

# School Safety Assessment Technical Memorandum

## KIPP BRIDGE ACADEMY

1700 Market Street, Oakland, CA 94607

Oakland Unified School District

March 2019

## KIPP BRIDGE ACADEMY

A school safety assessment was conducted at KIPP Bridge Academy in Oakland during the morning arrival on March 14, 2019. The assessment was attended by representatives from the City of Oakland, Alameda County Safe Routes to Schools Staff, and KIPP Bridge Academy staff.

#### Participants included:

- Beaver Boonsook, Engineer, Oakland Department of Transportation
- Salomé Portugal, Upper School Leader, KIPP Bridge Academy
- John Peterson, Lower School Leader, KIPP Bridge Academy
- Lauren Garner, KIPP Bridge Academy Staff
- Cierra Standford, KIPP Bridge Academy Staff
- Nick Bleich, Engineer, Alameda County SR2S Team
- Ben Frazier, Planner, Alameda County SR2S Team

## **School Information**

#### **Location & Enrollment**

	KIPP: BRIDGE ACADEMY	Address:	1700 Market Street
			Oakland, CA 94607
		Morning Bell(s):	7:40 AM
		Afternoon Bell(s):	4:00 PM
		Grade Levels:	TK - Grade 8
		Enrollment:	528
		School Type (neighborhood/ magnet/charter):	Charter

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

bike racks? What is the capacity? Is it secure bike parking?	The school has one set of bike racks near the new upper school building within the gated campus.

On a typical day, what percentage of racks are used?

Does the school have

The bike racks were empty on the day of the assessment.

Is the school served by local transit agencies? Are there stops within ¼ mile?



KIPP Bridge is served by AC Transit's Line 88 on Market Street.

Does the school have special pick-up/dropoff policies/procedures?



All pick-up and drop-off occurs along 18<sup>th</sup> Street; the school's only frontage with access points.

KIPP Bridge Academy is not served by school buses.

#### **Frontage Streets**

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Existing Traffic Calming
18 <sup>th</sup> Street	62 feet	4 lanes	25 mph	4,316 ADT	School crossing pavement markings
Market Street	88 feet	4 Lanes	School Zone 25 mph	-	Buffered bike lanes
16 <sup>th</sup> Street	44 feet	2 lanes	25 mph	-	-
West Street	40 feet	2 lanes	25 mph	-	School crossing pavement markings

## **Collision Summary 2014-2018**

Radius from School	Fatal Collisions	Severe Injury Collisions	Visible Injury Collisions	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions	Total Collisions
< 1⁄4 mi	0	3	8	20	17	14	31
1⁄4 mi - 1⁄2 mi	1	11	28	60	56	44	100
Total	1	14	36	80	73	58	131

Source: UC Berkeley – Transportation Injury Mapping System

## **Existing Conditions**

#### Overview

KIPP Bridge Academy is located in West Oakland, one block west of I-980, between 18<sup>th</sup> Street and 17<sup>th</sup> Street. The school shares the block with Marston Campbell Park to the south. The school is served by both transit and bike share with stops/stations along Market Street. The school recently completed construction of a new building at the northeast corner of the campus. Pick-up and drop-off for both the lower and upper schools occur on 18<sup>th</sup> Street.

#### Observations

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

- 1. 18<sup>th</sup> Street Frontage
- 18<sup>th</sup> Street is a four-lane roadway with two lanes in each direction and no median.
- 18th Street is the primary drop-off location for KIPP Bridge Academy students.
- To facilitate drop-off activities, KIPP Bridge lays out cones to create a drop-off lane.
  - o The drop-off area is very well staffed by KIPP Bridge staff.
  - The current drop-off lane setup occupies both the parking lane and one of the travel lanes.
    - The drop-off lane begins about 100 feet east of the Market Street intersection. There is no advance warning of the "repurposing" of the outside eastbound travel lane. This causes traffic to backup as through drivers need to change lanes to continue eastbound past the school.
  - Drivers were observed performing U-turns both into and out of the drop-off lane. Drivers were sometimes unable to complete their turns and blocked one or two lanes of traffic.
  - At its peak, the queue of cars extended beyond the line of cones, reaching Market Street.
- Multiple drivers were observed parking and double parking on the northern side of the street. Many of these parents crossed 18<sup>th</sup> Street mid-block with their student to reach the campus; crossing multiple lanes of traffic and the drop-off area.

