Innovating Safe Routes to School:

River City High School Year 1 and Year 2 Program Summary

WALKSACRAMENTO

SAFE ROUTES to SCHOOL
City of West Sacramento

"Working with WALKSacramento was a wonderful experience for our students to allow them to engage in meaningful work that can help to change the environment they live in. This experience helped the students gain real-world experience even in the virtual classroom and see that their input would be considered in future decisions. It was wonderful being able to do the walk audit with Molly and then work with Sarah on the Mobility hub design to help students see an application of their data that can be influential in change." – Phyllis Cruz, RCHS Science Teacher

Introduction

The Innovating Safe Routes to School: Transcending K-8 Curriculum program leveraged over 5 years of K-8 Safe Routes to School programming to implement an innovative 2-Year High School SRTS curriculum geared towards fostering a continuous culture of active transportation among High School Students attending River City High School. Since fall 2019, the project team has worked with River City High School staff to identify student leadership opportunities to develop a culture of active transportation. The program has been led by WALKSacramento with funding provided by the City of West Sacramento and Sacramento Area Council of Governments (SACOG).

Including Youth in the Planning Process

By the time students reach high school, they travel more independently of their parents/guardians and are making their own decisions about how they want to travel. Their decisions can be influenced by a number of factors, including commute times, access to different modes of transportation, and the feeling of safety in the built environment.

Johns Hopkins researchers recently set out to explore if student's experiences during school commutes affect their academic success[1]. Researchers found that students who have to travel through dangerous streets are more likely to miss school, leading to chronic absenteeism. While this study focused primarily on crime and not roadway design, the point remains the same. The perspective of a student's personal and physical safety can drastically affect how they perform in the classroom. When students arrive more stressed, have more complicated and longer commutes, they have a harder time focusing and performing in class.

Another recent study observed the relationship between commute times, sleep, and physical activity.[2] Researchers at California Polytechnic State University, Rutgers University, and UCLA found that over a 12-year period, "Students with commutes of fewer than 30 minutes got as much as an hour and 15 minutes more exercise than those with longer commutes. Those who walk or bike to school also got an hour and 11 minutes more exercise than those who commute by car". As for students' sleep, "Each additional minute of commuting is associated with an even greater 1.3-minute reduction in sleep. To put that in perspective, if one student had a 10-minute commute, and a second had a 30-minute commute, the second student would get an average of 26 minutes less sleep."

Both these studies reinforce the environment students are exposed to along their commute and the type of transportation they take is a critical factor in their performance and academic success. The more students are exposed and encouraged to use active modes of travel and public transportation at a young age, the more likely they will use regular active transportation and public transportation as adults. However, it is not enough to just tell students and families to swap their cars for biking, walking, or public transit. The built environment must support safe, reliable, and sustainable modes of transportation. While adults may navigate the physical environment in very routine ways, students and

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[1] Burdick-Will, Julia, Marc L. Stein, and Jeffrey Grigg. 2019. "Danger on the Way to School: Exposure to Violent Crime, Public Transportation, and Absenteeism." Sociological Science 6(1): 118-142. doi: 10.15195/v6.a5 https://releases.jhu.edu/2019/02/13/dangerous-school-commutes-lead-to-student-absenteeism/ Accessed March 9, 2021

[2] Richard Florida, "Long School Commutes Are Terrible for Kids", *Bloomberg CityLab.* May 7, 2019 https://www.bloomberg.com/news/articles/2019-05-07/how-distance-to-school-affects-student-well-being Accessed March 9, 2021

young adults bring a new and important perspective to the table. It is imperative that youth are included in planning processes with the recognition that their voice directly impacts their future community and their own personal future and health. This program created a space for youth to explore mobility, climate, and transportation goals as it relates to theirs and their peer's experiences. Student insights and feedback continue to inform ongoing and future planning projects and initiatives within the City of West Sacramento.

Year 1 Program Summary: Fall 2019/Spring 2020

The high school program officially launched in Fall 2019. Prior to launch, the project team met with RCHS administration to identify transportation needs that could be addressed by traditional Safe Routes to School strategies and develop student leadership opportunities for students. After understanding what students might be interested in, WALKSacramento hosted an afterschool club that met twice each month. The club curriculum posed the question "What can I do as a West Sacramentan to influence transportation choice of my peers and my community?".

Three key goals of the program were:

- Support student-led service projects
- Engage students around issues in the built environment in relation to transportation and other topics relevant to West Sacramento students
- Expose students to career paths in transportation, urban planning, sustainability, and related fields

Program Curriculum

Date	Session	Objectives
October 3, 2019	Info Session / You and Your Community	• Meet instructors • Design your sustainable community activity • Discuss how the community around us shapes how we live, get around, and how we can influence the future of our communities.
October 16, 2019	How did we get here? Connecting Transportation to the Environment	• Understand the history of transportation and how our transportation choice affects the environment around us for years to come • Explore efforts in West Sacramento for transportation modes
November 6, 2019	Understanding Data Trends Part 1	• Analyze data trends in transportation and health in the community and will learn how to conduct a student travel survey.
November 20, 2019	Understanding Data Trends Part 2	• Analyze data trends relating to travel patterns of their peers and brainstorm ideas to address survey findings

December 4, 2019	Walk Audit Workshop	• Assess conditions in the community around the school • Identify opportunities for improving access to school and other community destinations.
River City High School Fall Finals and Winter Break – No Sessions December 19, 2019 – January 7, 2019		
January 22,2020	Changing the Narrative through Projects and Policies	• Explore Strategies for positive community change to address challenges identified through data collection and the walk audit
February 5, 2020	Defining your Project	• Define and plan project to address challenges from previous session
February 19, 2020	Gathering Information	• Conduct interviews, research, and additional information for projects
March 4, 2020	Working Session	Climate Action Club students plan week long lunchtime activities for RCHS students March 30 – April 4, 2020 to explore transportation, community design, and celebrate walking and biking to school. Activities planned: • Monday: Take Action for Climate! Exploring connections between transportation, climate change, and air quality • Tuesday: Design Your Community Lego Activity: Students design and discuss their ideal community vs reality using Legos • Wednesday: Bike Tune-ups: Edible pedal will do bike tune-ups, share maintenance tips, and will encourage riding to school the following days. • Thursday: Bike Trivia Game – test your biking knowledge • Friday: Grand prize drawings for students who walked, biked, or rolled to school throughout the week.
Climate Action Week March 30 – April 4th and all remaining sessions cancelled due to COVID-19 school closures.		

Year 1 Highlights

Ten RCHS students participated in the program and explored how community design affects daily movement of residents. A few highlights from the program included:

• **Creative Visioning:** Students were prompted to answer the question, "What does a sustainable city look like to you?" through a creative visioning exercise. Students broke out into small groups and used Legos and other objects to design their sustainable city. The open-ended nature of the question allowed students to define what "sustainability" meant to them. While each group created different cities, they all shared common elements such as dense land uses, electrification and renewable energy, community gardens, water recycling systems, and waste reduction.

• **Transportation Tradeoffs:** Students learned about the importance of reducing emissions from transportation due to the transportation sector contributing over 40% of California's emissions. Following this discussion, students broke out into two groups to participate in a game where they were tasked with identifying a suite of mobility solutions that would maximize carbon emissions reductions in a fictional city. Each group was given a different scenario to tailor their mobility solutions to the needs of their city's residents. Scenarios included a population that prioritized open space, a population that opposed high density land uses, an aging population, and a population that prioritized health. The game prompted dialogue about the benefits and drawbacks of different mobility solutions. After the game, students shared the game had made them think about opportunities and constraints with different solutions They learned more about how to reduce carbon emissions through the transportation sector. A few students attended the Mayor's Climate Commission's Youth Climate Summit the following Saturday and mentioned that this session had prepared them to be the experts at the table in their transportation group.

Figure 1: Students build their vision for a sustainable West Sacramento

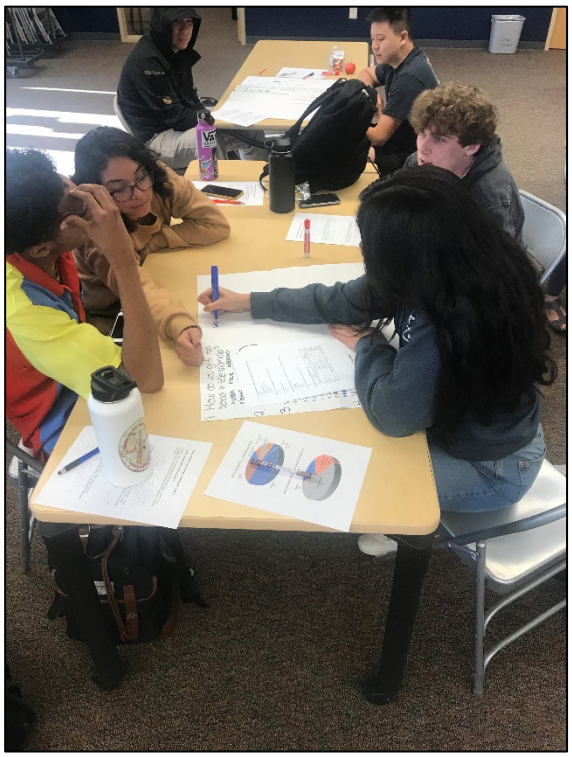


Figure 2: Students use existing data to develop a student travel survey

• **Data Collection Methods:** Students explored how to use data collection tools such as UC Berkeley SafeTREC's Traffic Injury Mapping System (TIMS) and Street Story tools, CalEnviro Screen to understand historical data to challenges they identified in the community and use the data to support future calls to action. In addition to existing tools, the students developed a survey to better understand their peer's opinions about transportation (Appendix A). 223 students responded to the survey. Students also conducted a walk audit to share their challenges traveling to and from River City High School and the West Sacramento Recreation Center. Their findings from the survey and the walk audit are summarized in the RCHS Walk Audit report developed through this program.

