Timestamp

**Email Address** 

Name

Email address

Job Title

Agency/Firm/Organization

Phone number

Mailing Address (personal or work)

**YPT Chapter** 

Which award are you interested in applying for?

**Project Description** 

Description of the impacts to the transportation industry or local transportation system(s)

Description of the roles and contributions of young professionals

Additional Information

Attachments

**Attachment Descriptions** 

Innovation / Research Description

Description of the roles and contributions of young professionals

Additional Information

Attachments

**Attachment Descriptions** 

**Personal Statement** 

Attachments

**Attachment Descriptions** 

For further inquiries please contact Admin@YPTransportation.org or list questions here:

2/7/2019 13:26

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Michael McQueen

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Master's Student

Portland State University

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StreetLight Graduate Fellowship

## Personal Statement

## Michael McQueen

I have always been captivated by the different methods we use to travel from point A to point B, and oftentimes this is my favorite part of any journey away from home. During my time as an undergraduate aerospace and mechanical engineering student at Case Western Reserve University, I took great joy in discovering the bus and rail public transit systems available throughout the city of Cleveland, something to which I did not have much exposure while growing up in the suburbs of Detroit. My most cherished memories of experiencing well executed public transit and a walkable built environment came during my six-month stay in Paris, France for an aerospace engineering internship. As a burgeoning urbanist following this adventure, I knew I wanted to see this approach towards mobility embraced and better championed back home in the USA, but I did not know how to help.

After graduating with my BS in mechanical and aerospace engineering, I took a job with General Motors in my hometown of Detroit developing hydrogen fuel cell propulsion systems for automobiles. I was glad to be working on a new green technology for transportation, but I felt that I was not improving people's lives quite directly enough. I also deeply believed in strengthening our country's transportation options that make use of active modes and complementary public transit. Upon discovering transportation engineering and planning, it all seemed to click! This was the work I had been looking for.

Wanting to learn more about the field, I began reading as much as I could. I picked books about our nation's recent movement back towards dense urban environments, the unique demographical history of our cities, and the evolution of our strong automobile culture, to name a few topics. I also interviewed transportation professionals, learning about the potential roles a transportation engineer can hold.

Ignited by my past experiences and independent study, I felt inspired and responsible to discover how to do my part in molding today's urban environments to encourage sustainable

transportation and consequently a more healthful, empathetic, and intentional way of living. I began my graduate studies in pursuit of a Master of Science in transportation engineering at Portland State University in the fall of 2018 and concurrently joined my local YPT chapter upon the suggestion of one of my professors. I have been delighted to attend several YPT happy hours, especially since I am new to the transportation field. These forums have provided me with several opportunities to learn about the different career paths that fellow members have taken, something that is very relevant to me as I begin to distill my own post-graduation plans. Thanks to YPT, I was also able to attend a panel discussion about shaping one's career path given by diverse professionals in the tech, private, and public sectors of transportation. Another highlight was a tour of FedEx's airside operations at Portland International Airport. Through these experiences, I have already forged connections with young professionals who are currently employed at organizations in which I am interested. I have also been lucky enough to make some new friends.

So far during my first few months of graduate school, I have researched the potential of e-bikes to decrease automobile use and greenhouse gas emissions in Portland. I wrote a white paper exploring incentive programs that lower the cost of entry to owning an e-bike. Through a class project, I also had the opportunity to investigate the out of hub parking behavior of Portland's "Biketown" bike share system users. I identified areas of Portland that could use additional parking hubs in order to reduce rebalancing inefficiency and increase equity for users that cannot park out of hub for free. During the next year and a half, I intend to take courses to inform my interests in transportation data interpretation, transportation demand management, transportation and health, bicycle and pedestrian infrastructure, and public transportation.

I plan to begin my thesis work this term to investigate how Portlanders access and egress transit, and I am certain that the StreetLight InSight data offered through this fellowship could greatly assist in this endeavor. Through this research, I would like to understand how

active modes, micro-mobility options (bike share and scooter share), and ride-share options augment or detract from fixed route transit.

After graduation, I plan to pursue a position that enables me to take an active role in positively influencing people to choose active transportation modes with complementary transit rather than single occupancy vehicles. I would like to work with data to determine which policy or infrastructure changes make a significant impact to this end, such as secure bicycle parking facilities at transit stops, separated bicycle and scooter lanes, and incentive programs.

Eventually, I would also like to help de-silo transportation and land use planning. I believe that these two practices need to continually grow closer together and mature to include active modes and affordable housing to make it practical for citizens to become less auto dependent. I believe it is imperative that we prevent active transportation and fixed route transit modes from being defunded and abandoned in order to preserve public health and the environment. I would like to live and work in Portland to help realize this vision, but I also hope to be able to share our successes with other cities in the future. This fellowship would help support my studies as I begin my journey in the transportation sector and work towards a cleaner, healthier, and smarter transportation future.