 Westbound traffic on 18th Street was observed traveling at high speeds and showed aggressive driving habits. Traffic going to/from I-980 passes through this area as the freeway on- and off-ramps are just one block east of the school.





Left: A student and parent crossing mid-block on 18<sup>th</sup> Street in front of the school. Right: A car performing a mid-block U-turn (multiple point turn) into the drop-off lane area from the opposing travel lanes.



Above: The queue of cars and traffic backing-up from cars weaving into/out of the drop-off lane.

## 2. 18<sup>th</sup> Street/Market Street

- 18<sup>th</sup> Street/Market Street is a major signalized intersection, where two multilane streets come together.
- There are curb extensions on the two southern corners of this intersection. All four crosswalks are marked as yellow transverse crosswalks.
- The median on Market Street extends into the crosswalk at the northern approach. It is not a pedestrian refuge island and can force pedestrians, especially those with special mobility needs, to walk outside the crosswalk.
- Students and families were observed walking from the north, through this intersection, to reach KIPP Bridge.

## 3. Market Street/16<sup>th</sup> Street

- Market Street/16<sup>th</sup> Street is a four-way intersection. The 16<sup>th</sup> Street approaches are stop-controlled.
- AC Transit Line 88 has stops at the northeast and southwest corners.
  - These stops are commonly used by students arriving and leaving school.
- There are two marked crosswalks at this intersection: a white high visibility crosswalk across the southern Market Street approach and a white transverse crosswalk across the eastern 16<sup>th</sup> Street approach.
  - The Market Street crossing is over 100 feet long and pedestrians must cross four lanes of traffic.
  - o The Market Street crossing has advance yield markings.
  - Students who use AC Transit to travel south on Market Street or who come from north, must cross Market Street at this uncontrolled location.

## 4. 16<sup>th</sup> Street/West Street

- 16<sup>th</sup> Street/West Street is a four-way intersection. The West Street approaches are stop-controlled.
- There is one marked crosswalk at this intersection; a yellow transverse crosswalk across the western 16<sup>th</sup> Street approach.
- The crosswalks at this intersection were very faded. There were no advance pavement markings.

## 5. West Street/17<sup>th</sup> Street/18<sup>th</sup> Street

- Immediately west of West Street, 18<sup>th</sup> Street splits into 18<sup>th</sup> Street and 17<sup>th</sup> Street, with a triangular concrete island separating these segments as they intersect with West Street.
  - o 17<sup>th</sup> Street has two lanes traveling eastbound and curves to the south.

- o 18<sup>th</sup> Street has two lanes traveling westbound.
- Traffic traveling westbound on 18<sup>th</sup> Street at West Street does not stop. Eastbound 17<sup>th</sup> Street at West Street is also not stop-controlled. West Street is stop-controlled at 18<sup>th</sup> Street and 17<sup>th</sup> Street.
  - The West Street/17<sup>th</sup> Street intersection is affected by poor sightlines from multiple angles.
  - Due to the curve on 17<sup>th</sup> Street, drivers approaching West Street have limited sight distance to see waiting pedestrians.
  - Drivers were observed traveling at high speeds along the curve, having limited time to react if needed as they approach the intersection.
     Visibility of other approaching cars is also limited from other approaches.
- There are yellow transverse crosswalks marked across the western approaches of 17<sup>th</sup> Street and 18<sup>th</sup> Street.
- Student drop-off activity also occurred at this intersection, with drivers pulling over to the curb and letting their students out of cars.
  - SSA participants stated that since the completion of the new academic building at the corner, there has been an increase in drop-off/pick-up activity at this intersection.





Left: The West Street intersections of 18<sup>th</sup> Street and 17<sup>th</sup> Street.

Right: The marked crossing of 17<sup>th</sup> Street at West Street.



Above: 17<sup>th</sup> Street curving towards the West Street intersection.

## Recommendations

#### **Engineering Recommendations**

Recommendations to improve infrastructure or operations surrounding KIPP Bridge Academy can be seen on the conceptual improvement plan found on the following page.

