

My immediate goal is to obtain a PhD degree in Civil Engineering, so now the most important thing is my education. With the opportunity to take many courses which prepare me for engineering challenges of future work force, being a part of the University Transportation Research Center in City College of New York (CCNY) is an exciting opportunity for me to contribute to the ongoing research in Transportation Engineering. I look forward to increased knowledge through this internship and I am particularly interested in research of public transit in New York City (NYC). My long term career goal is to be one of the transportation engineering experts in the field of urban transportation planning, a professional who can give strategic designs and provide practical solutions that cater to the needs of various transportation development situations. Upon graduation from CCNY, I plan to work in an industrial enterprise or a government organization in NYC in which I can participate in the development of policy and strategies for the transportation sector in urban regions, specifically large metropolitan areas. NYC, having a 24 hours 7 days public transit system with all modes and thousands of taxi, black cars, and for-hire-vehicle, is the best work environment which can provide me with experience dealing with urban public transportation problems caused by city development, as well as personnel growth. By working for a firm or agency for five to seven years, I will gain practical experience and key knowledge of urban transport system. Eventually, I want to serve as a transportation advisor in a developing country in Southeast Asia.

With my education background, engineering research experience, real project work experience and desire to learn, I am confident to handle the challenges that this internship will bring. I intend to contribute to the select bus service research and provide in-depth analysis to find the factors attracting riders. I foresee my career initially from projects in different cities of China. The first real project was the Public Transportation System Planning in Ezhou City working with my advisor and teammates to reveal the crucial needs for improving its public transportation system and design new bus lines connecting urban areas and rural districts. Thereafter with extensive experience and networking, I moved ahead to do research on urban transportation issues which has allowed an insight into the underlying causes of urban traffic problems. My current research is analyzing the transit factors affecting taxi demand in New York City. All my experience have helped me to understand how important is providing an efficient transportation system to fast developing cities and accept the responsibility that comes with the opportunity to be involved in making contribution.

It was one thing to study detailed planning guidance and planning experience from multiple locations. It was quite another to change the planning of several intersections almost one year after construction finished in a medium-sized city in central China, because of unacceptable level

of service caused by soaring traffic volume and rapid land development. This experience embedded in my mind the seriousness of our work in a way that constantly reminding myself the importance of developing planning applicable to local socio-economic development. The challenge is to do adequate research on local situations to provide solid support for up-coming planning. These real projects were new learning opportunities and provided me with knowledge much different from what one learns in classroom. Through this research project based on real bus service in NYC, I want to learn more about the research methodologies that analyze different transportation related factors and their interaction with demands of transportation modes.

From the academic interest perspective, I am strongly keen on public transit, especially related research about trip generation and mode choice. Good public transit systems bring benefits to individuals, communities and nations, and they need to be kept working efficiently by strategies and designs provided by transportation engineers. From a social perspective, good public transport systems are an essential part of healthy development. For the poor, without transit might means losing work opportunities beyond walking distance of their homes. And it also can give people greater access to education, health care and recreation. What is more, compared to personal motor vehicle, public transport is far more efficient than personal motor vehicles in terms of the road space it uses up and the energy it consumes. The demand of efficient public transit system is urgent in big cities such as NYC and more urgent in developing countries with large population.

The Select Bus Service implemented by NYCDOT partnered with MTA New York City Transit from 2008 to 2013 on six routes around New York City is a good experience of Bus Rapid Transit (BRT) in big city. The understanding of elements affecting rider decision-making, including potential effects on travel mode choice and frequency of trips can not only help NYCDOT and NYCT design future SBS routes to maximize the elements that most attract new riders to the service, but also provide reference for similar urban BRT planning. Working on this research will considerably improve my skills for sampling survey, data processing, statistical analyzing, report and other key subjects preparing me for tackling real-life situations with the best skills. The vibrant and intense research process will also give me the adrenaline rush which will further motivate me to strive for excellence. My solid education background and real project experience while surviving under extremely challenging circumstances as a top student will contribute to the research process. The more important, with my profound interest I can actively devote for the internship. To sum up, as long as I make enough efforts, getting this internship will greatly help me achieve my goals.