



Transport

Part I: Educate

Let's begin with some background information to provide foundational transportation knowledge to your team.

Directions:

PART I: Research and answer questions 1-4 within your team. Answer in **200 words or less** per question.

PART II: Contact your campus facilities department and ask a representative questions 5-8. You may share the question list with them ahead of time so they can prepare. Answer in **200 words or less** per question.

After you have answered the primary question, use extra writing space to explore the *Student Considerations* question.

PART I:

1. How many vehicle miles traveled (VMT) would be eliminated if were to you use the bus to travel to school instead of a car for one week? How many OCTA-operated OC Buses travel nearest your school each day? Pick one offsite location or that you frequent or your workplace. Does the OC Bus travel near that spot?

Student Considerations: Consider how the OC Bus map impacts your peers' or family-members ability to travel. Try riding the OC Bus to a destination within your City and the next City over. How could it be improved?

2. Can you ride OCTA-operated OC Bus for free? If not how much is a single bus ride and a daily pass? Do bus stops provide shelter, benches, trash cans, and other amenities?

Student Considerations: What are the ways transit riders can pay to ride the OC Bus? How does the cost of bus ridership compare to car ownership annually?

3. Does your City have an Active Transportation Plan or something similar? What type of bicycle and pedestrian improvements are planned near your school? What improvements could be made to infrastructure for people walking and biking near your school?

Student Considerations: Is there a crosswalk that you would want improved? Have you told your City Public Works Department about the specific location? Is bicycle safety training provided by your City, maybe specific to e-bikes?

4. Using the US Census data, find the “Journey to Work” by Bicycling and Walking within your City. What does it say about the ability of your community to travel by means other than car to their favorite places? Explain what is needed for your City to be reasonably called a 15-minute City.

Student Considerations: What types of stores, restaurants, and social spaces would you like to be able to walk to? Would you be more likely to study at a cafe or shop at a local business if you could walk there?

PART II:

5. Within our campus/district, what is the percentage breakdown of students getting to school by personal car, parental drop-off, carpool, school bus, bicycle, e-bike, walking, public transport, or other? Is there an effort to gather data on this information if we do not currently have it?

Student Considerations: Do you often wait in lengthy drop off lines or struggle to park? What is the protocol for parking and locking up bicycles and e-bikes? How could you promote a [Safe Routes to School](#) program on your campus?

6. Does our campus/district own our buses or contract them? How many students, on average, utilize these services every day (only include students once, even if they ride to and from school)?

Student Considerations: Does the size of the bus affect its ability to navigate traffic or narrow streets?

7. Are any vehicles in our campus/district’s white fleet (on-site, operational service vehicles) electric? Is there a timeline in place to transition the fleet? If there are no plans to switch to an electric fleet, what are the fueling costs associated with our current vehicles?

Student Considerations: How would a switch to an electric white fleet impact campus air quality in the short term? Where would be a good place to set up a charging station?

8. Does your office coordinate with the OCTA to diversify student means of getting to school? Is there a free trolley system or public bus that you work to educate the student body about?

Student Considerations: How do you feel about public transportation in your city? If you use it, how efficient do you think the services are? If not, what keeps you from using it?

Part II: Assess

Welcome to the audit portion of the Transport Module! This section will challenge you to gather qualitative data about walking and biking infrastructure near your campus.

Directions: With your team members, examine a map of the area surrounding your campus and select a location half a mile to one mile away. Ask your team supervisor, a teacher, or adult on campus to accompany you on a “walking tour” to this location. Use the below rubric to score the path. If you cannot leave campus midday and are dropped off at school, complete this audit by asking your ride to drop you off at least one block away from campus and score what you see along that path to school.

ELEMENT 1: Sidewalks

Assessment	1 – Poor	2 – Satisfactory	3 – Excellent
State of Sidewalk	Sidewalk is mostly cracked, pieces jut upwards, creating tripping hazards.	The sidewalk is mostly flat with few cracks or vegetation disruptions. Little to no tripping hazards.	The sidewalk is flat and well-maintained.
Shade	There are no trees or buildings nearby to provide cover from the sun. The area feels hot due to urban heat island effect.	There is moderate shade from trees and buildings.	There is plentiful shade, provided mostly by vegetation.
Vegetation or Debris	The sidewalk is covered with fallen leaves, seedlings, or sticks. There is litter along our path.	There are some fallen leaves, seedlings, or sticks. Little to no trash is encountered.	The sidewalk is mostly cleared. It appears taken care of with no litter.