Figure 3: RCHS Students explore UC Berkeley SafeTREC's Data Tools

• **Momentum Building with Peers:** Students identified a need to generate education, encouragement, and excitement for active transportation. They recognized linking active transportation to climate smart solutions would be key in generating discussions from a larger group of peers. After feedback from fellow peers, the survey, and their community design research, the group planned a Climate Action Week for March 2020. The Climate Action Week consisted of daily lunchtime activities around transportation including an interactive design your community activity, a pop-up bike maintenance education clinic with Edible Pedal Bike Shop, a transportation emissions demo, sharing safe walking and biking route map, and daily incentives to walk and bike to school. Due to COVID-19 school closures, the events and remaining program was cancelled for the remainder of the year.

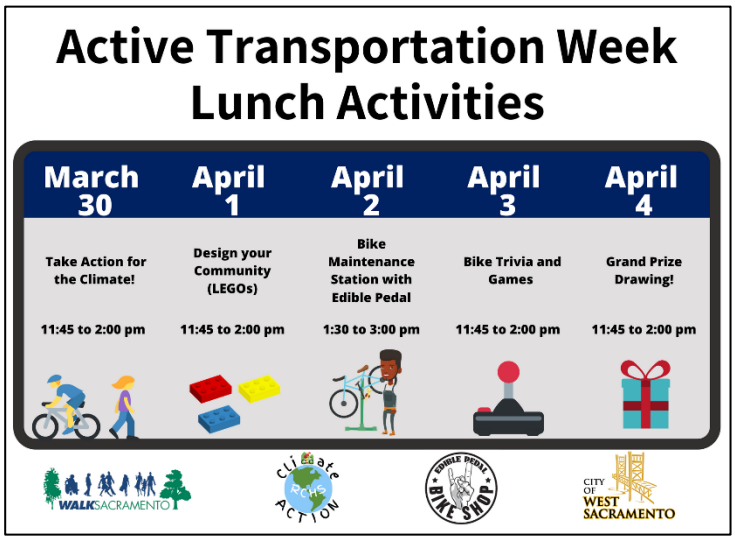
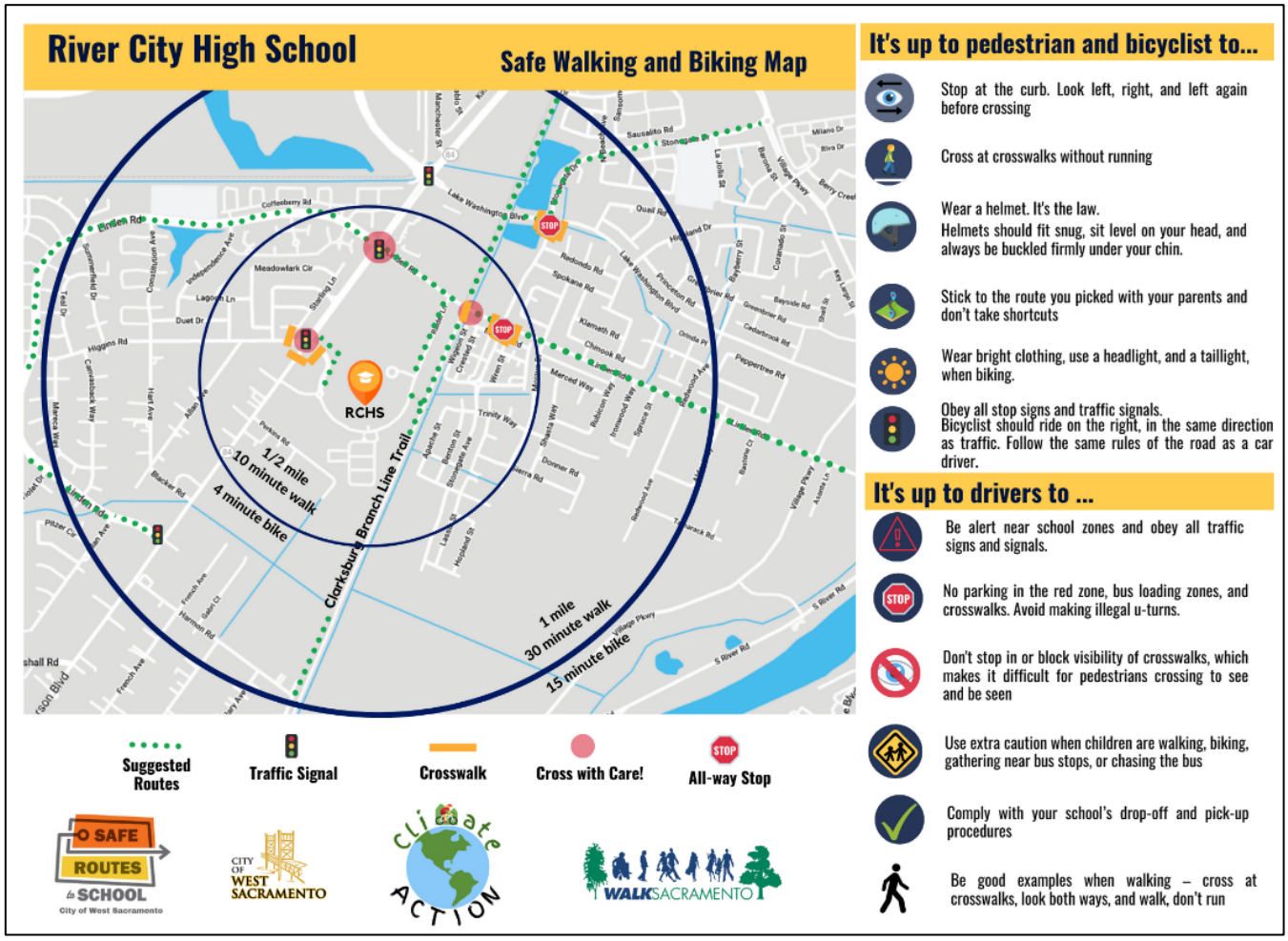


