Wheelchair Accessible Vehicle Operator Shortage Study

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Prepared for:

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EXECUTIVE SUMMARY

The DC Department of For Hire Vehicles (DFHV) observed a declining trend in the number of wheelchair accessible vehicle (WAV) taxi operators in recent years. DFHV hired Foursquare ITP to study the shortage of WAV taxi operators and identify data-driven findings regarding the potential effectiveness of WAV operator recruitment and retention strategies. By conducting outreach to taxi operators through a survey and two focus groups, Foursquare ITP determined WAV operators' current top concerns as well as what incentives and programs have the potential to increase the number of WAV operators in the District. The study finds that:

- Operators struggle most with costs including: the cost of regular preventative vehicle maintenance, the cost of purchasing or renting a WAV, and the cost of long or deadhead rides.
- Operators shared other concerns of safety, particularly during nighttime hours
- Fares (excluding incentives) often don't justify a WAV vs. non-WAV trip for operators

One of the primary levers that DFHV has to increase the supply of WAV taxi operators is the offer of financial incentives. Non-WAV taxi operators in the survey and focus groups stated that they would be interested in operating a WAV if not for the cost of a vehicle purchase, vehicle maintenance, and the uncertainty around fare revenue relative to operative costs. While operators have other concerns related to safety that may be harder for DFHV to address, DFHV can offer incentives and programs to address low compensation for WAV trips and lack of knowledge of training and incentive programs for operating a WAV. Based upon the results of this study, DFHV can look to expand and more effectively market those programs, to better ensure taxi operators are aware of all of the opportunities and incentives available to them that make being a WAV operator an attractive opportunity.

EXISTING CONDITIONS

Background of Agency

The DC Department of For-Hire Vehicles (DFHV) is a public agency of the District of Columbia government that regulates the for-hire vehicle industry, which includes taxis and limousines. DFHV does not own or directly operate any vehicles; all service is contracted out to third parties. This includes the operation of Wheelchair-Accessible Vehicles (WAVs).

WAVs can be reserved through the Transport DC program, a demand-response service accessible to residents who have an access pass to MetroAccess, the shared trip paratransit service of the Washington Metropolitan Area Transit Authority (WMATA). MetroAccess vehicles offer shared trips, while the Transport DC service offers private rides. Additional booking services, including the "Curb" mobile phone application, allow riders to book individual rides as necessary.

According to DFHV's most recent strategic plan, the number of taxi companies applying for licensure jumped from 108 to 985 in FY2022.

Background Information

DFHV's WAV operator and vehicle shortage is not happening in a vacuum. Nationwide, unemployment is at record lows and many industries are struggling to find workers. The following information provides context for this study:

- In early 2023, Foursquare ITP prepared the Transit Workforce Shortage report for the American Public Transportation Association (APTA). The study involved a nationwide survey of transit agency employees to understand the causes of the workforce shortage and to outline best practices for recruiting, hiring, and retaining transit operations workers. The study found that:
  - Low pay, inflexible schedules, unclear paths to career advancement, and perceived lack of support from upper management were main reasons why drivers the transit industry left.
  - Barriers to hiring included time-consuming drug and alcohol policy requirements and the time and effort associated with obtaining a commercial driver's license (CDL)
  - Some hiring events and training programs were found to be effective strategies to address the shortage.

  Some of these findings are relevant to the for-hire vehicle industry as well, especially with respect to low pay and the potential effectiveness of hiring events and training programs.
- An article in the DCist, a local news website, investigated the cause behind the shortage of WAV. The article stated that the **increased cost of maintaining a WAV**, the **higher amount of time and effort associated with caring** for people in wheelchairs, and **rapidly changing rules and requirements** over the eligibility of Transport DC trips (medical or work related) were all factors in the lack of WAV operators.
- For a number of years, DFHV has offered grants to contractors that would go towards the purchase of a WAV.

