

# School Safety Assessment Technical Memorandum

## Impact Academy

2560 Darwin Street, Hayward, CA, 94545

Hayward Unified School District Envision Education

February 2020



# Impact Academy

A school safety assessment was conducted at Impact Academy in Hayward during the afternoon dismissal on Tuesday, February 11, 2020. The assessment was attended by representatives from the City of Hayward, Alameda County Safe Routes to Schools staff, and Impact Academy staff and parents.

#### Participants included:

- Charmine Solla, Senior Transportation Engineer, City of Hayward
- Omar Bryan, Vice Principal, Impact Academy Middle School
- Pooja Maharaj, Vice Principal, Impact Academy High School
- Andre Huff, Engineer, Alameda County SR2S team
- Aleida Andrino-Chavez, Engineer, Alameda County SR2S team
- Beth Martin, Planner, Alameda County SR2S team
- Nick Aguilera, Planner, Alameda County SR2S team
- Victor C., Impact Academy Parent
- Denise Kaheiki-Farian, Impact Academy Parent
- Monica Hernandez, Impact Academy Parent

## **School Information**

#### **Location & Enrollment**

	Address:	2560 Darwin Street Hayward, CA 94545		
IMPACT ACADEMY TECHNOLOGY	Morning Bell(s):	8:10am (Middle School);		
		8:30am (High School)		
	Afternoon Bell(s):	3:20pm (Middle School all days except Wed); 3:45pm (High School all days except Wed); 12:45pm (Middle School Wed); 12:00pm (High School Wed)		
	Grade Levels:	6 - 12		
	Enrollment:	376 (Middle School);		
		477 (High School)		
	School Type (neighborhood/ magnet/charter):	Charter		

Impact Academy

## **Student Travel Data**

Students' Proximity to	Less than ¼ mile (5-min. walk): 2%		
School (school estimate):	Between $\frac{1}{4}$ and $\frac{1}{2}$ mile (5-10-min. walk): 3%		
	Between $\frac{1}{2}$ and 1 mile (10 to 20-min. walk): 25%		
	Greater than 1 mile (more than 20-min. walk): 70%		

Student Travel Mode	Recent SR2S Hand Tally Data:		
Info:	Spring 2019		
	Walking: 1%		
	Biking: 1%		
	School Bus: 0%		
	Transit: 18%		
	Carpool: 10%		
	Family Vehicle: 70%		
	Other: 0%		

## Bikes, Buses, and Drop-off/Pick-up

Does the school have bike racks? What is the capacity? Is it secure bike parking?	The school has one bicycle rack that is secured and gated within school grounds. It has the capacity for 10-15 bicycles.			
On a typical day, what percentage of racks are used?	Approximately 30% (3-5 students)			
Does the school have special pick-up/drop-off policies/procedures?		Middle grades students may arrive anytime after 7:30 AM, which is when supervision begins.		
	Para a manager and a manager a	8 <sup>th</sup> Grade families use the back parking lot. 6 <sup>th</sup> and 7 <sup>th</sup> grade families may use Darwin Street or the back parking lot.		
		No families may use the front parking lot		

#### **Street Profiles**

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Notes	
Darwin Street	35 feet	2 lanes	25 mph	628	Street parking on either side	
Bahama Avenue	48 feet	2 lanes	25 mph	1,806	Street parking on either side	
Tennyson Road	70 feet	4 lanes	35 mph	Unavailable	Street parking on either side	

#### Pedestrian- and Bicycle-Involved Collision Summary 2014-2018

The collision summary table shows all bicycle- and pedestrian-involved collisions within one-half mile of the school. These collisions may or may not be school-related travel.

Radius from School	Total Collisions	Fatal Collisions	Severe Injury Collisions	Visible Injury Collisions	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions
< 1⁄4 mi	2	0	0	1	1	1	1
1⁄4 mi – 1⁄2 mi	13	0	0	7	6	10	3
Total	15	0	0	8	7	11	4

Note: Hesperian Boulevard to the northeast of Impact Academy is on the Alameda County High-Injury Pedestrian Network.

Source: UC Berkeley – Transportation Injury Mapping System, Safe Transportation Research and Education Center, University of California, Berkeley, 2019; Alameda County Transportation Commission Countywide Active Transportation Plan – High-Injury Network

## **Existing Conditions**

#### Overview

Impact Academy is located on Darwin Street in Hayward, California. Impact Academy's campus is home to both Impact Academy Middle School and Impact Academy High School. Both schools are tuition-free charter schools operated by Envision Education.

The school campus is directly west of Mt. Eden Park in a residential neighborhood of Hayward. The majority of student drop-off and pick-up occurs along the school frontage along Darwin Street and Bahama Avenue. Approximately 18% of students walk from transit stops on Tennyson Road or Hesperian Boulevard.