Figure 4: RCHS Active Transportation Week Schedule of Activities



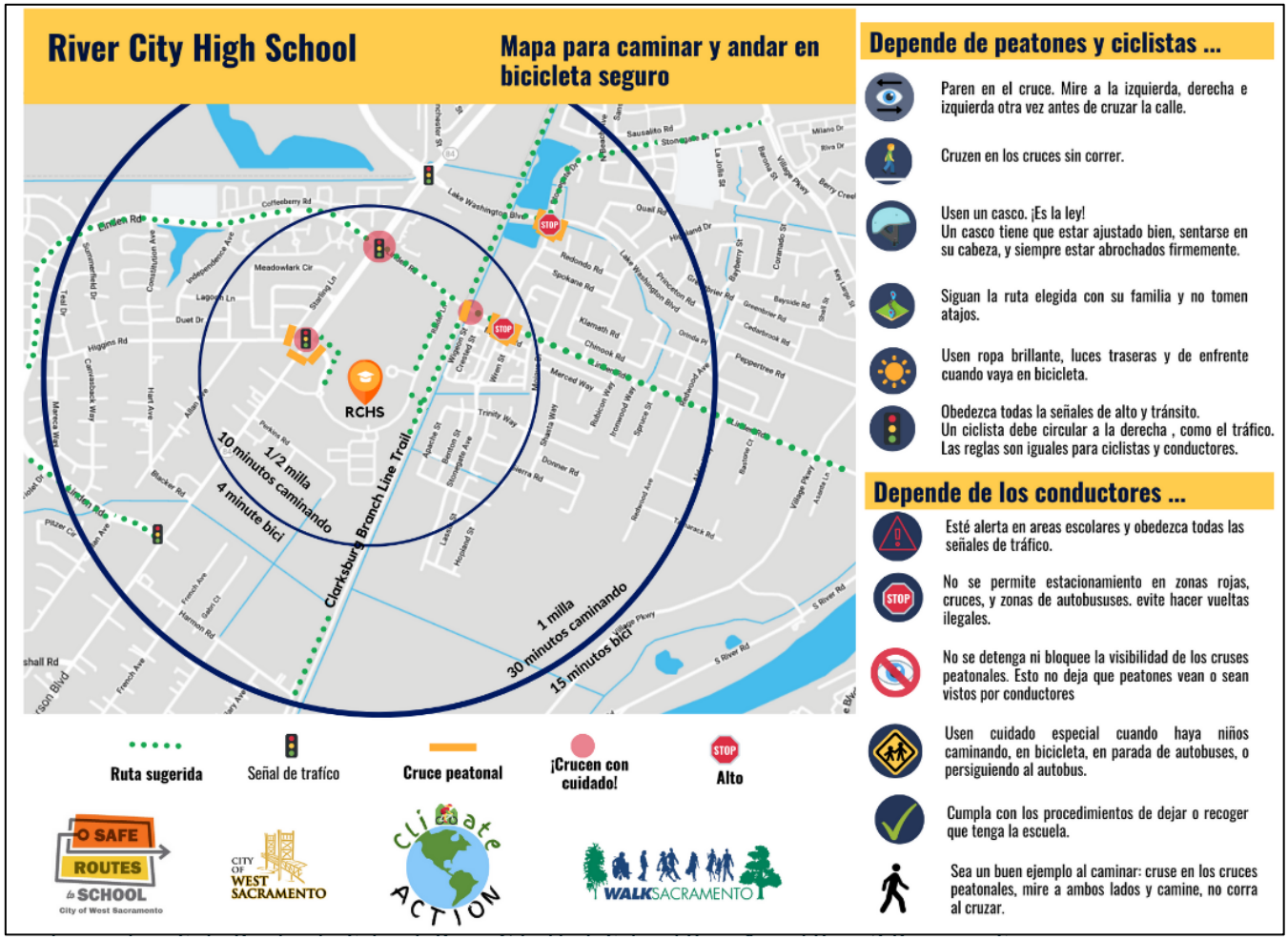


Figure 5: Climate Action Students helped develop suggested walking and biking routes to River City High School

Year 2 Program Summary: Fall 2020/Spring 2021

As students returned to virtual learning in the Fall of 2020 and Spring 2021 due to COVID-19, WALKSacramento identified new avenues to support students and teachers. Through a partnership with Phyllis Cruz, a Science Teacher at River City High School, WALKSacramento guest taught a 5-day virtual course focused on Transportation, Air Quality, and the Built Environment.

Throughout the course, students identified connections between transportation mode choice, air quality, and barriers and opportunities to choosing active transportation and conducted walk audits in their own neighborhoods, further exploring what it means to travel by walking, biking, or rolling. The course concluded with an interactive workshop hosted by the City of West Sacramento to gather student feedback on the City's Mobility Action Plan in the Fall semester and a career panel in the Spring semester.

Fall 2020 Program Outline

Date	Session	Objectives
September 14, 2020	Connecting Transportation, Air Quality, and the Built Environment	• Meet instructors • Understand the history of transportation and how our transportation choice affects the environment around us for years to come • Discuss how the community around us shapes how we live, get around, and how we can influence the future of our communities. • Introduction to Walk Audits
September 15, 2020	Preparing for a Walk Audit (Working Day)	• Introduction to Walk Audits Continued • Conduct walk audits during class
September 16, 2002	Conducting a Walk Audit (Working Day)	• Conduct walk audits during class • Assess conditions in the community around the school • Identify opportunities for improving access to school and other community destinations
September 17, 2020	Summarizing the Walk Audit Findings	• Assess conditions in the community around the school • Identify opportunities for improving access to school and other community destinations
September 18, 2020	Mobility Action Plan Workshop	• Special Guests from the City of West Sacramento conduct a Mobility Action Plan Workshop with students to share their version for the future of transportation in West Sacramento.

Spring 2021 Program Outline

Date	Session	Objectives
March 9, 2021	Introduction to Transportation, The Environment, and Walk Audits	• Introduction to the WALKSac Team • Interactive Activity exploring Community Design/Transportation • Overview of Walk Audit Assignment
March 10, 2021	Preparing for a Walk Audit (Working Day)	• Introduction to Walk Audits Continued • Conduct walk audits during class
March 11, 2021	Conducting a Walk Audit (Working Day)	• Conduct walk audits during class • Assess conditions in the community around the school • Identify opportunities for improving access to school and other community destinations

March 12, 2021	Advocating for Change/Examples of Professions	• Career Panel:
		  ○ Class 1 8:35 - 9:25 Speakers:
		  ▪ Treasure Acevedo, Transportation Planning Intern
		  ▪ Seamus Laffey, Associate Planner
		  ▪ Elijah Ortega, Community Investment Specialist
		  ○ Class 2 9:35 – 10:30: Speakers:
		  ▪ Treasure Acevedo, Transportation Planning Intern
		  ▪ Isaah Alford, Community Investment Specialist
		  ▪ Amber Saiyasit, Administrative Analyst I

Midterm Assignment	Introduction to Policy White Papers and Video Voice as Advocacy Tools	• Understand Policy White Papers and Video Voice as tools for change • Use walk audit observations to inform recommendations for improved community design

Year 2 Highlights

Despite the challenges of COVID-19, the WALKSacramento team, in partnership with West Sacramento teachers and staff, found creative ways to continue to educate, engage, and empower high school youth to take part in promoting active transportation in their communities.

• **Connecting Air Quality and Transportation:** On Day 1 of the four-day curriculum with River City's Greentech Class provided an overview of how different modes of transportation have different impacts on the environment, particularly air quality. Students drew connections between assessing neighborhood walkability, promoting active transportation, and improving air quality, which helped them prepare for conducting walk audits.

• **The Built Environment and Transportation Choices:** Students explored how peoples' transportation choices are heavily influenced by the design of the built environment. Students discussed how transportation has affected their lives and mobility options (Appendix B).

• **Fall Mobility Hub:** On the last day of the fall course, students put what they had learned throughout the week to use by participating in an interactive workshop for the City's Mobility Action Plan. Students shared future innovations and technologies that they want to see at mobility hubs throughout the City with City Staff.

• **Spring Career Panel:** On the last day of the spring course, five City of West Sacramento young end emerging professionals working in housing, economic development, and transportation joined the classes for Friday Career Day. The special guests shared their unique paths to public service, drew connections between coursework taught earlier in the week to

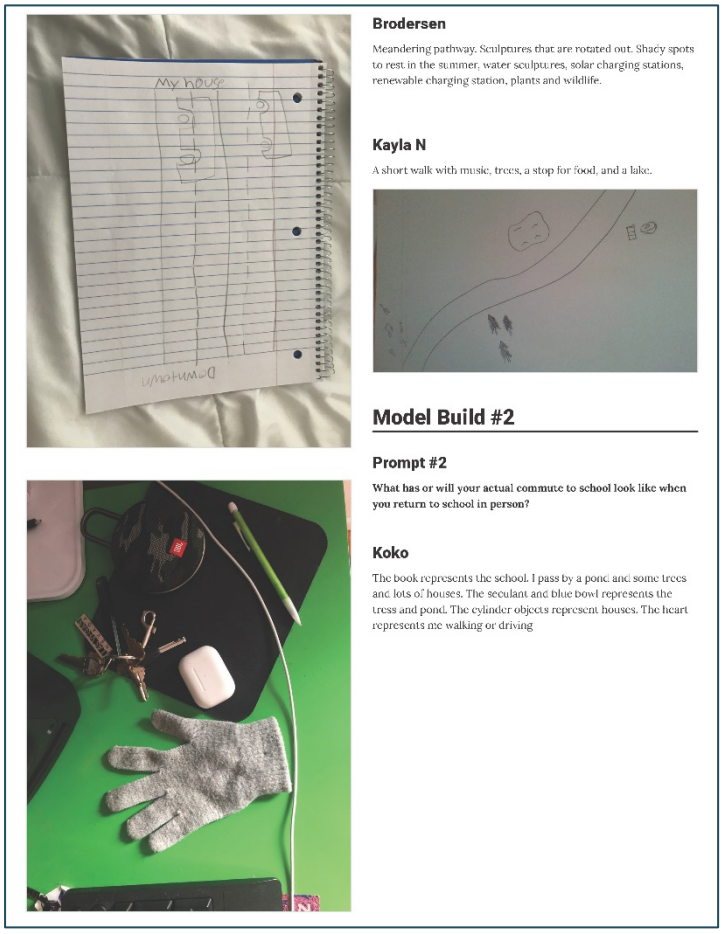


Figure 3: Students explore ideal vs reality of commutes to school through creative model building.