Analysis of Trip Data

Between the dates of May 1, 2020 and April 30, 2023, 72,676 WAV trips were taken in the District of Columbia, including 22,556 trips between April 2022 and April 2023. **Figure 1** below shows the daily average number of WAV trips taken in DC over a three-year period and provides an overview of the average fare, average mileage, and average wait time by time of day. Nighttime WAV trips (trips taken between the overnight

hours of 6:00 p.m. and 6:00 a.m.) had the longest wait time for passengers seeking a ride, likely due to a more limited number of operators available at this time. In contrast, morning WAV trips, taken between the hours of 6:00 a.m. and 10:00 a.m. had the shortest wait time and average mileage per trip in that period was also the lowest of all time periods. The average trip length and, by extension, fare for WAV trips was highest for those taken during the midday, afternoon, or evening, potentially further disincentivizing nighttime WAV operation – a point also heard from operators during engagement conducted as part of this study.

FIGURE 1 | DAILY WAV TRIPS

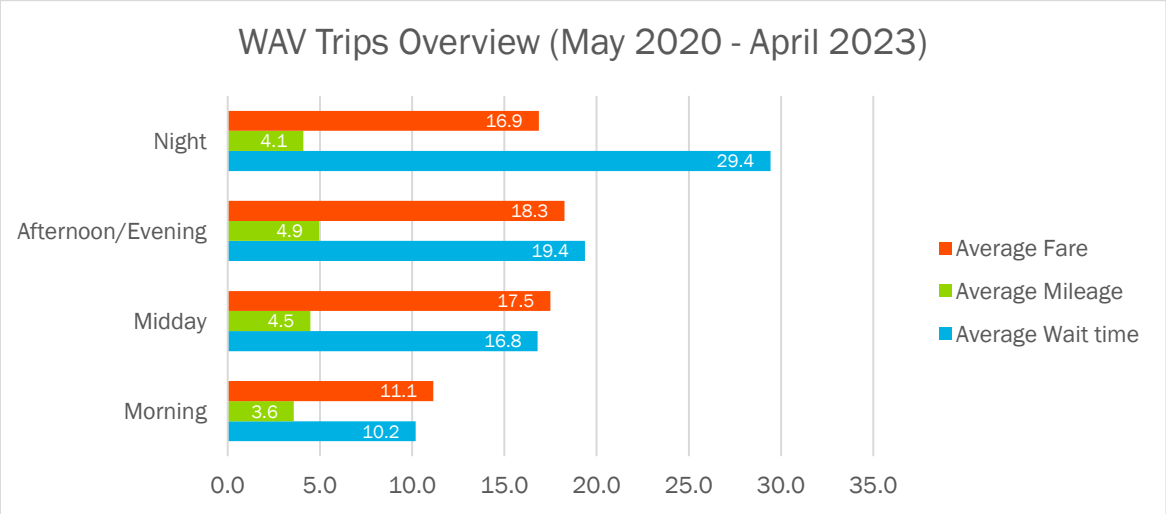
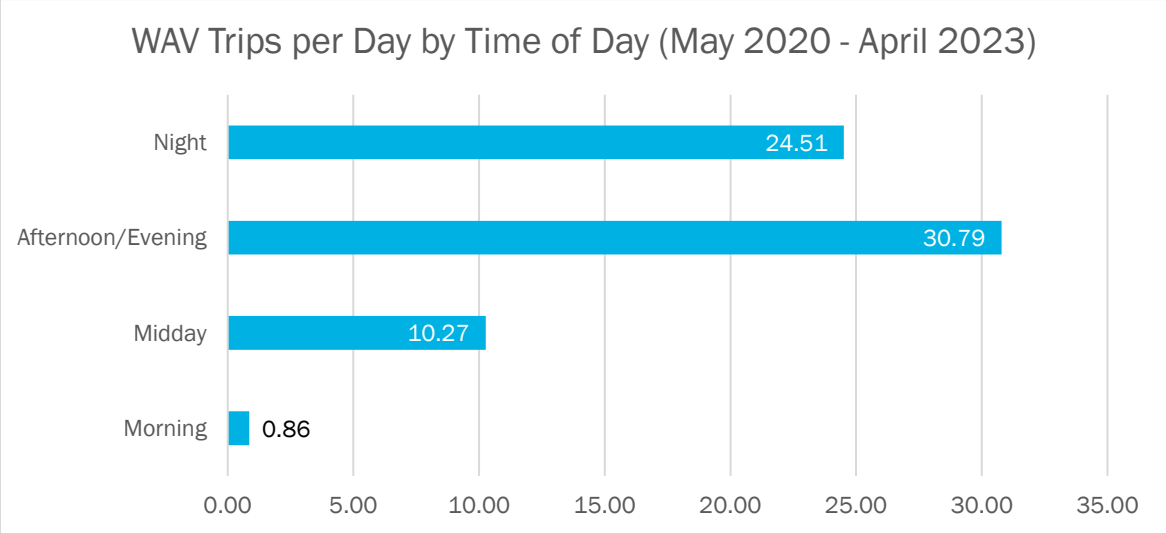