#### **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 KIPP Bridge Academy.

The School Site Coordinator for KIPP Bridge Academy is Jeannette Cooper. 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:

Jeannette Cooper, jcooper@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 KIPP Bridge Academy to increase safety and active commutes to school.

- Develop Walk Route Maps
  - The SR2S Program can create recommended Walk Route Maps. These maps illustrate preferred routes to school for walking. Maps also provide safety tips to encourage better travel behavior. These maps can also be used as a part of Walking School Buses (WSBs) or other Walk and Roll to School activities. Park and Walk and WSB 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.
- Facilitate Walking School Buses and Bicycle Trains
  - Walking School Buses (WSBs) and Bicycle Trains (BTs) are groups of students, led by parent/adult chaperone(s), that meet at designated locations and times to gather and walk and/or bike to school together.
     WSBs and BTs can be regular events, occurring daily, weekly, or monthly or occur in coordination with other events like International

Walk and Roll to School Day or the Golden Sneaker Contest. SR2S staff can assist schools with the planning, coordination, and execution of the WSBs and BTs. Walking and biking in groups with parental supervision can not only increase the visibility of these road users, but can reduce barriers to walking or biking for some families while making it fun and exciting for the students.

- Schedule Pedestrian Rodeos/Bicycle Rodeos OR Drive Your Bike
  - o These interactive rodeos/workshops 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. The Drive Your Bike workshop has both a middle school and high school version.
- 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. Cocoa for Carpools, held in the winter, is a fun event for high schools that rewards carpoolers with free hot chocolate when they arrive to school. 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.



## Safe Routes to Schools Improvement Plan

## **KIPP Bridge Academy Oakland**

Site Assessment held March 2019

## 18th Street

- Realign the drop-off lane to be directly against the curb. Do not use the travel lane for drop-off activities

- Stripe a white lane line between the travel lane and parking lane - Instead of placing two lines of cones, after the street has been restriped, place cones closer together on parking lane line to limit U-turns in/out of the lane

- Install CA-MUTCD R3-4 No U-turn signs on the north side of 18th

- Refresh SCHOOL XING AHEAD pavement marking (for both directions

- Relocate the eastbound markings closer to West Street

- Long term: Consistent with the Let's Bike Oakland Plan, consider implementing a road diet on 18th Street to install Class II buffered bicycle lanes

### 18th Street/Market Street

Upgrade all four crosswalks to high visibility crosswalks

- Retrofit the median at the northern approach to include a pedestrian
- Install appropriate red curb/parking restriction signage at this intersection\*\*

### 16th Street/Market Street

- Restripe the existing crosswalk across the southern Market Street approach as a yellow high visibility crosswalk
- Extend the median into the crosswalk or create a paint and post refuge island for the southern Market Street crosswalk
- Install an RRFB for the Market Street crossing
- Restripe the crosswalk at the eastern approach of 16th Street as a yellow transverse crosswalk. Add advance stop markings at the
- Review signal timing for adequate pedestrian intervals
   Install appropriate red curb/parking restriction signage at this intersection\*\*

#### 16th Street/West Street

- Upgrade the existing yellow transverse crosswalk to a yellow high visibility crosswalk across the western approach. Install advance yield markings at both the western and eastern approaches
- Push back the existing stop bars and mark yellow transverse crosswalks across both approaches of West Street
- Install appropriate red curb/parking restriction signage at this intersection\*\*

## West Street/17th Street (south)

- Upgrade the two existing transverse crosswalks at 17th/West to high visibility crosswalks
- Install appropriate red curb/parking restriction signage at this intersection\*\*

#### West Street/17th Street (north)

- Conduct a stop sign warrant study for the 17th Street approach at
  - If warranted, also install CA-MUTCD W3-1 Stop Sign Ahead sign and advance
  - stop pavement markings
  - If the approach remains uncontrolled install advance yield markings and consider a RRFB
- Upgrade the transverse crosswalk across 17th Street to a high visibility crosswalk. Install the appropriate advance yield/stop markings before the crosswalk
- Install appropriate red curb/parking restriction signage at this intersection\*\*







The Alameda County Safe Routes to Schools Program is funded by the