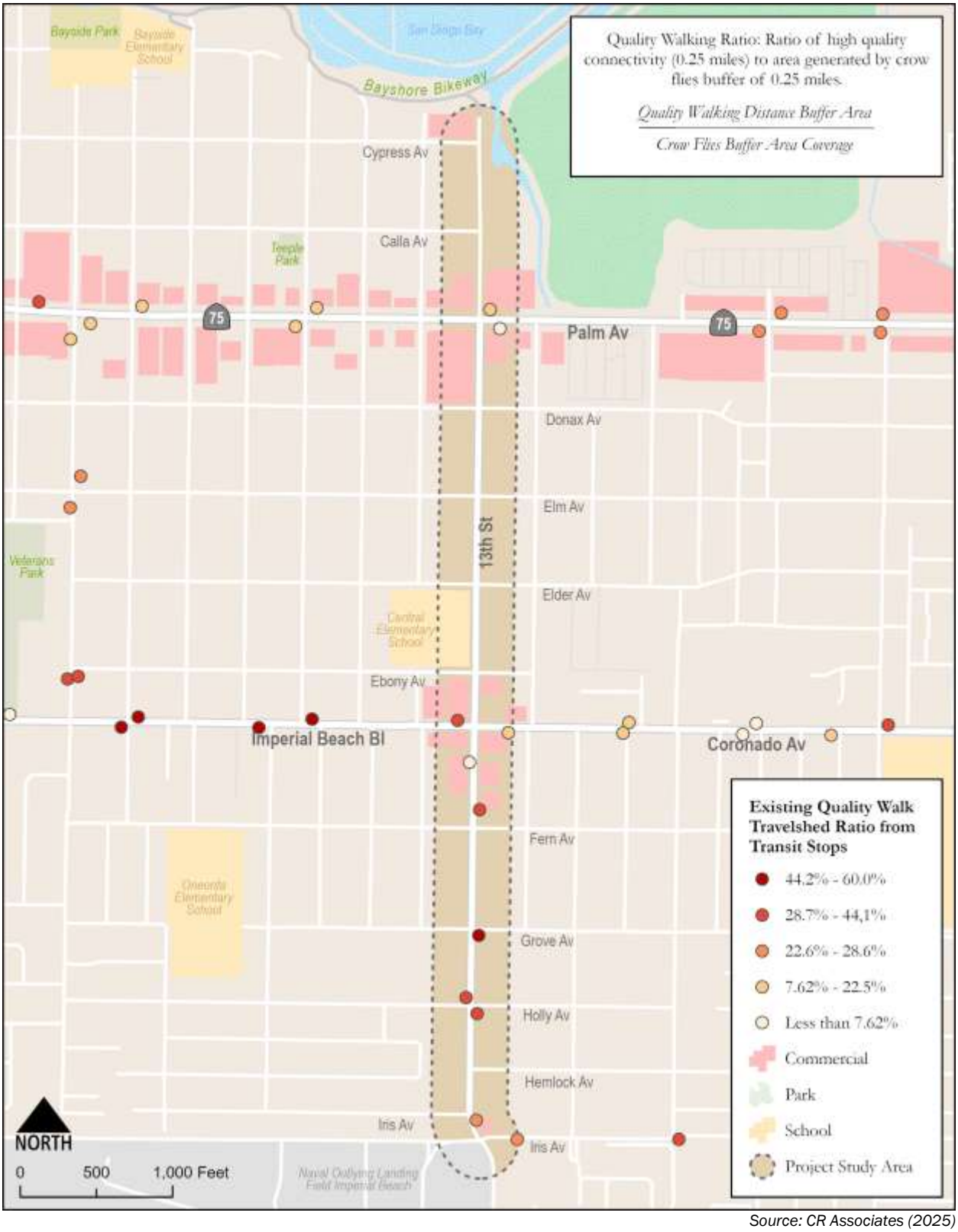
4.4 Multimodal

Transportation amenities are features generally intended to enhance user comfort and convenience. Examples include, but are not limited to, bus shelters, benches, bike parking, wayfinding, and micromobility devices and parking (such as e-scooters). An assessment was performed to determine locations within the study area that exhibit characteristics with the greatest potential for trips via walking, bicycling, or transit, which may also benefit the most from additional investments in transportation amenities.