The peak afternoon pick-up period lasts from approximately 3:15pm - 3:50pm on all days except for Wednesdays.

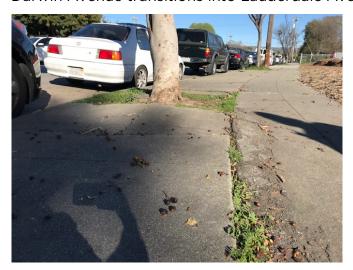
Between 2014 and 2018, there has been one bicycle collision and one pedestrian collision reported within ¼ mile of the school. There have been 13 total collisions within a ½ mile radius of the school. The majority of these have been concentrated along Hesperian Boulevard and Tennyson Road. Hesperian Boulevard is identified as part of Alameda County's High-Injury Pedestrian Network. Impact Academy students walk along both Hesperian Boulevard and Tennyson Road to get to and from transit on their way to school.

#### Observations

The following existing conditions were observed or reported by participants during the school safety assessment (SSA).

- 1. Darwin Street
- Impact Academy's primary middle school and high school entrances are on Darwin Street.
- High volumes of drivers were observed double parking to pick-up students along the south side of Darwin Street.
- Many vehicles are parked on the south side of Darwin Street throughout the day. The school has asked staff to park in the school parking lot instead of along the school frontage, although this policy is not enforced.
  - SSA participants said that vehicles were parked with irregular spacing, which limited curbside capacity.
- SSA participants reported students darting in front of oncoming traffic and low levels of pedestrian visibility due to double parked vehicles in the street.
- SSA participants said that drivers make U-turns along the length of Darwin Street.
- SSA participants said that speeding occurs along Darwin Street and drivers may not know that it is a school zone. School staff noted that a "Loading Only" sign was installed by the city farther west than Impact Academy had initially requested.

- SSA participants observed drivers blocking the school driveway while waiting to pick-up students.
- SSA participants said that people drive their vehicles in the oncoming travel lane to pass double-parked vehicles.
- High volumes of pedestrian activity were observed walking both east and west along the sidewalk after the dismissal bell.
- SSA participants observed broken, uneven sidewalk along the south side of Darwin Street between the school and Bermuda Lane.
- SSA participants and school staff said that an ice cream truck parks along the south side of Darwin Street after school and generates high volumes of pedestrian activity.
- SSA participants said that vehicles make very wide turns around the bend as Darwin Avenue transitions into Lauderdale Avenue.





Left: Broken, uneven sidewalk on the south side of Darwin Street. Right: No Student Drop Off or Pick Up signage in school driveway.



Above: Unevenly spaced car parking limits curb capacity.

#### 2. Darwin Street at Bermuda Lane

- The intersection of Darwin Street and Bermuda Lane is uncontrolled on all approaches.
- There are two painted transverse crosswalks on the north and east approaches of the intersection.
- SSA participants observed high volumes of students crossing in the existing marked crosswalks as well as the unmarked east approach of the intersection.
- SSA participants observed many personal vehicles and a food truck parked along the curb encroaching into the crosswalk and obstructing visibility of people walking in the crosswalk.
- People driving large vehicles were observed making three-point turns in the intersection.



Above: Commercial and personal vehicles park close to the crosswalk and obstruct pedestrian visibility.



Above: The intersection of Darwin Street and Bermuda Lane. SSA participants observed students crossing at unmarked locations.

#### 3. Darwin Street at Creole Place

- The intersection of Darwin Street and Creole Place is uncontrolled.
- There is an existing transverse crosswalk on the north approach of the intersection.

#### 4. Bahama Avenue at Darwin Street

- The intersection of Bahama Avenue and Darwin Street is a four-way intersection that is stop controlled on all approaches.
- There are currently transverse crosswalks on all approaches of the intersection.



Above: Transverse crosswalks at the intersection of Bahama Avenue and Darwin Street.

#### 5. Bahama Avenue – School Frontage

- SSA participants observed students being picked up in private vehicles along both sides of Bahama Avenue.
- There are no marked crosswalks across any of the minor street intersections at Bahama Avenue between Darwin Street and Tennyson Road.
  - SSA participants said that students cross Bahama Avenue in these unmarked crossings in front of oncoming traffic.
- SSA participants said that southbound vehicles make U-turns along Bahama Avenue in order to travel north.



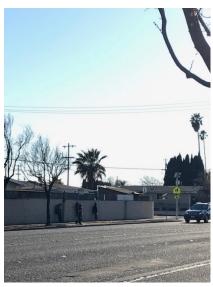
Above: Signage along the Bahama Avenue School Frontage.