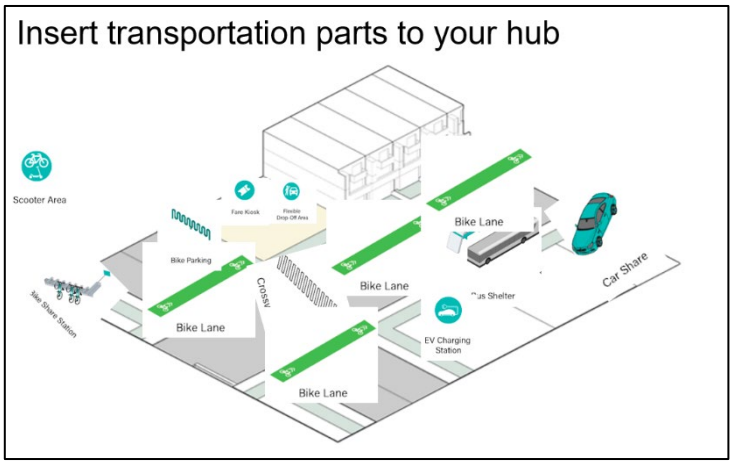


Figure 4: Students share desired transportation amenities for during the Mobility Hub Workshop

real world projects within the City, and shared opportunities for students to get further involved in civic engagement. Two of the special guests were River City High School Alumni.

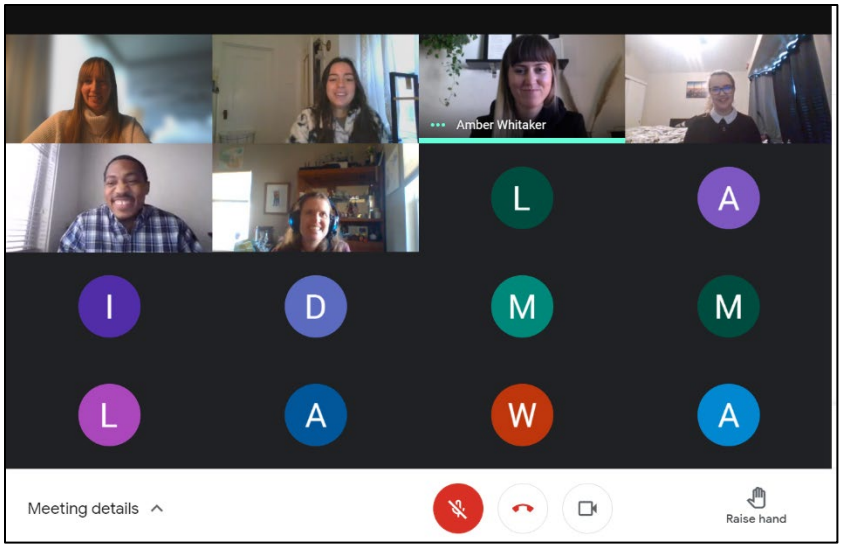


Figure 5: City of West Sacramento Young Professionals share their passion for public service with students.

• **Advocacy:** The spring Greentech Class prepared students to complete their midterm assignment, in which the they were tasked with drafting a policy white paper or creating a video to help make the City of West Sacramento more walkable and bikeable. The midterm assignment provided an opportunity to reinforce students' learnings and directly channel their walk audit observations into action and advocacy.

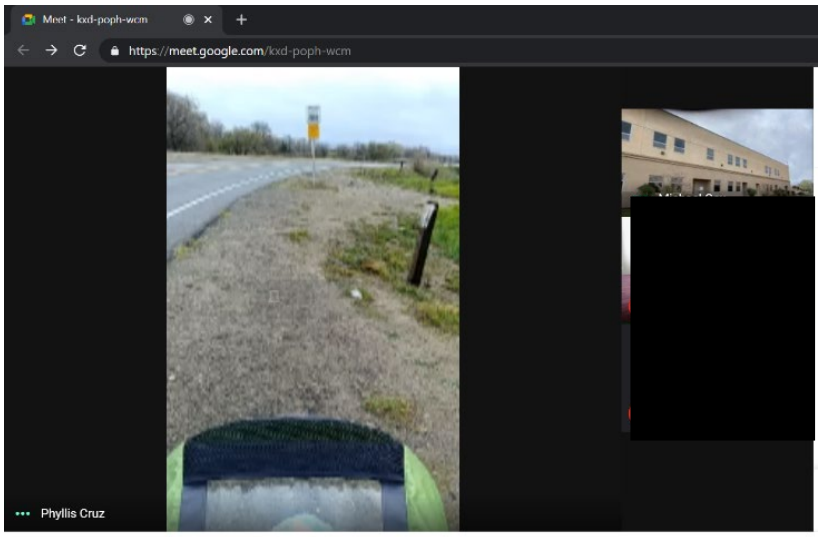


Figure 6: RCHS Teachers and students conduct walk audits during class.

Student Walk Audit Observations

As part of the fall and spring curriculum, the Green Tech students conducted walk audits in their neighborhoods and around River City High School. The students made astute observations and developed strong arguments for a wide range of pedestrian and cyclist improvements. Their passion for their communities' health and safety were highly evident in their reports, citing a number of justifications for improvements, including the influx of young families and rapid development in West Sacramento and a rise in popularity of cycling and walking. Below is a summary of observations shared by students.

South of Sacramento Avenue to Interstate 80/Highway 50

Students who live south of Sacramento Avenue and north of Interstate 80/Highway 50 in the Michigan-Glide-Sutter neighborhood and near West Capitol Avenue, cited broken sidewalks, faded crosswalks, fast moving traffic, and minimal amenities such as benches and water fountains in nearby areas. Additionally, personal safety concerns were mentioned by students as a fear or barrier to walking and biking in their neighborhood.

"This assignment was tough because I cannot go outside for walks. Everything has to be limited because of my mom's health and the fact that they are scared for me to walk around as a young black man. Where I live, housing is in close proximity to factors of poor air quality. There are a ton of houses, businesses (IKEA court), and not much vegetation. The people who live on my side of West Sacramento are going to be poorly affected.

There are city buses around the area; however, there are not many car charging ports and few bike lanes. There are some safe walking routes. There are a ton of businesses around the food court and a lot of deliveries by big trucks. That is going to negatively affect the air quality.

I do not think there is enough access to green spaces. We need more parks and natural resources. The other side of town has a ton of access. We do not have nearly any.

The areas for improvement are: we need more public transportation, more parks, less delivery trucks, and safer pathways. There are some paths but I am not even allowed to use them for fear of crime.

COVID-19 has affected West Sacramento by less driving traffic which has helped the air quality. More people are taking walks and staying away from each other. I also think there has been less traffic on the freeways which helps air quality too." - Fall 2020 Student

"What I mean by there is a lot of homeless is, I don't mind having homeless people down West Capitol it's just most of them are drunk from the bar right next to Togo's. It's scary in the mornings having to wait for my bus because you don't know when or who someone will come out of the bar acting funny towards you or calling you names, it's pretty sad that most of the time students that take route 25 usually take West Capitol and Glide. Me and my sister & her friend had plenty of experiences having to move spots due to men following after us, asking for money after continuously saying no and I've seen guys get uncomfortable, they probably won't admit it but you can tell by someone's posture and their facial expressions the way someone is creeping you out or making you scared." – Fall 2020 Student

Bryte and Broderick

The Bryte and Broderick is primarily residential with public schools, charter schools, and a few parks within the area. Students shared many aspects that contribute a pleasant walking and biking environment such as, well marked crosswalks on Holland Drive and Carrie Street, easy access to Bryte Park, and large tree canopies. Common areas of concern include Sacramento Avenue. Students noted high traffic speeds, minimal tree coverage, frequent sidewalk gaps, and faded crosswalks as factors deterring active travel along Sacramento Avenue.

A student who conducted walk audit along Kegle Drive, Lighthouse Drive, Joan Street, and Hardy Drive (Figure 10) noted trash and overgrown landscaping blocking the path of travel on sidewalks, narrow sidewalks, minimal street lighting, vacant or rundown buildings, and a need for traffic calming measures such as speed bumps and traffic lights.

Narrow sidewalks, additional bike facilities, and landscaping maintenance were also common themes identified by students conducting walk audits in the Bryte and Broderick communities.

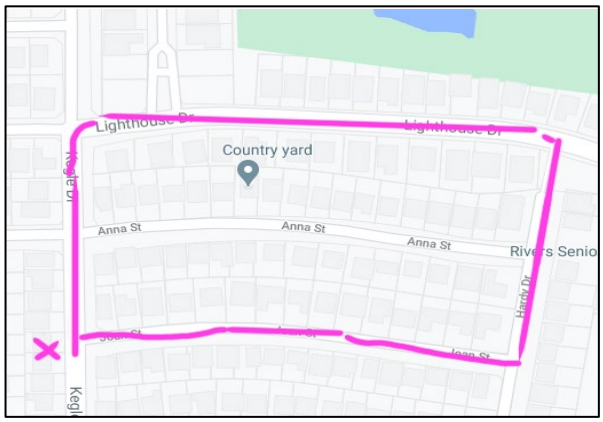


Figure 7: A student shares their walk audit route along Kegle Drive, Lighthouse Drive, Joan Street, and Hardy Drive.