Would you choose to take this walk again? Are there any risks of injury due to poor sidewalk conditions or lack of shade? Write two sentences minimum.

ELEMENT 2: Bike Lanes

Assessment	1 – Poor	2 – Satisfactory	3 – Excellent
Lanes	There are either severely faded bike lanes or no bike lanes at all alongside our walking path.	Bike lanes are clearly marked and there is an adequate buffer from traffic.	Bike lanes are protected by some sort of barrier.
Curb Ramps	Ramps for wheelchair users, strollers, or scooter riders are missing or broken.	Ramps are available but the area lacks detectable bumps for vision-impaired travelers.	Ramps are fully equipped to serve all travelers.
Traffic	Surrounding vehicles are chaotic, speeding, or create disruptive noise. Distractions are abundant.	Biking safety measures are minimal but traffic is smooth, quiet, and follows the speed limit.	There are designated turning lanes, crossing points, and signage to draw attention to cyclists.

How safe would you feel riding your bike to this location? Are there signs for car drivers to yield to cyclists? Write two sentences minimum.

ELEMENT 3: Safety

Assessment	1 – Poor	2 – Satisfactory	3 – Excellent
Crosswalks	Crosswalks are unmarked, so pedestrians must assess safe areas to cross for themselves, or standard with only two lines.	Crosswalks are highly visible. The road has been painted a unique color or a pattern is used (continental, ladder, etc.).	Blinking lights or barriers alert passing vehicles to the crosswalk. Traffic on this street would pause for a mid-block crosswalk.
Road Safety	A lack of medians contributes to confusing traffic flows and a feeling of overexposure for pedestrians crossing the street.	There are median strips to separate coming and going traffic. These strips can be paved, planted, or raised. Medians limit illegal turns, reduce driver error, and provide an emergency rest area for pedestrians.	At least two pedestrian islands are available! Pedestrians can pause halfway across a street to shift their attention to the new direction of oncoming traffic. A slimmer lane incentivizes cars to slow.
Security	The area has inadequate lighting sources nearby, creating anxiety around nighttime travel and criminal activity risk.	Lighting sources are adequate but there is a lingering uneasiness due to trash, graffiti, encampments, etc.	The area is well-lit and feels secure.

How do drivers behave in this area? How safe would you feel to walk this route in the evening? Write two sentences minimum.

Part III: Survey

This last section of the Transportation Module asks you to survey your peers with a set of questions related to travel safety. Teams should survey a minimum of 15 students and 5 campus staff although a greater sample size is encouraged. These questions are meant to challenge your peers' perceptions.

You can complete this portion by creating and distributing a survey submission link or by filming a "questions on campus" video, similar to what might be seen on TikTok, Reels, or YouTube. Feel free to be creative!

See the question list and submission form below. If you are quizzing your peers in a live format, feel free to share answers so everyone can learn!

QUESTION LIST:

1. Do you know anyone who has been involved in a walking or biking crash? Do you think that micro modes of transportation (walking, biking, rolling, etc.) are dangerous?
2. What is the number one factor contributing to road fatalities for pedestrians?
 - A: Speed! If you are hit by a vehicle traveling at 25 miles per hour, you have an 89% chance of survival. If you are hit by a vehicle traveling 40 miles per hour, your chance of survival drops to 35%.
3. What types of road infrastructure make you feel the more safe and secure? Why?
4. Estimate the number of collisions that occur every day in Orange County.
 - A: According to the Southern California Association of Governments (SCAG), there are about 32 collisions every day in OC. That's 11,778 annually!
5. Would you assume more vehicle collisions occur on local roads or highways? Why?
 - A: In Orange County, 67% of collisions occur on local roads whereas 27% of collisions occur on highways.
6. When driving, how much buffer space should you give to cyclists?
 - A: Drivers are required by law to provide cyclists with at least 3 feet of space when passing them. If necessary, you should change lanes and move your vehicle further away to maintain the buffer.