#### 6. Bahama Avenue at Naples Street

- The intersection of Bahama Avenue and Naples Street is a four-way intersection characterized by two-way stop-control on Naples Street.
- SSA participants observed southbound vehicles making U-turns in the intersection to avoid the intersection of Bahama Avenue and Tennyson Road and travel north instead.

#### 7. Bahama Avenue at Tennyson Road

- The intersection of Bahama Avenue and Tennyson Road is stop-controlled on the Bahama approaches.
- There is a high-visibility crosswalk with an rectangular rapid flash beacon (RRFB) on the east approach of the intersection. SSA participants saw many students walking south through this crosswalk after actuating the RRFB.
- SSA participants said that long queues of southbound cars back up down Bahama Avenue as they wait to turn left on Tennyson Road. High traffic volumes and high vehicle speeds along Tennyson Road make it difficult for vehicles to turn left.





Left: Students wait at the bus stop on Tennyson Road. The bus stop lacks seating and shelter. Right: A high-visibility crosswalk and RRFB across Tennyson Road.

#### 8. Tennyson Road at Oliver Drive

- The intersection of Tennyson Road and Oliver Drive is signalized.
- There are transverse crosswalks across the east and south approaches of the intersection.
- SSA participants watched students cross Tennyson Road in the east crosswalk.



Above: A student crosses Tennyson Road at Oliver Drive.

#### 9. Hesperian Boulevard at Tennyson Road

- The intersection of Hesperian Boulevard and Tennyson Road is signalized.
   There are existing transverse crosswalks across all approaches of the intersection.
- SSA participants reported that vehicles make high-speed turns around the corners of the intersection due to the wide corner radii.
- SSA participants watched students run across the 100-foot long crosswalk in a hurry to cross before the pedestrian countdown ended.
- SSA participants said that the sidewalk on the northeast approach to the intersection is broken and uneven.





Left: Broken, uneven pavement along Hesperian Boulevard.

Right: A vehicle makes a wide, quick turn from Hesperian Boulevard onto Tennyson Road.



Above: People walk across Hesperian Boulevard.

#### 10. Hesperian Boulevard at Aldengate Way

- The intersection of Hesperian Boulevard and Aldengate way is a signalized Tintersection. There are existing transverse crosswalks across the north and west approaches of the intersection.
- SSA participants saw vehicles make quick, wide turns around intersection corners.

#### 11. Hesperian Boulevard at Sleepy Hollow Avenue

- The intersection of Hesperian Boulevard and Sleepy Hollow Avenue is a fourway, signalized intersection.
- SSA participants said that vehicles make high-speed, wide turns around the intersection corners.
- SSA participants said that making left-turns onto Hesperian Boulevard from Sleepy Hollow Avenue is challenging due to high volumes on oncoming traffic during arrival and dismissal hours. Without a protected left-turn signal phase, this results in back-up on Sleepy Hollow Avenue.

#### 12. Mt. Eden Park

- SSA participants said students use the paths through Mt. Eden park to reach Hesperian Boulevard.
- SSA participants observed that the path through Mt. Eden Park is broken and uneven.



Above: Broken, uneven sidewalk on a path connecting Mt. Eden Park to Hesperian Boulevard.

#### 13. Impact Academy Campus

- There is fencing and vegetation on the northeast corner of the parking lot driveway that exits onto Bahama Avenue. SSA participants noted that this limits the visibility of students walking along the sidewalk.
- SSA participants observed vehicles speeding through the parking lot and exiting the parking lot onto Naples Street against traffic and against the existing circulation pattern.

## **Participant Comments**

The school principal and SSA participants were very eager to participate in the SSA and very excited about the potential to improve student safety on the streets and transportation facilities around Impact Academy. There was a strong turn-out of parent support at the SSA. Parents were most concerned about student safety along Darwin Street and Bahama Avenue.

## Recommendations

#### **Engineering Recommendations**

Recommendations to improve infrastructure or operations Impact Academy can be seen on the conceptual improvement plan found following this memo.

#### **Policy & Program Recommendations**

In addition to engineering improvements, the Alameda County Safe Routes to Schools Program has many encouragement and educational activities that can benefit students and campus community at Impact Academy.

The School Site Coordinator for Impact Academy is Darrell Davis. The Site Coordinator can help schedule, organize, and promote many of the program offerings of Alameda County SR2S. The contact information for the Site Coordinator is below:

Darrell Davis, ddavis@alamedacountysr2s.org

Please do not hesitate to reach out to the Site Coordinator if you have any questions or concerns, or if you wish to move forward with additional programming activities.

#### **Programs**

The following improvements are recommendations for policy and program implementation at Impact Academy to increase safety and active commutes to school.