Figure 2, below, shows the average daily trips taken by time of day. The afternoon/evening (2:00 p.m. – 6:00 p.m.) and nighttime (6:00 p.m. – 6:00 a.m.) periods saw the greatest number of trips. This also represents the demand pattern for trip requests and when the greatest need exists for WAV operators. Based upon discussions with DFHV, in which the Department stated there was high demand for nighttime trips, and with operators who were hesitant to operate at night for a number of reasons, **Figure 2** supports the fact that additional operators are needed for this time period.

FIGURE 2 | WAV TRIPS - DAILY AVERAGE



1. SURVEY RESULTS

Introduction

Building upon observed industry trends, market research, and observed conditions, the team for this study developed a survey to better understand the causes of WAV driver attrition, how recruitment of WAV drivers could improve, and what incentives would most likely result in drivers switching to and continuing to operate WAVs.

The study team sent current and former operators of WAV and non-WAV taxis an online survey in English and Amharic. The survey did not provide participants with an incentive for their responses; instead, the team informed them that their insight would help improve the for-hire vehicle industry. Per survey best practices, following the initial survey response request, weekly emails were sent to operators reminding them to take part in the survey. The survey was open for approximately 2 months with 90 percent of responses coming within the first two weeks. In total, 85 operators responded. Approximately 40 percent of respondents either currently operate a WAV or had operated one in the past, while 60 percent of respondents had never operated a WAV taxi. The number of non-WAV operator responses was larger due to a larger potential participant pool. However, as a percentage of total operators, a larger proportion of WAV operators responded to the survey than non-WAV operators. Operators of non-WAVs, based on survey response rates, were able to offer valuable insight into why they do not to operate a WAV, perceptions of operating a WAV, and whether or not specific incentives would convince them to switch vehicle type. The following sections outline the survey questions, driver responses, and key takeaways from the survey results.

Questions about Why WAV Drivers Are Quitting

TABLE 1 | OPERATOR ATTRITION SURVEY QUESTIONS AND RESPONSES

Survey Question	Survey Response
Are you a current or former WAV operator?	24 (39%) responses were from current or former WAV operators. n=61, all operators
How long have you been a WAV operator?	Average tenure of about 12 years of experience. Lowest was 5 years, highest was 32. n=12, WAV operators
Agree or Disagree: I left because the level of passenger demand wasn't worth the cost.	▪ 27% agreed or strongly agreed ▪ 45% were neutral ▪ 27% disagreed or strongly disagreed n=11, WAV operators
Respondents were asked to Agree or Disagree with the following statements:	
I left because the cost of maintaining a WAV was too high.	▪ 54% agreed or strongly agreed ▪ 27% were neutral ▪ 18% disagreed or strongly disagreed n=11, WAV operators
I left because the physical demands were too high	▪ 18% agreed or strongly agreed ▪ 36% were neutral ▪ 45% disagreed or strongly disagreed n=11, WAV operators

I left because of harassment and assault on the job.	■ 27% agreed or strongly agreed ■ 27% were neutral ■ 46% disagreed or strongly disagreed *n=11, WAV operators*
I left because the DFHV does not support drivers when an issue arises with a rider.	■ 27% agreed or strongly agreed ■ 36% were neutral ■ 36% disagreed or strongly disagreed *n=11, WAV operators*
I left because I don't want to risk my health/risk getting COVID.	■ 18% agreed or strongly agreed ■ 45% were neutral ■ 36% disagreed or strongly disagreed *n=11, WAV operators*

KEY TAKEAWAYS:

- The cost of purchasing, renting, and maintaining a WAV was a common reason that operators don't drive a WAV.
- Concerns of safety and driver support when an issue arises with a rider are other concerns that operators have.

