

To: Dr. Erika Paterson, ENGL301 Professor

From: Izabel Lopez, ENGL301 Student

Date: June 22, 2022

Subject: Formal Report Proposal for Placing Copper in Buses to UBC as a Priority

## **Introduction**

According to the UBC Vancouver Transportation Status Report Fall 2019, 54% of all trips to and from the campus were made by public transit. With many students and staff taking the public transit, they could run a higher risk of contracting COVID-19 than those who take a private vehicle or live on the campus. If the commuter students and staff contract COVID-19, they could risk spreading the virus to the household members who live with them.

Bacteria and viruses are known to live on surfaces for several hours. They spread from actions such as coughing, sneezing, and contact with contaminated surfaces. Those bacteria and viruses could get into the human body through the nose, mouth, eyes, or hands.

## **Statement of Problem**

As the restrictions loosen, more people are returning to taking transit for work or school. With more commuters, there is a greater chance of catching bacteria or viruses from the contaminated surfaces in buses such as poles and seats. Sanitation supplies are not as demanded as at the start of the pandemic. Permanent measures are not in place to limit the spread of bacteria and viruses in public transit.

## **Proposed Solution**

A possible solution to maintain cleanliness after the pandemic would be introducing copper into commonly touched surfaces in buses going to UBC. Copper products by Teck Resources Limited ("Teck") were tested in public transit in late 2020. Copper was reported in 2021 to be durable and able to kill 99.9% of all bacteria within one hour of the bacteria's contact with the surface. In partnership with Translink and Vancouver Coastal Health, they plan to do further testing in more train cars and buses. If copper products continue to show effectiveness against the spread of bacteria, UBC students and staff could benefit from its antimicrobial properties.

## **Scope**

To assess the feasibility of placing copper in buses going to UBC, I plan to pursue the following areas of inquiry:

1. How many UBC students and staff are currently taking public transportation?
2. What are the health and safety concerns of UBC students and staff commuters?
3. What is the current practice of sanitation in Translink?
4. What is the current research regarding copper in public transit?
5. What are the resources needed to implement copper in buses to UBC?

## **Methods**

My primary sources will include surveying UBC students and staff commuters. The questions will ask about their views on health and safety while taking public transit. The questions will

also ask their thoughts on copper's properties and its effectiveness against bacteria. The UBC students and staff will be asked to consent before taking the survey. The students will respond anonymously.

My secondary sources will include publications and reports on copper utilized in public spaces and their overall effectiveness.

### **My Qualifications**

I have firsthand experience using the BC transportation system as a UBC undergraduate student. I took the bus and train regularly from Surrey to UBC from 2018 to 2019. From Surrey to UBC I took three forms of transit: Bus 502, Expo Line, and Bus 99. Since moving to Richmond in 2019, I've only had to take two forms of transit to get to UBC: the Canada line and Bus R4.

### **Conclusion**

Action is needed to reduce the spread of bacteria and viruses in buses going to UBC after the pandemic. Rigorous sanitation might not be practiced by the time the pandemic ends. By addressing the inquiries mentioned earlier, I can determine the feasibility of directing the copper products to the buses going to UBC. With your approval, I can begin preparing the survey and its participants.