Stonegate Drive to Lake Washington

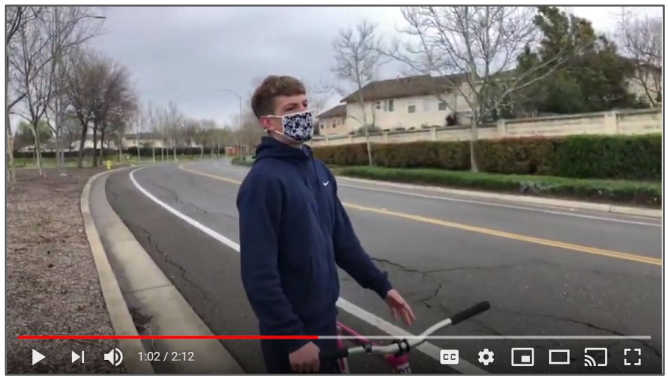


Figure 8: A student uses "Video Voice" to highlight the safety concerns he faces when biking to work along Stonegate Drive.

Stonegate Drive is a one-lane, two-way street with a bike lane in both directions, making it a relatively low-stress and popular cycling route to River City High School. However, students have identified that Stonegate could be improved by repairing road conditions along Lake Washington, adding signage to increase cyclist visibility, and adding conflict markings where bike lanes intersect right turn lanes.

Jefferson Boulevard (towards Stonegate Drive/Bridgeway)

Jefferson Boulevard is a major urban arterial and borders River City High School on the west side. Jefferson Boulevard is also a critical route for students to be able to access jobs, shopping, and entertainment in West Sacramento. Students walking and cycling to and from school along Jefferson (particularly towards Stonegate Drive and the Bridgeway area) must negotiate four lanes of fast-moving traffic and no lighting or sidewalks in many places. As Jefferson Boulevard is a major school commuting route, students have identified improvements here, including adding lighting, filling sidewalk gaps, and re-striping, as a top priority.

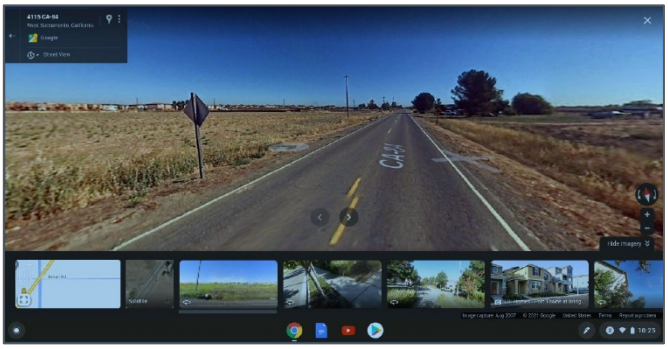


Figure 9: A student uses Google Maps Street View to observe pedestrian conditions on Jefferson Boulevard.

Marshall Road and Otis Avenue

Many students walk along Marshall Road and cross Otis Avenue to get to and from school. There is also a bus stop on Marshall Road, which increases the amount of foot traffic in this area. Despite the number of students crossing at this intersection, there are no stop signs, lightings, marked crosswalks, and several sidewalk gaps. The nearest marked crosswalk is a ten-minute walk away at Marshall Road and Southport Parkway. Together, these conditions have contributed to the Marshall Road/Otis Avenue intersection becoming a hot spot for collisions, with one student mentioning they have personally witnessed several collisions or near-misses. Students recommend improving this intersection by adding stop signs in both directions on Marshall Road, adding lighting, filling sidewalk gaps, installing a marked crosswalk, and adding pedestrian crossing signs to separate pedestrians from traffic and increase pedestrian visibility.

Figure 10: Due to COVID-19, students learned how to use tools such as Google Maps to conduct virtual walk audits.

> *"I have seen near accidents occur in front of my own eyes. Multiple times. Often with relatively fragile people. Each one of those instances could have ended catastrophically. Children could have died. Parents could have died. Grandparents could have died. People could have died. As a resident of the neighborhood, it makes me uneasy to know that an accident could so easily occur less than a mile away when minimal to no preventative measures are being taken." – Spring 2021 Student*

Jefferson Boulevard and Marshall Road

Jefferson Boulevard and Marshall Road is a critical intersection because it is located within a mile of River City High School and Marshall Road leads to housing subdivisions where many students live. The intersection does have traffic signals; however, it does not have marked crosswalks and the bike lanes and sidewalks end, making it very unsafe for cyclists and pedestrians to cross and travel through. Students observed a few cyclists at this intersection but little to no pedestrians due to the dangerous travel conditions. High priority improvements at the Jefferson Boulevard/Marshall Road intersection identified by students include adding a protected turn lane for cyclists and filling sidewalk gaps.

Leading up to Jefferson Boulevard, Marshall Road does have a sidewalk and bike lane on the south side, but not the north side. In addition to adding a sidewalk and bike lane on the north side, students have identified a need for the existing bike lane to be improved by re-striping, re-paving where the pavement is uneven, and adding rumble strips.

> *"If you could protect the safety of the citizens of West Sacramento, while at the same time encouraging fitness and reducing greenhouse gas emissions, would you? Then you should add sidewalks and improve the bike lanes in and around the intersection of Jefferson Blvd and Marshall Road." – Spring 2021 Student*

Curriculum Sharing

Throughout both years of working with the High School students, valuable lessons were learned in how to engage students to for both in-person and virtually. WALKSacramento had the opportunity to share an overview of the high school program and specifically, how data tools such as Street Story can be a powerful to use for student-led advocacy during a UC Berkeley SafeTREC's "From Practice to Progress - Street Story in the Field" webinar on March 25, 2019.

Figure 114: UC Berkeley SafeTREC Webinar presentation

Key Lessons Learned

- Tailor curriculum to be student led, allowing for more opportunities for students to lead the direction of courses, based on their current and future interests.
- Develop incentives including resume building opportunities and resume language about the work accomplished during the course.
- Address "Zoom fatigue" by encouraging multiple avenues of participation (i.e. using the chat box) and breaking up presentation content with activities and discussion.
- Keep it simple. Virtual tools are great but they can take valuable time out of the lesson to make sure everyone is on the same page (literally and figuratively).
- Meet students where they're at. Not all students are active transportation enthusiasts. Understanding their interests and values is key to making curriculum feel more relevant to students' everyday lives and passions. The more relevant content feels, the more likely you are to inspire advocacy and creativity among students.
- Bring in opportunities for multi-media art as much as possible. Finding creative outlets can be a great way for students to synthetize educational content, add their own voice to the conversation, and connect with their peers.
- Relationship building and trust with High School administration takes time, especially as high school safe routes to school programs are new. Meet high school administration and educators where they are. Prepare to tailor program expectations to what the school is willing and able to support. Start small and look for non-traditional engagement methods such as afterschool programs to partner with.

Summary

Despite challenges of COVID-19, students continually showed interest in the design of their communities and are passionate about climate friendly solutions to reducing reliance on single occupancy vehicles. While this program concluded before the return of in-person learning and could not measure the immediate impact of promoting active transportation with in-person events such as the Active Transportation Week that was planned for Spring 2020, many students showed interest in traveling by walking, biking, rolling, or taking transit or already regularly travel by these modes. Students are highly knowledgeable of the limitations that the built environment may have on their experience or perception of safety. This program achieved the most reach and influence when curriculum is student led, and

tailored to existing student interests. By including students in the conversation and ideation of built environment solutions designed to address today's transportation challenges, we are developing tomorrow's leaders in championing climate friendly mobility solutions.

Appendix A: River City High School Student Transportation Survey Findings and Recommendations

River City High School Student Transportation Survey 2019
City of West Sacramento Safe Routes to Schools

Findings

According to the Student Transportation Survey, 8.6% of students use a form of active transportation (walking or biking) to get to school, while the majority of students were either driven by a parent (44.6%) or took the bus (32.4%). In the afternoons, the portion of students walking increased by 7 students for a total of 9.4% and the number of students biking home remained the same. While rates of active transportation increased slightly, driving (including parent drop-off and carpooling) decreased after school by 11.5% for an overall total of 32.7%. The number of students taking the bus in the afternoon increased to 38.1%.

The top three deterrents students reported to walking or biking were: "It's too far" (57.6%), "I don't want to" (25.8%), and "My parents won't let me/I get dropped off" (23.7%). In terms of what would make walking or biking to school better, the top three responses were: "Friends to walk/bike with" (52.3%), "Nothing – I live too far to walk or bike" (36.8%), and "Safe places to cross the road" (23.2%). While current rates of active transportation at River City High School might be relatively low, the student's survey responses leave much room for opportunity. A little less than half of the students (45%) reported living within two miles of school, which indicates there is a large portion of the student body that lives within the school's walk and bike shed.

Recommendations

Programming and infrastructural improvements can be strategically employed to address perceived barriers and opportunities associated with walking or biking to and from school.

