

2020 DDOT Internship Program

Research, Development & Technology Transfer

Transportation Demand Management Internship



Project Description

DDOT's transportation demand management (TDM) program requests a research intern to assist with several research questions related to the operations of and demand for "slugging" in the District. "Slugging" is a form of casual carpooling that started in the 1970s during the gas crisis. This form of carpooling has grown considerably over the years and is generally a widely accepted, reliable form of transportation. However, it is unclear how many drivers and passengers travel into and out of the District using this form of transportation. The goal of this research will be to collect and analyze relevant data, and to answer the following research questions:



- 1. How many drivers and passengers use slugging on a daily basis in the District?
- 2. What kind of facilities are needed to fully accommodate this off-the-grid transportation mode?
- 3. What should DDOT do to accommodate and support slugging in the District?
- 4. With new HOV and HOT lanes coming online soon in Virginia, how many more drivers and passengers could potentially start using slugging to travel to work?





The District has 10 locations for slugline pick-ups, most of these have 2-3 different lines of passengers waiting to take them back to park-and-ride lots throughout northern Virginia.

- 1. How many drivers and passengers use the sluglines and to which locations are they traveling?
- 2. Which other transportation modes are available on the block and how/whether slugging is impacting these?
- 3. What is the existing curbside usage for these locations and how is it impacting slugging?



Secondary Research Area: Mode Split

The secondary research area will focus on mode split. The intern will work with his/her manager to use existing mode split data available for the District through the US Census Bureau, COG, and other sources to map out the last 20 years of mode split for the District. MWCOG publishing projected job growth and population growth recently and the intern will research relevant documents to map out necessary growth needed for each mode in order for the city to stay on pace with the 2032 mode split goal.







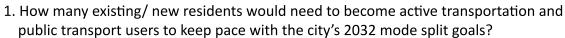


2020 DDOT Internship Program

Research, Development & Technology Transfer

Transportation Demand Management Internship

Research questions may include:



- 2. How many existing/ new residents would need to give us SOV travel over that same period of time?
- 3. What are the potential programmatic implications (staffing, budget, etc.) for DDOT's existing transportation demand management (TDM) program?

The intern will develop content, data sets, performance and metrics. The intern will also produce a succinct summary of background information, research, analysis, and recommendations for DDOT staff to use for future TDM and curbside management planning.

This research project will directly contribute to DDOT's TDM program by helping the agency better understand the impact of an informal transportation mode/ network like slugging and help us to better plan for this curbside use. It will allow DDOT to be more comprehensive in integrating slugging with existing programming and curbside management practices.



- Experience with data collection and working with data spreadsheets (Excel and/or Access)
- Interest in topics including TDM, curbside management, multimodal transportation planning, and emerging mobility.
- Experience with data visualization software (i.e. Tableau, R, etc)

Educational Background

- Graduate student in Urban Planning, GIS, Statistics or a Civil Engineering student with interest in transportation planning.

Bi-weekly stipends range from \$1,440 to \$1,600















2020 DDOT Internship Program

Research, Development & Technology Transfer

Transportation Demand Management Internship