Housing, employment, visitor-attracting businesses (retail, restaurants, services, etc.), civic resources (schools and parks), transit ridership and low-bicycling stress connectivity was measured at each intersection within the study area to determine which nodes have the highest use potential for transportation amenities. The quantity of these variables, except for transit ridership, were summarized within a half-mile network distance of each intersection. **Table 4.1** shows the summary of each variable by intersection. Transit ridership reflects the average daily boardings and alightings at bus stops clustered around each intersection. Intersections with no bus stops have no transit ridership in the table.

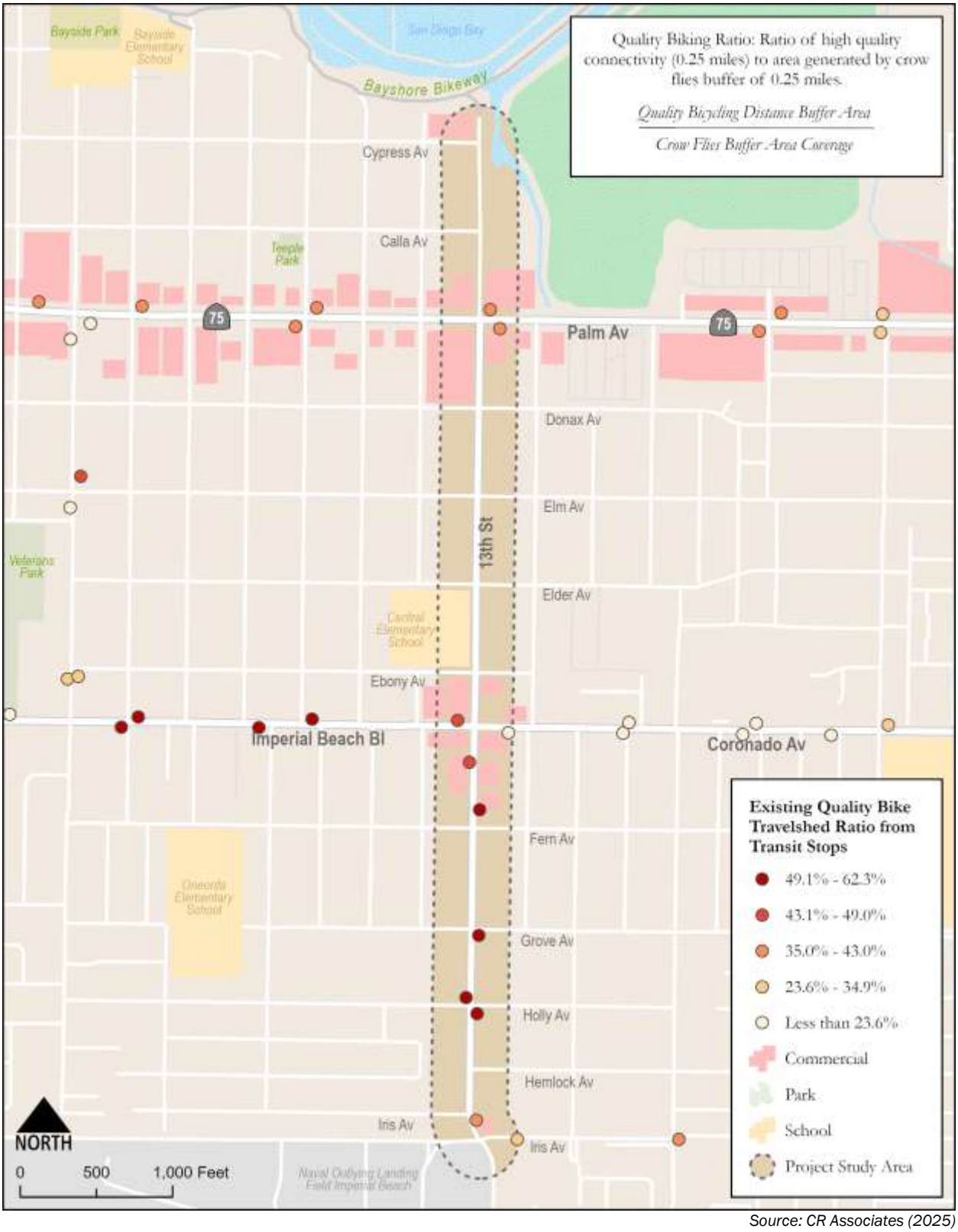
The quantities were sorted for all variables, except for Parks and Schools, into five categories based on natural breaks. The highest quantity category received four points, the next highest quantity category received three points, and so forth down to the lowest quantity category, which received zero points. The points for Parks and Schools was determined by multiplying the quantities by two considering the relatively greater volumes of people walking and/or bicycling these uses tend to attract. There were only three schools and one park within the study area and no intersection was within a half-mile of more than two of these land uses. Factoring by two enabled the scoring for this variable to be consistent on a zero to four scale with the other variables. **Table 4.2** and **Figure 4.5** depict the results for each intersection. As shown, the Imperial Beach Boulevard and Palm Avenue intersections scored the highest with 18 points.