1. Deterrents: *"It's too far"* and *"My parents won't let me/I get dropped off"*
   For the 55% of students who reported living over two miles from school (or" I don't know"), River City High School, in partnership with Safe Routes to School coordinators, could establish drop-off zones within two miles of school so that parents could continue their normal routines of dropping their children off and students could be within a reasonable distance to walk or bike. Existing carpools could be leveraged to utilize these drop-off zones as well.

2. Deterrent: *"I don't want to"*
   Encouragement activities tailored to high school students, such as social media campaigns, art projects, partnering with local sports teams, poster contests, etc. could help increase walking and biking rates among students who are not interested. More inspiration for high school-oriented encouragement and education activities can be found in the Safe Routes Partnership's resource, "Safe Routes for Youth: Supporting and Empowering Teen Leaders in Vision Zero."

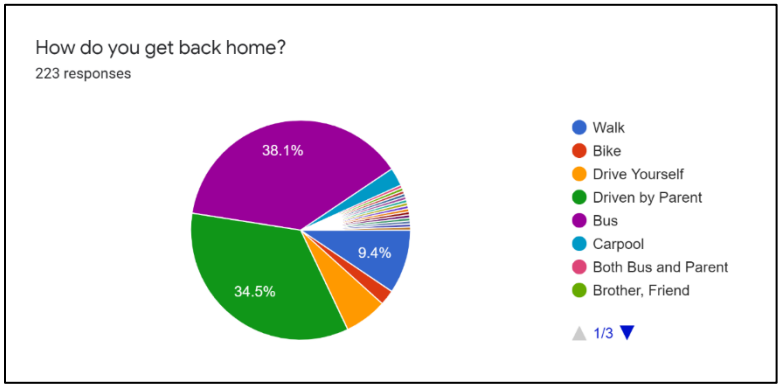
3. Incentive: *"Safe places to cross the road"*
   Information should be gathered from traffic observations and walk audits with students and their families to understand where dangerous intersections are located around the school. Once these key intersections are identified, infrastructural improvements, such as flashing beacons

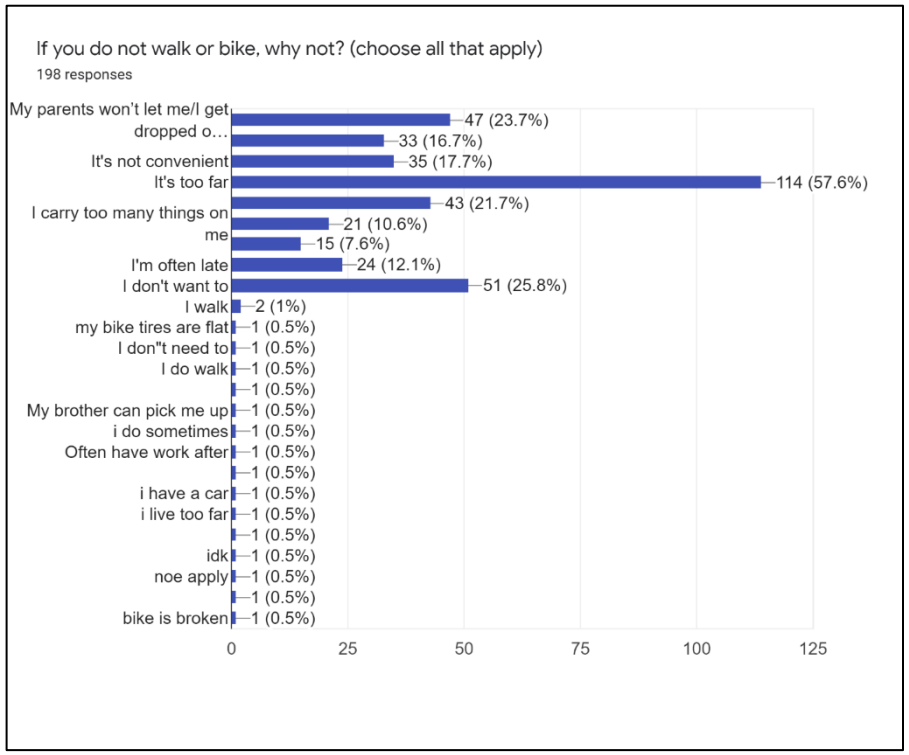
and high-visibility crosswalks, should be employed to promote students' safety and help alleviate parents' concerns.

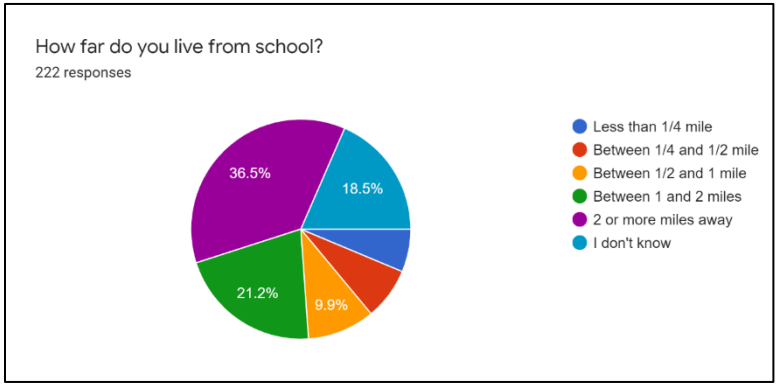
4. Incentive: *"Friends to walk/bike with"*
   For the 45% of students who live within two miles of school, Safe Routes to School coordinators can help students organize age-appropriate Walking School Buses or Bike Trains. These could especially be emphasized during the afternoons when there is an increase in students who walk home. In addition, such programming could mitigate parents' concerns related to the safety by providing assurance that their children will not be walking or biking alone.

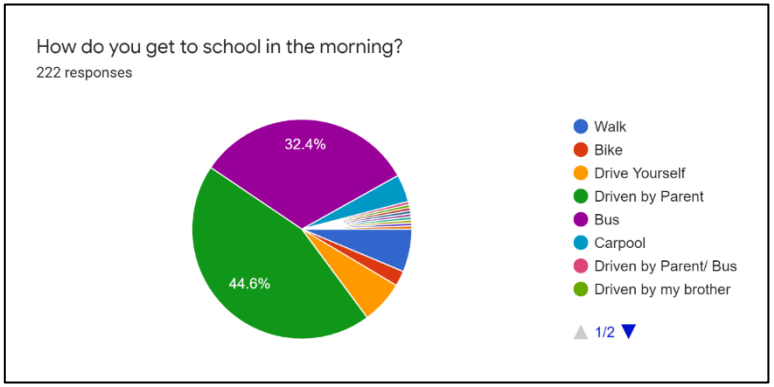
Student Transportation Survey Questions and Responses: See Next Page

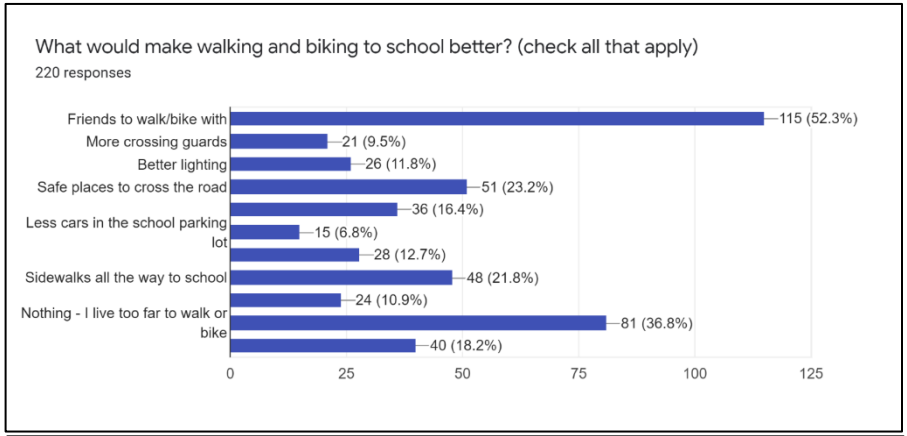
Student Transportation Survey Questions and Responses
November 2019

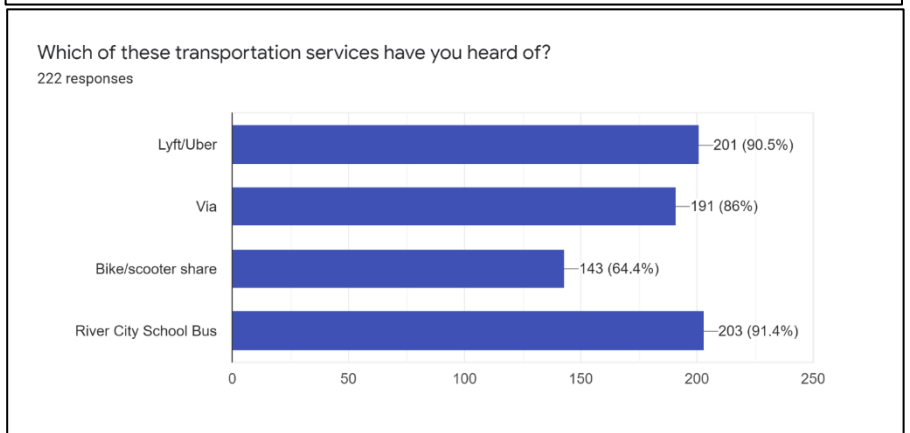












Appendix B: Spring 2021 Transportation & Community Design Model Building Activity

padlet

padlet.com/mgex/walk

Transportation & Community Design

WALKSacramento

MICHAEL GEX JAN 06, 2021 03:14PM

Model Build #1

Prompt #1

What does your ideal commute to school look like if you were to walk, bike, carpool, or use public transit to get there?