The questions from the operator survey shown in **Table 1** focused on driver attrition; primarily, why DFHV has seen a decline in the number of individuals operating WAVs. When asked whether or not WAV operators left because of low passenger demand, only three out of eleven respondents agreed, with all respondents being current or former WAV operators. This signifies, consistent with data analysis, that the demand for wheelchair accessible trips is high and there are other factors that affect operators' decision to drive a WAV.

Most former WAV operators responded that the physical demands of the job were not a reason that they no longer operate a WAV. Based upon the survey results and what was addressed in the succeeding focus groups, drivers were aware of the physical demands of the job prior to beginning, likely an important reason why this was not a significant cause of WAV operator attrition. The results of this question support, in some regard, the level of training that drivers are receiving to become WAV drivers and reinforces that DFHV and its contracting agencies should continue such training programs; however additional questions in the survey suggest that a broader scope and audience is necessary for the training.

Cost of maintenance and health and safety concerns were the most non-WAV drivers agreed or strongly agreed that they wouldn't switch to a WAV.

Questions about Operator Recruitment and Training

TABLE 2 | RECRUITMENT AND TRAINING SURVEY QUESTIONS AND RESPONSES

Survey Question	Survey Response
How long have you been a driver?	The shortest operator tenure is 5, and the longest operator tenure is 48. n=22, non-WAV operators
Did you receive any training on the operation of WAVs when you first became a driver?	■ Out of the current and retired WAV operators, approximately 13% of operators got no training. Next most popular was an in-person seminar (67%) and written materials (40%). n=15, WAV operators ■ 66% of non-WAV operators received no WAV training when initially onboarded as a taxi driver. n=22, non-WAV operators
Have you even needed to reach out to DFHV to resolve an issue?	■ 60% of WAV operators said "No". n=15, WAV operators ■ 75% of non-WAV operators said "No". n=24, non-WAV operators
What methods are you aware of to reach out to DFHV?	■ 79% of non-WAV operators were aware of a general phone number; 64% were aware of a general email. N=14, WAV operators ■ 59% of non-WAV operators were aware of a general phone number; 50% were aware of a general email. N=22, non-WAV operators
How did you first hear about the WAV employment opportunity?	■ 57% of current or former WAV operators heard through word of mouth. n=14, WAV operators
The WAV schedule is flexible enough to accommodate other obligations.	■ 83% agreed or strongly agreed ■ 16% were neutral ■ 0% disagreed or strongly disagreed n=12, WAV operators
WAV operators have the flexibility to decide where and how long to work.	■ 83% agreed or strongly agreed ■ 8% were neutral ■ 8% disagreed or strongly disagreed n=12, WAV operators

KEY TAKEAWAYS:

- Operators didn't feel well trained on specific aspects of operating a WAV and also felt like they had limited avenues to reach out to DFHV (limited to general phone and email)
- Operators were unaware of the opportunity to switch to WAV operation or were unsure of additional costs associated with operating such a vehicle

"[I was] never presented the opportunity [to operate a WAV]" – survey respondent.

As stated in the previous section, operators were aware of the physical requirements of the job and that additional physical labor is often required when operating a WAV. However, many operators (66 percent of respondents) received little or no training on operation of a WAV or how to safely transport a wheelchair within a vehicle – a sentiment that was echoed in multiple focus groups with operators as well. Inconsistency seems to arise partially from the fact that DFHV

employs outside contractors to supply WAV and non-WAV operators. In most cases, the contractor is responsible for training their drivers, which results in inconsistent results. One operator said they were "not able to understand what [they were] doing." In some cases, training is provided when an operator is first onboarded and then not refreshed after the fact; as a result, an experienced taxi operator may lack the required knowledge to switch to WAV operation because they don't remember the initial onboarding training they received. DFHV does provide operators with some training, however, based upon responses to the survey, an increase in the volume and consistency of training would be beneficial to all operators.

Many operators were also unaware of potential WAV employment opportunities. Nearly half of WAV operators (57 percent) heard about the job opportunity through word of mouth while some heard about the opportunity for the first-time during focus groups conducted as a part of this study. Non-WAV operators responded that they were also unsure of additional costs associated with operating a WAV, such as purchasing or renting a different vehicle, availability of frequent rides, and comparative maintenance costs.