Figure 4.3 - Quality Walking Ratio from Transit Stops



Source: CR Associates (2025)

Figure 4.4 - Quality Biking Ratio from Transit Stops



Source: CR Associates (2025)

Table 4.1 - Multimodal Trip Amenity Potential Input Values

Intersection	Housing Units	Employment	Trip-Attracting Businesses	Transit Ridership	Parks and Schools	Low-Stress Bicycling Mileage
Cypress Ave	1,529	329	18	0	2	5.1
Calla Ave	1,909	680	22	0	2	6.2
Palm Ave	2,412	762	32	168	2	7.5
Donax Ave	2,576	750	32	0	2	8.9
Elm Ave	2,695	692	22	0	1	9.7
Elder Ave	2,831	545	15	0	1	10.5
Ebony Ave	3,148	402	10	0	2	10.5
Imperial Beach Bl	3,189	320	8	330	2	10.3
Fern Ave	3,223	360	8	26	2	9.9
Grove Ave	2,489	344	8	29	2	8.9
Holly Ave	2,439	277	6	115	2	7.9
Hemlock Ave	2,219	167	5	0	1	6.9
Iris Ave	2,054	154	5	111	1	6

Source: CR Associates (2025), SANDAG (2025), MTS (2023)

Table 4.2 - Multimodal Trip Amenity Potential Scores

Intersection	Housing Units	Employment	Trip-Attracting Businesses	Transit Ridership	Parks and Schools	Low-Stress Bicycling Mileage	Total Points
Cypress Ave	0	1	3	0	4	0	**8**
Calla Ave	1	4	3	0	4	0	**12**
Palm Ave	2	4	4	3	4	1	**18**
Donax Ave	2	4	4	0	4	2	**16**
Elm Ave	3	4	3	0	2	3	**15**
Elder Ave	3	3	2	0	2	4	**14**
Ebony Ave	4	2	1	0	4	4	**15**
Imperial Beach Bl	4	1	1	4	4	4	**18**
Fern Ave	4	2	1	1	4	3	**15**
Grove Ave	2	2	1	1	4	2	**12**
Holly Ave	2	1	0	2	4	1	**10**
Hemlock Ave	1	0	0	0	2	1	**4**
Iris Ave	1	0	0	2	2	0	**5**

Source: CR Associates (2025)

Figure 4.5 - Multimodal Trip Amenity Potential

Source: CR Associates (2025)

5.0 Key Findings

The key mobility findings are summarized in **Figure 5.1**. Recent improvements to 13th Street as part of the Border to Bayshore Bikeway project provided great benefits for all modes through shortened crossing distances and improved crosswalks, improved bike lanes, and increased on-street parking. Additional improvements, including separated bicycle facilities and pedestrian crossing enhancements, are being designed along Palm Avenue, which is a major commercial corridor intersecting with 13th Street.

