Transportation and Climate Change Action Hour

THE CHALLENGE

Students will conduct online research to learn more about a topic related to transportation and climate change and present their findings with a call to action based on their findings. The presentations should consider how the topic is part of a larger transportation system and provide steps needed to implement the action. The evaluation rubric should be used by facilitators and students to guide development of the presentation.

GRADE LEVEL

High School

ACTIVITY OVERVIEW

Students are assigned (or select) a topic to pursue and then develop a presentation to showcase their findings. Student teams will likely require 60-75 minutes to complete this activity.

MATERIALS

Students will require computers with internet access and presentation development software.

SET UP

Students should be assigned to teams of 2-4 to develop their research projects. Each team will have a volunteer facilitator.

ACTIVITY

In the U.S., the transportation sector is one of the largest sources of greenhouse gas (GHG) emissions. Globally, it is the fourth largest contributor. GHG reduction goals cannot be met without meaningful change to the transportation sector.

In light of transportation’s substantial contribution to the climate crisis, you are charged to explore a topic related to transportation and climate change and present a call to action. Topic ideas include:

- Non-Motorized Transportation (walking, biking, micromobility)
- Transformational Transit (improving buses and subways)
- Complete Streets (street design for everyone)
- Funding, Finance, and Pricing (show me the money!)
- Parking (car storage)
- Connections between transportation and location/types of housing and other places we go (stores, schools, etc.)
- Electrification
- Shipping and Freight (maritime, rail, trucking)
- Green Infrastructure (bioswales, street trees, etc.)

Talk to your team’s facilitator if you would like a quick summary of a topic idea or if you want to create your own topic.

Prepare a 5-7 minute presentation that ‘sells’ your call to action to your audience (why should they get on board with your idea?) and provides the following information about your topic:
a. A description of your topic that is understandable for anyone ("explain like I’m five" - ELI5).
b. Identify the advantages and disadvantages of your call to action.
c. Address what government would need to do or how it would need to change for your call to action and issues related to accessibility, equity, and advocacy.
d. Identify how you might lead your call to action. What can you do now? What career pathways could you take to work on your call to action? What kinds of jobs already exist and what kinds of skills do they require?
e. Identify key challenges, areas of ongoing work or research, and a real-life existing example of your call to action and how it is actively addressing climate change.

FOR DISCUSSION

Additional resources that may help with choosing and researching topics include, but are certainly not limited to:

* Intergovernmental Panel on Climate Change:*
  https://www.ipcc.ch/

* TransitCenter:*
  https://transitcenter.org/

* A People-First Transportation Tool-Kit:*
  https://www.mainstreet.org/howwecanhelp/navigatingmainstreets

* Union of Concerned Scientists, Carbon Pricing 101:*
  https://ucsusa.org/resources/carbon-pricing-101

* Street Plans:*
  http://www.street-plans.com/

* Rethinking Streets:*
  https://rethinkingstreets.com/

* National Association of City Transportation Officials (NACTO) Design Guides:*
  https://nacto.org/publications/design-guides/

* Planning Magazine article, Freight Can’t Wait:*
  https://www.planning.org/planning/2019/nov/freightcantwait/
# Evaluation Rubric

**Team Name:**

**Reviewer Name:**

<table>
<thead>
<tr>
<th>Presentation Components</th>
<th>Excellent (5)</th>
<th>Good (3)</th>
<th>Room for Improvement (1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speaking and audience impact</strong></td>
<td>Presenters make eye contact with the entire audience. They speak clearly and with passion. Their body language helps convey their message. The audience feels inspired to act!</td>
<td>Presenters usually make eye contact and avoid reading from the slides. They speak clearly and the audience can understand them. Their body language doesn’t distract from their message.</td>
<td>Presenters avoid eye contact with audience. The audience has difficulty hearing them when they speak. Their body language distracts from their message.</td>
<td></td>
</tr>
<tr>
<td><strong>Slide composition</strong></td>
<td>All slides are clear and easy to read. Text on each slide is limited. Graphics are used creatively. Show don’t tell!</td>
<td>Slides are usually clear and easy to read. Some slides are too text heavy. Some graphics are used to convey the message.</td>
<td>Slides are difficult to read. Most or all slides have too much text. Graphics, if used, do not support the message.</td>
<td></td>
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<tr>
<td><strong>Detailed description of the topic</strong></td>
<td>Presented so that a person with no knowledge of the topic can easily understand (ELI5 achieved).</td>
<td>Presented so that a person with some knowledge of the topic can easily understand.</td>
<td>Presentation required audience to have detailed knowledge of the topic to understand or was generally difficult to follow.</td>
<td></td>
</tr>
<tr>
<td><strong>Advantages/ disadvantages</strong></td>
<td>Advantages/disadvantages were presented and critically examined.</td>
<td>Advantages/disadvantages were presented but were not robustly examined.</td>
<td>Advantages/disadvantages were not presented.</td>
<td></td>
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<tr>
<td><strong>Government policy and social issues</strong></td>
<td>Policy or regulatory requirements and accessibility, equity, and advocacy issues were addressed thoroughly.</td>
<td>Policy or regulatory requirements and accessibility, equity, and advocacy issues were addressed, but some key details were missing.</td>
<td>Policy or regulatory requirements and accessibility, equity, and advocacy issues were not addressed.</td>
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<tr>
<td><strong>Connection to presenter’s lives and potential careers</strong></td>
<td>Team clearly identified paths to involvement in their call to action and career linkages (job opportunities, skills required, and types of professionals employed).</td>
<td>Team identified some paths to involvement in their call to action and some career linkages.</td>
<td>Team did not identify paths to involvement in their call to action or career linkages.</td>
<td></td>
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<tr>
<td><strong>Conclusion</strong></td>
<td>Team concluded with relevant key challenges, areas of ongoing working related to the topic, and a poignant example.</td>
<td>Team concluded with key challenges or impact on society.</td>
<td>Team did not present either key challenges or impact on society.</td>
<td></td>
</tr>
<tr>
<td><strong>Teamwork</strong></td>
<td>All team members respond knowledgeably to questions and appear to have fully participated in the project. Team members support each other collaborating and coordinating throughout presentation and during Q&amp;A with audience. Team members set each other up for success.</td>
<td>Most team members respond knowledgeably to questions and appear to have fully participated in the group project. Group takes some steps to present and answer questions collaboratively and in a coordination with one another.</td>
<td>The team did not seem to work together. Only a few or one member seemed to do most the work.</td>
<td></td>
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</tbody>
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