Section 3: Operator Preference

TABLE 3 | OPERATOR PREFERENCE SURVEY QUESTIONS AND RESPONSES

Survey Question	Survey Response
Why did you choose to operate a WAV or non-WAV?	■ The cost of maintaining a WAV compared to the amount of available work was the most popular reason for choosing not to operate a WAV. ■ Some respondents stated that the physical requirements to assist riders also created a barrier to WAV operation. ■ Many respondents wrote that rideshare companies offer WAV rides and MetroAccess rides, which further cuts down on the possible profit and further disincentivizes WAV operators.
I felt my training was sufficient to address the requirements of operating a WAV.	■ Of current and former WAV operators, about 83% felt that the statement was true. n=12, WAV operators.

KEY TAKEAWAYS:

- Operators didn't feel well trained on specific aspects of operating a WAV and also felt like they had minimal support from DFHV.
- Operators were unaware of WAV employment opportunities or were unsure of additional costs associated with operating such a vehicle.

Approximately 83 percent of current or former WAV operators felt that their training was sufficient to operate a WAV, and 58 percent of non-WAV operators didn't feel that they had sufficient training for a WAV. WAV operators have learned on the job and learned from other operators about the best methods to be used on the job and this has complemented the initial training provided by DFHV. In the instance of non-WAV operators, the sentiment of insufficient training to operate a WAV was also heard in focus groups and was stated by operators as a barrier to switching. Operators stated that although they may have received training when they first started driving with DFHV, the training was now outdated. These findings indicate a significant opportunity for DFHV to provide updated training for non-WAV operators who are interested in operating a WAV.

Section 4: Incentives

TABLE 4 | OPERATOR INCENTIVES SURVEY QUESTIONS AND RESPONSES

Survey Question	Survey Response

DFHV has launched a number of grant programs in the past that offered operators cash for the purchase and maintenance of a WAV or additional incentives. Were you aware of any such programs?	■ Of current and former WAV operators, over 60% were unaware of previous incentive programs. n=12, WAV operators ■ When provided an opportunity to suggest future incentives, respondents focused on a desire for something that would increase the volume of work and help operators compete with rideshare companies.
I can comfortably afford regular preventive maintenance of the WAV	■ 36% agreed or strongly agreed ■ 36% were neutral ■ 27% disagreed or strongly disagreed n=11, WAV operators
Financing a WAV is worth the initial investment.	■ 18% agreed or strongly agreed ■ 71% were neutral ■ 18% disagreed or strongly disagreed n=17, non-WAV operators
Did the volume of WAV rides support operating costs?	■ 33% said yes ■ 67% said no n=12, WAV operators
The Union Station Fast Pass program allows WAV operators to access the front of the taxi line at Union Station. Would a Fast-Pass incentive motivate you to switch to WAV?	■ 41% said yes* ■ 59% said no n=17, non-WAV operators
What other incentives would motivate you to switch to driving a WAV?	Various write-in responses included increasing the fares, assistance with the cost of gas and vehicle rent, and competing with rideshare companies.

*Note: Operators were not aware of the full extent of the Union Station Fast Pass incentive on the survey. When clarified during focus groups, operators were very interested in this option.

KEY TAKEAWAYS:

- DFHV offers a number of incentives to WAV operators, many of which respondents stated would be helpful.
- Operators were generally unaware of incentives available to WAV operators.
- Operators stated that the volume of available WAV rides didn't support a switch from non-WAV to WAV. This is a problem that would be directly addressed by a Union Station Fast Pass which would provide operators with more rides.

Operators who responded to the survey were interested in the stated available incentives but were generally unsure of whether the incentives applied to them or what the full extent would be. Operators expressed relatively low interest in the Union Station Fast Pass on the survey because the extent of the incentive was unclear. Many concerns expressed by operators were reflected in current incentive options, therefore, rather than offering additional or different incentives, the DFHV would be better served by improving messaging and outreach about available incentives to make them readily available for operators.

~16%~

The percent of WAV operators who stated they can comfortably afford regular preventative maintenance.