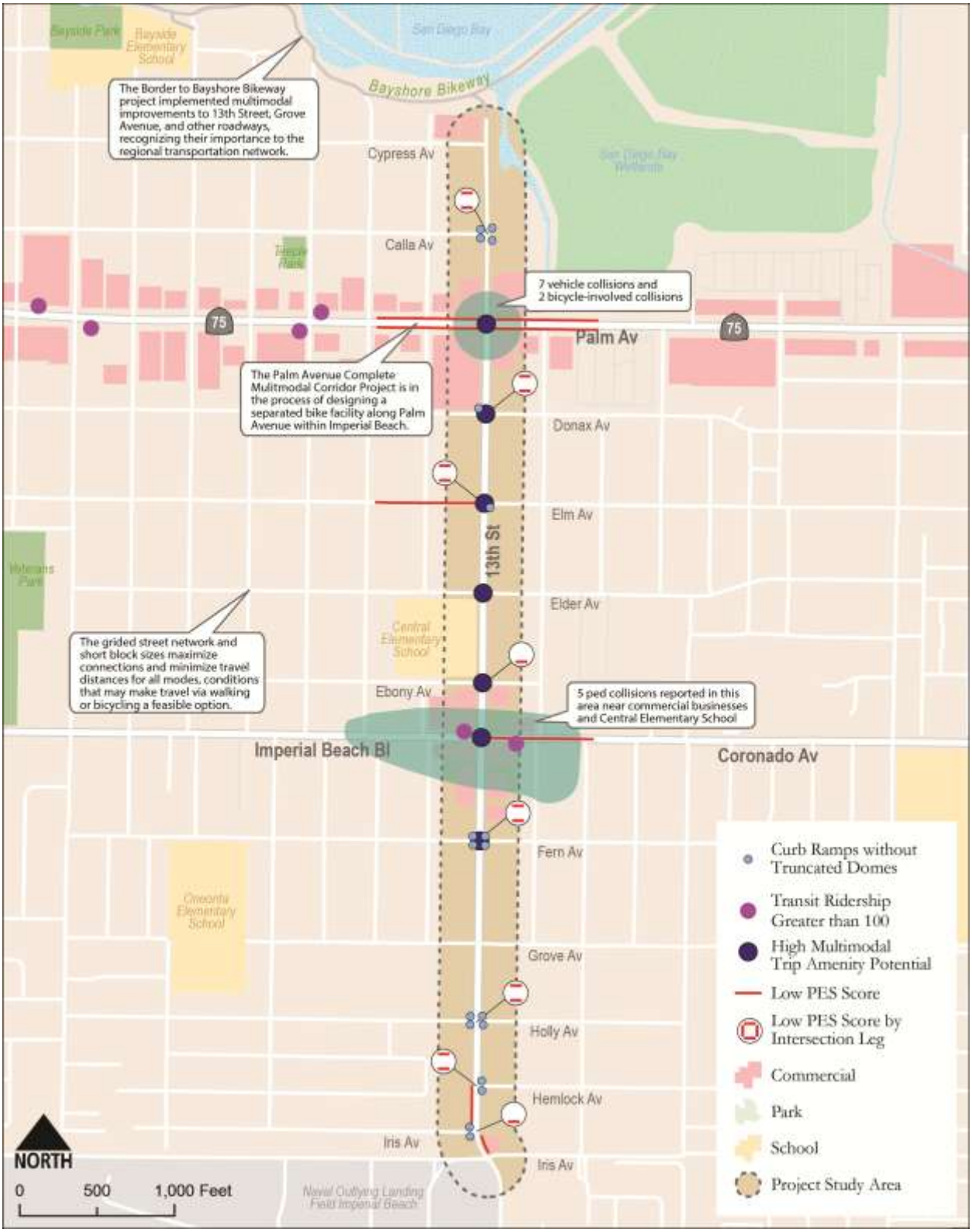
The study area street network, and Imperial Beach as a whole, exhibit a strong grid pattern which facilitates ease of navigation, maximizes connectivity, and helps minimize travel distances. These characteristics, along with low posted speed limits (25 – 30 miles per hour) and relatively narrow roadway widths and few travel lanes, contribute to an environment that helps make travel via walking, bicycling, and/or transit a potentially feasible and comfortable option.

The recent and ongoing improvements, and supportive environment can be capitalized upon to further improve access, mobility, and safety for all travel modes. Deficiencies to consider addressing include ensuring all curb ramps are retrofitted with truncated domes to help provide universal access and targeting low PES scoring sidewalks and crossing locations for additional improvements. The frequent curb cuts for driveways along the corridor serve as potential points of conflict for drivers with pedestrians and/or bicyclists. Reducing driveway frequencies through parcel consolidation or site redevelopment could contribute to improved safety and comfort for active transportation users, however, site access for residents, patrons, visitors, and emergency vehicles must be considered.

The intersection of 13th Street and Imperial Beach Boulevard and surrounding area may benefit from an additional pedestrian focus due to the concentration of pedestrian collisions, retail and elementary school proximity, and high ridership transit stops. Improving the pedestrian signal heads at the intersection with Palm Avenue to include countdown indicators could improve pedestrian safety by informing people how much time remains to safely cross the six-lane roadway. The seven intersections at and between Palm Avenue and Fern Avenue may warrant further considerations for investment, as these areas were identified as having relatively high potential for multimodal trips and could benefit from amenities.

Discussions with community members, business representatives, agency staff, and other stakeholders will supplement the findings from this technical analysis and help inform the direction and approach to mobility recommendation development. Any recommendations will also be made to complement potential land use changes and urban design enhancements.

Figure 5.1 - Mobility Issues and Opportunities



Source: CR Associates (2025)