- Develop Walk and Bicycle Route Maps
  - The SR2S Program can create recommended Walk and Bicycle Route Maps. These maps illustrate preferred routes to school for walking and biking. Maps also provide safety tips to encourage better travel behavior.
  - These maps can also be used as a part of Walking School Buses (WSBs), Bicycle Trains (BTs), or other Walk and Roll to School activities. Park and Walk, WSB, and BT meeting locations are also shown on these maps where appropriate.
- Encourage and Help Facilitate Carpooling
  - The SR2S Program can assist schools in working with parents to connect them with other families who live nearby to increase the

number of students carpooling. This can reduce congestion by reducing the number of vehicles coming to campus.

- Schedule Pedestrian Rodeos and Bicycle Rodeos
  - These interactive rodeos are great educational opportunities to teach and refresh safe walking and bicycling behavior. These workshops cover a wide range of relevant topics from understanding traffic signals and signs, to bicycle hand signals, to how to safely cross the street. Pedestrian Safety Rodeos and Bicycle Safety Rodeos are geared towards elementary school students.
- Participate in International Walk and Roll to School Day (IRW2SD), the Golden Sneaker Contest (GSC), and Bike to School Day (B2SD)
  - These are the three main countywide encouragement events that occur throughout the academic year. All schools can participate in International Walk and Roll to School Day, held in October every year. The Golden Sneaker Contest, held in spring, is for elementary and middle schools and is a two-week contest both within schools and across the county challenging classrooms to travel to/from school using active and shared modes. All schools can also participate in Bike to School Day, held in tandem with Bike to Work Day, which encourages schools to sponsor Energizer Stations and students and families to bike to school.
- Educate the School Community on parking, pick-up, and drop-off policies
- Work with the Hayward Police Department to enforce curb and parking policies
- Enforce Afterschool Program Pick-Up Parking Spot Program



## Safe Routes to Schools Improvement Plan **Impact Academy** Hayward, CA

School Safety Assessment held February 2020

#### **Darwin Street**

- 1a. Stripe parking lane on the north and south sides of street between Bahama Avenue and Bermuda Lane
- 1b. Paint white curb along school frontage and install R25D "School Loading Only" signage
- 1c. Install "School Assembly D" signage along Darwin Street
- 1d. Repair sidewalk on south side of street between school and Bermuda Lane

#### Darwin Street/Bermuda Lane

- 2a. Upgrade existing crosswalks to high-visibility
- 2b. Install high-visibility crosswalk across west approach of intersection
- 2c. Install paint and post curb extensions on corners of intersection
- 2d. Install red curb on south side of intersection\*\*

#### **Darwin Street/Creole Place**

- 3a. Upgrade existing crosswalk to high-visibility
- 3b. Install high-visibility crosswalks across west and east approaches
- 3c. Install paint and post curb extensions on all corners
- 3d. Install red curb on south side of intersection\*\*

#### **Bahama Avenue/Darwin Street**

- 4a. Upgrade existing crosswalks to high-visibility
  4b. Install paint and post curb extensions on all corners

#### **Bahama Avenue - School Frontage**

- 5a. Install paint and post curb extensions across Bal Harbor Lane and Leeward Street. Upgrade crosswalks to high-visibility
- 5b. Paint white curb along school frontage and install R25D "School Loading Only" signage

#### **Bahama Avenue/Naples Street**

6a. Install paint and post curb extensions across Naples Street 6b. Install high-visibility crosswalk across Naples Street

- Bahama Avenue/Tennyson Road
  7a. Prepare a traffic calming feasibility study at intersection
- 7b. Install high-visibility crosswalks on all intersection approaches
- 7c. Install paint and post curb extensions on all corners

#### **Tennyson Road/Oliver Drive**

- 8a. Upgrade existing crosswalk to high-visibility
- 8b. Install Class IIB Buffered Bike Lane along Tennyson Road west of Hesperian Boulevard\*\*\*
- 8c. Install Class IV Separated Bikeway along Tennyson Road east of Hesperian Boulevard\*\*\*

#### Hesperian Boulevard/Tennyson Road

- 9a. Install paint and post curb extensions on all corners
- 9b. Upgrade existing crosswalks to white continental
- 9c. Install median refuge islands on all approaches
- 9d. Repair broken sidewalk along Hesperian Boulevard

Hesperian Boulevard/Aldengate Way
10a. Install paint and post curb extensions on northeast and southeast corners

#### Hesperian Boulevard/Sleepy Hollow Avenue

- 11a. Install paint and post curb extensions on all corners
- 11b. Study implementation of protected left turn signal phase for vehicles turning onto Hesperian Boulevard from Sleepy Hollow Avenue