Molly Wagner's ideal commute! Lots of plants, and of course a good coffee shop! I love to bike to work and my dream would be live near a river and paddle board to work! :)

Mr. Gex's Ideal Commute

Bike lanes, charging stations, and a cute coffee shop

Prompt one shared-koko

I shared my prompt and you said it was fine to go without a picture on this one:).

for this one i did the charger for the road the remotes fro the car the bos and cup resprestnt he house the pencil need to take a pencil to school the gum is for when i get to school or walking it nice to chew gum

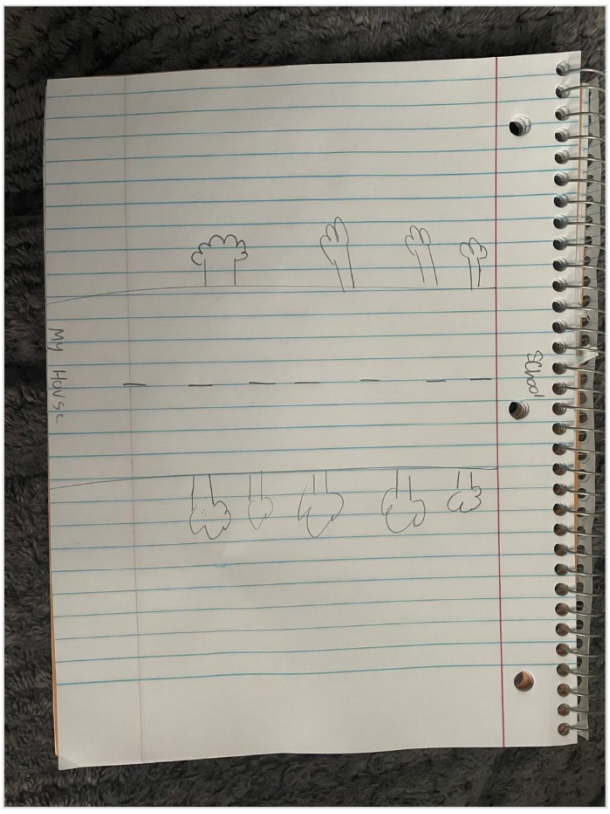
destiney rodgers — ANONYMOUS

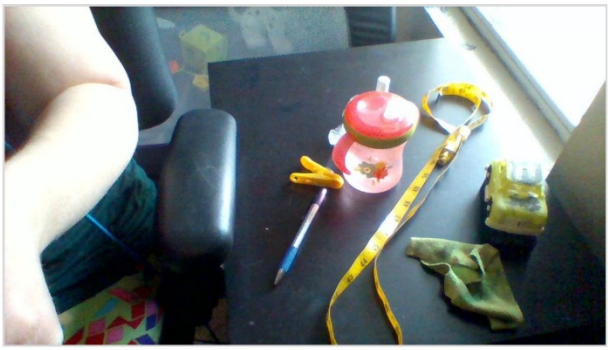
alexia

Rachel

Cooper

A street with trees that I can walk down





Isaiah F

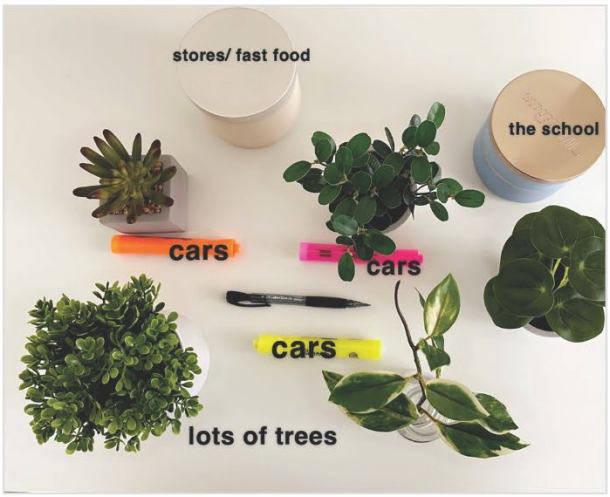
Isaac v

got a basketball with some music

Isaiah F

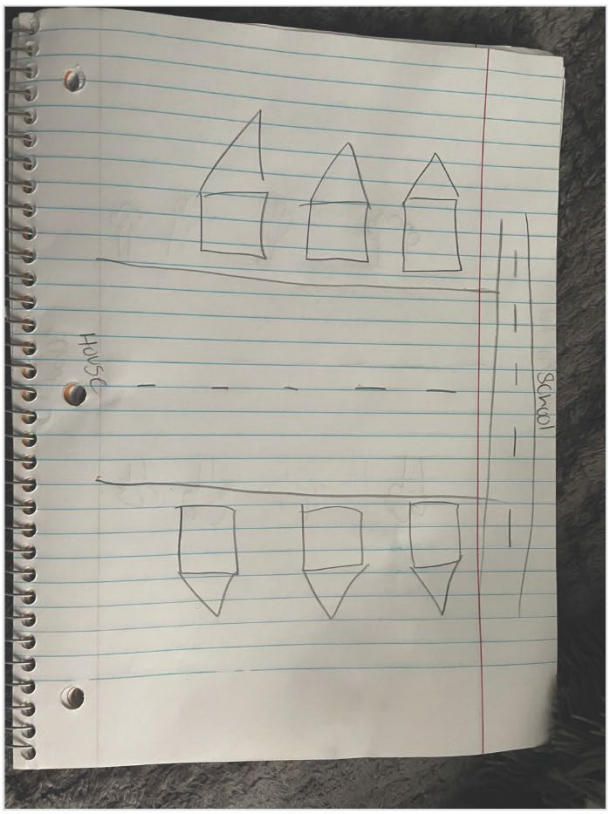
when we go back to school everything going to be different for everybody and everyone will be 6 feet away from other people

alexia



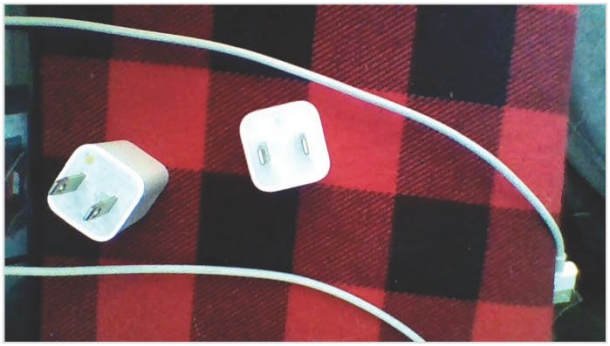
Cooper

walking past a bunch of house



Isaac V

walkway with people walking



Kayla N

I have to drive down a street with no bike lane and no shoulder but a lot of people still bike and run down that street, so driving down there is stressful. I will also likely have to take my brother to school which will require me to make lots a u-turn and go through busy streets, and I hate driving so I don't particularly think I will feel relaxed getting to school.

for this one the charger represents the road pen and pencil just noting or something on the walk the airpods case is for just listening to music the brick to the charger represents a house or a bench

destiney rodgers — ANONYMOUS

Molly Wagner (WALK)

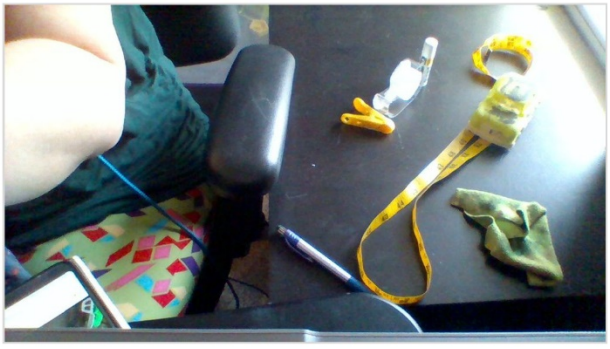
My current commute - the arrows represent the bike lane and me biking, a delicious coffee shop, trees, and the boom box represents a person who lives along my route. He is an incredible piano player! He plays the piano on his porch in the afternoons when I bike home. The white headphones case represents cars.

