To whom it may concern,

My name is Trinity and I am a recent graduate from Oregon State University. This past spring term, I took a class called Sustainability for the Common Good. As a final project for the course, we were tasked with writing an Op-Ed on a topic of our choosing, and I picked transportation. Although this piece was written for a class assignment, I believe that the message and opinions included in it are very real. I would like to submit this Op-Ed as a public comment to the Joint Committee on Transportation. Please see the Op-Ed on the following pages.

Best,
Trinity Henderson

Transportation: The environmental, social, and economic impacts

The upsides to making a vast change to our transportation methods greatly outweigh the downsides.

From the Environmental Protection Agency, sustainability is defined as "to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations" (EPA 2023). Transportation is one piece of the puzzle to achieving sustainability, and has intersections between the environment, society, and the economy.

Many working adults in the United States use a car on a regular basis. Whether to get to work, pick up their weekly groceries, or drive their kids to soccer practice, cars have become an integral part of much of society. Although fast and convenient, cars are a substantial factor to climate change.

Transportation as a whole has a unique place among all contributors of climate change…everyone does it. Whether walking to your local coffee shop, or flying to visit relatives, transportation is something that the collective whole of the human race is part of. Transportation is also distinctive because tangible positive repercussions can come from making a change. Although we know of many methods that a single person can do to help with climate change, such as investing in energy-efficient appliances, or reducing water waste, it can be difficult to see how these changes make a difference. But with transportation, the economic and social benefits are noticeable. The need to get places is not going to change, but how we do it certainly can.

I want to talk about both the good and the bad here, so let's break down the transportation issue and see what we're working with. What role exactly is it playing in relation to climate change? Well, the transportation sector contributes air toxins, smog, poor air quality, pollutants, and other negative global impacts to the environment. This translates to particulate matter in the air being the cause of 30,000 premature deaths every year.

According to the European Journal of Operational Research, in the breakdown of various industries' impacts on global warming in industrial countries, 25% of gas emissions can be attributed to transportation.

Carbon dioxide is the most prevalent human-caused greenhouse gas, coming in at a whopping 80% of the total emissions in the U.S., and this is the majority of what cars emit. Carbon dioxide is a barrier for the atmosphere, causing heat to become trapped, causing the Earth to warm, causing rising sea levels and intense droughts, causing health risks, causing heat waves, causing, causing… Do you get the picture?

It's hard HARD to not feel the crushing weight of what our world is facing right now. Climate anxiety is real, and oftentimes people can feel powerless. Transportation is one easy way where a single person can help contribute to make an impact. Now don't get me wrong, there are a lot of issues that need to be dealt with around global warming, and many of the solutions start with big corporations. However, as a consumer of transportation, you have a lot of power. Less driving of cars and more desire for public transportation has notably positive impacts.

"A single person who switches from a 20-mile commuting alone by car to existing public transportation, can reduce their annual CO2 emissions by 20 pounds per day, or more than 48,000 pounds in a year. That is equal to 10% reduction in all greenhouse gases produced by a typical two-adult, two-car household." (KCATA).

I won't lie, I myself am a car user. But I am by no means a lover of driving. I don't particularly enjoy sitting in traffic, stressing about parking, or spending $60 to fill my car up with gas. Why do I drive then? It's convenient. When visiting my partner, I am able to see him in a drive that takes just under an hour. He is car-free however (and the inspiration for this piece), and it takes him a 3-plus hour journey to visit me by public transit, which includes one hour of waiting in a small town, since the buses come so infrequently. This is clearly a barrier for people. As a busy college student, it's difficult to fathom making my round-trip journey three times as long as it would be otherwise.

Governments need to take action and create more accessible and frequent transit. I would like to acknowledge the fact that a switch to using electric vehicles is also a positive change. This is a very pricey thing for an individual to do though, and therefore not a realistic option to the whole of the general public.

The United States has a relatively high amount of car usage, and studies show one of the current reasons why Americans are reluctant to use public transportation is because of trip length. I understand this and quite obviously cannot put blame or judgment on anyone. I want to be an avid bus rider or *car-lite* as some may say, but I've yet to be able to fully transition over because of the inconvenience. Although there is predicted to be a general increase in the percentage of public transportation users in the coming years, improvement upon the existing systems could give an even greater push towards this.

An easy argument to turn one's back on public transportation could also be that it is expensive. In the long term however, "According to the American Public Transportation Association's (APTA) Transit Savings Report, individuals who ride public transit instead of driving can save an average of $13,000 annually, or $1,100 a month." (Greater Cleveland Regional Transit Authority 2023). This is not a small amount.

In addition to economic benefit on the individual level, improving access to public transport has larger money benefits as well. For every $1 that is invested into public transportation, it creates $5 in economic returns. Business sales also increase, and so do jobs. We need to act now on the individual and governmental level.

Active transportation cannot be left out of this conversion either. This includes biking, walking, running/jogging, and all human-powered methods of getting around. The biggest barrier that exists here is safe infrastructure. Take cycling, for example. Whether it's a huge passion, or you've barely ridden at all, you deserve to at least have access to a safe place to ride. Active transportation is a method that people are more likely to turn to if they feel safer while doing it. Thus, giving money towards improving infrastructure around sidewalks and bike lanes is highly beneficial.

Public and active transportation also positively impacts peoples health both physically and mentally. Physicality-wise, the exercise from walking or biking is shown to lower the risk of heart disease, reduce high blood pressure, and alleviate stress. Emotionally, having this means of connection creates community in our society. For example, encouraging kids to use active transportation methods to get to school promotes teaching of road safety, more alert attention in the classroom, and a development of community connection

I believe we need to look to countries that have already made vast improvements in these departments. Taking a look at cycling in the Netherlands, the railway industry in Japan, or bus routes in London. These are just a few of the places who have systems already in place that we can try to emulate.

We continue to be at pivotal times with climate change and the Earth, and we need to act fast because we are currently hurdling our planet toward a point of no return. Transportation is an extremely important topic regarding sustainability, and the fixes are vital because they have layers relating to economic, social, and environmental needs.