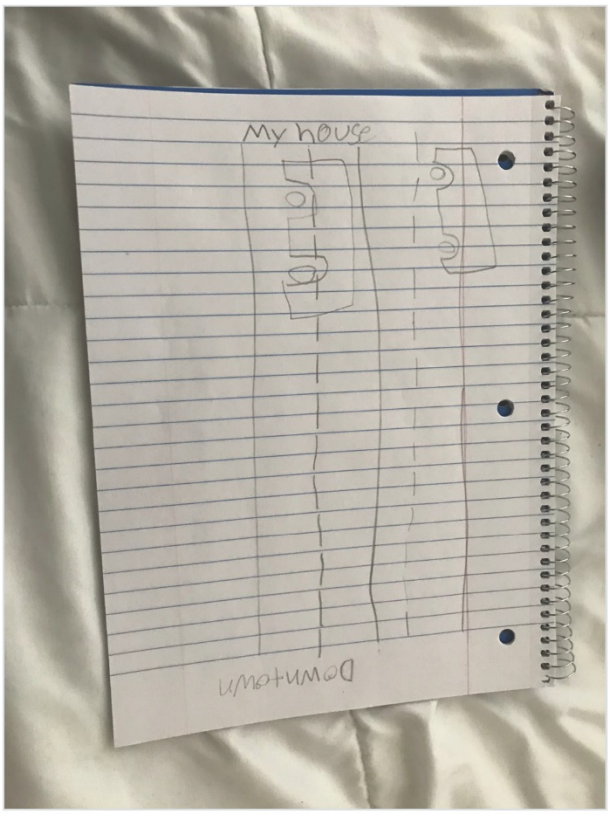
Rachel stark

getting to school brodersen

Driving a long distance. Stressed by brake lights and bad mergers. Sometimes listening to a book on tape or music to help my frame of mind. Glad and relieved once I park in the school.

road that I drive to school, with a park *green cloth, and a shopping center *tape and clip, pen is the school.





Brodersen

Meandering pathway. Sculptures that are rotated out. Shady spots to rest in the summer, water sculptures, solar charging stations, renewable charging station, plants and wildlife.

Kayla N

A short walk with music, trees, a stop for food, and a lake.

Model Build #2

Prompt #2

What has or will your actual commute to school look like when you return to school in person?

Koko

The book represents the school. I pass by a pond and some trees and lots of houses. The seculant and blue bowl represents the tress and pond. The cylinder objects represent houses. The heart represents me walking or driving

Appendix C: Spring 2021 Walk Audit Mid-term Assignment

Mid-Term Assignment Overview:
The purpose of this assignment is to: (1) engage students with issues related to health and the built environment (2) expose students to various built environment professions/fields (3) provide students with tools to promote change in their communities. With these goals in mind, students will learn how to transform their walk audit observations into policy white papers and videos as tools to advocate for active transportation improvements in the City of West Sacramento.

MID-TERM OPTION 1: Policy White Paper
Description:
As you learned in class, policy white papers are a specific type of research paper aimed at influencing decisions. You will use the observations from your walk audit to select a particular issue related to active transportation you feel strongly about (i.e. sidewalk gaps, improvements to a bus stop, speeding cars, lack of bike lanes, etc.). Using a combination of research and your first-hand observations, you will then develop solutions and recommendations to improve this issue.
Paper Structure:[1]

I. *Executive Summary (250 words)*
A brief overview of the paper. What is the issue at hand? What are the proposed solutions?

II. *Background/Problems (400 words)*
Start with a hook. Provide readers with the general background information on the issue at hand and why it is important to you as a member of the community Help the reader make their decision based on the understanding of the research. Include walk audit observations and takeaways here. This section may also include defining key terms.

III. *Solutions/Recommendations (500 words)*
After explaining the background and problems, propose your solution or recommendations—this could be a program, infrastructure improvements, a policy amendment, etc. Think about a few short-term (1-6) months recommendations and/or long-term (1-3 years) recommendations you can propose. For the purposes of this assignment, don't worry about funding or budgets. However, please consider the timeline for your solutions/recommendations and who might be involved (i.e. schools, state agencies, city planning department).

IV. *Conclusion (500 words)*
Your conclusion should appear as a result of the logical argument and information you have presented. Effective White Paper conclusions should have a strong call to action. The conclusion should briefly restate the main findings, and show readers why the goals and/or solutions presented in the previous section are in their interests. What makes white paper conclusions different than other conclusion is the emphasis on what the reader can do as a next step.

V. *Works Cited*
Include a few sources to strengthen your paper and proposed solutions. To practice your research and academic writing skills, you will use MLA format for in-text citations and the works cited.

Tips

1. **Know Your Audience**
   White Papers are most effective when the reader considers the target audience's perspective. Depending on your proposed solution, your target audience could be City of West Sacramento officials, River City High School or Washington Unified School District officials, or others. What is their perspective? What might their top concerns and priorities be? How could they help you achieve your vision?

2. **Choose a Catchy Title**[2]
   A good title is essential. It should clearly indicate what the reader will learn from the white paper. It should also be enticing.

Sample Rubric:

Section	Points	Comments
Executive Summary		
Background/Problems		
Solutions/Recommendations		
Conclusion		
Works Cited		

White Paper Background Resources:

- How to Write a Policy White Paper
- White Paper: Purpose and Audience
- How to Write and Format a White Paper: The Definitive Guide
- 2020 Ultimate Guide: How to Write and Format a White Paper

Research Resources

- MLA Formatting and Style Guide
- How to Write an Abstract

Data Collection & Tools Resources

- Street Story: A Platform for Community Engagement
- Transportation Injury Mapping System
- 2019 River City High School Student Travel Survey
- Community Commons: Data Tools, and Resources to Help You Learn about Health, Economy, Education, Transportation, and More in Your Community

Example White Papers:

- Building a Healthy, Vibrant, and Joyful Sacramento (Hiram Johnson Health and Medical Science Academy)
- Y-PLan, Leap, and the Future: The Transformation of Our Bus Stops (Healthy Richmond + Y-Plan)
- Serving all Young People in Richmond, CA (Kennedy High School, IT Academy)
- Regional Transportation Initiative White Paper (Monterey Bay Economic Partnership, Alta Planning)
- Pedestrian Injuries and Fatalities on America's Roads - A National Epidemic (Impact Recovery Systems)
- The E-Bike Potential: Estimating the Effect of E-Bikes on Person Miles Travelled and Greenhouse Gas Emissions

MID-TERM OPTION 2: VideoVoice

Description:

VideoVoice is another advocacy tool that uses visual methods (photos and videos) to document and communicate an issue. For this project, you will produce and direct your own VideoVoice video to capture your walk audit observations and share your ideas on how a particular dangerous intersection or street can be improved. For an example, check out this video students from The Thomas Edison Language Institute located in Arden Arcade in Sacramento created to raise awareness about safety issues facing students who walk and bike to their school: https://vimeo.com/99355701

Video Logistics:

- Length: Aim for 2 to 2 and a half minutes for total video length.
- Content: You can use a combination of photos, live footage, and Zoom recordings (given interviewee permission) to shoot your videos. Your video must include all of the elements in the video structure outlined below.
- Editing: Feel free to use whatever video editing software you have access to or feel most comfortable with.
- Uploading: Upload your videos to YouTube. Be sure to adjust your sharing settings to "unlisted" and include the private link in your assignment submission.[3] If you don't have an account, you can create one for free here: https://support.google.com/youtube/answer/161805?co=GENIE.Platform%3DDesktop&hl=en

- Creativity: Have fun with it! Feel free to add your own personal style through music, effects, etc.

Video Structure:

I. *Introduction: Active Transportation Overview*

Describe the issue. What is active transportation? Why is it important to have safe streets and sidewalks for students to walk, bike, and roll?

II. *Interviews: Student Perceptions of Safety*

Conduct virtual or socially distanced interviews with fellow students. Do they feel safe walking and biking to, from, and around school? Why or why not? What are some personal experiences they can share about walking, biking, and rolling to/from school?

III. *Existing Conditions: Select a Site*

Select one location (i.e. a particular street or intersection) that you feel (or have heard from other students) to be dangerous. Why did you select this location? Why is it important that this particular location be targeted for safety improvements? What are the characteristics or conditions of this location that are dangerous?

IV. *Solutions/Recommendations*

What solutions or recommendations do you have to improve student safety in this location? This could be an infrastructural improvement (i.e. installing a new sidewalk or more speed bumps), program, an education campaign, a policy recommendation, etc.

V. *Video Description: Your Artist Statement (100-150 words)*

An artist's statement is "a not-too-long series of sentences that describe what you make and why you make it. It's a stand-in for you, the artist, talking to someone about your work in a way that

adds to their experience of viewing that work."[4] This will serve as your video's description when you upload it to YouTube.

Tips

1. **Know Your Audience**
   Strengthen your video by identifying who your target audience is and framing your content and message accordingly. Your target audience could be anyone who is impacted by active transportation issues (i.e. teachers, students, parents, community members) or could influence active transportation issues (i.e. city planners, city officials, the school district, etc.)

Artist Statement Resources

- How to write an artist statement
- 8 Artist Statements We Love (scroll to the bottom for more tips and resources)

Sample Rubric:

Section	Points	Comments
Introduction		
Interviews		
Existing Conditions		
Solutions/Recommendations		
Artist Statement		