2. FOCUS GROUP FINDINGS

INTRODUCTION

In July 2023, Foursquare ITP conducted two virtual focus groups in English to understand the WAV operator shortage from the operators' perspective. The focus groups were conducted in the evening through Microsoft Teams. Participants also had the option to join via telephone if Teams was not an option. One focus group had as few as three, and the second had approximately 18 participants. All participants were offered a $150 gas card for their time and participation. The moderators from Foursquare ITP used the questions from the online survey to guide the discussions.

SUMMARY OF FINDINGS

Wheelchair-Accessible Vehicles are Difficult to Afford.
Focus group participants strongly emphasized the high cost of possessing a WAV as a barrier to operation. Although operators can choose between renting a WAV and owning one outright, even the reduced price of renting one was prohibitively expensive.

Taxi Operators Lose Business to Rideshare Companies, Who Have Fewer Barriers to Entry
Rideshare apps now have a WAV option, and District funds go towards subsidizing rideshare companies that offer rides through MetroAccess. In addition, drivers on rideshare apps are not required to adhere to the same level of fees and administrative burden that taxi drivers must uphold.

> *One participant noted that the "entire [taxi] industry is on life support."*

Operators Support Financial Incentives and Increased Agency Support
Many participants support the addition of financial incentives specifically for WAV operators, although some participants felt that the dollar amount needed to increase.

Many participants found that the Fast Pass, a program that would allow WAVs to skip the line at Union Station, to be a helpful incentive. However, other participants pointed out that Union Station can be so crowded that a Fast Pass isn't enough to get past the congestion.

Some participants pointed out that many WAV operators work mostly during daytime business hours. Several suggested financial incentives, like night and weekend differential pay, to incentivize WAV operators to provide transportation outside of normal business hours.

Many participants were in favor a subsidized supplemental fare on WAV trips for no-show riders and deadhead fees to cover the cost of traveling between riders that are farther away. Some participants felt that the dollar amount for this incentive was too low to make a difference.

Participants also expressed the desire to have increased access to support from the DFHV in the event of a customer dispute. Several participants voiced the opinion that the DFHV should extend the hours of the staff who help address driver concerns so they could respond after typical business hours.

3. STUDY FINDINGS

The survey and focus groups together informed development of the following key findings of the study:

1. **Supporting existing WAV taxi operators with financial incentives including vehicle purchase assistance could help retain them in the WAV workforce.** Implementing financial incentives for WAV operators (i.e., Fast Pass, night differential, deadheading fee, no-show fee, vehicle assistance) through subsidies would encourage them to continue with operation. Drivers expressed a preference for the incentives to go directly to the operator, instead of filtered through taxi company management.
2. **Drivers would benefit from more and more frequent communication from DFHV.** DFHV should clearly publicize and staff a line of communication exclusively for operator concerns. Ideally, it would be available after business hours to accommodate the schedule of operators. Most WAV taxi operators heard about their current job through word of mouth, so DFHV needs to ensure that there are multiple languages and modes to distribute information about upcoming incentives.
3. **Reducing the administrative burden and cost of becoming a taxi operator could help increase the number of WAV operators in the District.** The process of becoming a WAV operator for a taxi company is more expensive and time-consuming than becoming a rideshare driver. Taking steps, such as streamlining and digitizing the application process, or providing flexibility in the payment of fees, could make the process easier without sacrificing professional standards.
4. **Emphasizing the positive parts of WAV taxi operation could help attract new WAV taxi operators.** Especially after implementing the financial incentives, DFHV would benefit from alerting potential WAV operators (including current rideshare drivers) about the positive aspects of WAV operation. Some operators enjoy operating WAVs as a way to help people with limited transportation options.
5. **DFHV could act as a clearinghouse or facilitator to connect WAV taxi operators to public health, medical, or human services organizations that consistently need transportation.** Some operators reported having a relationship with a facility whose clients consistently needed transportation. For WAV operators who want assistance, DFHV should facilitate relationships with organizations whose clientele includes those who use wheelchairs.
6. **DFHV should continue to work with transportation hubs like Union Station to inform the public of the advantages of taxis, including the equity benefits of offering WAV transportation.** DFHV seeks to convince the public to choose a WAV taxi rather than a WAV rideshare vehicle. Choosing a WAV taxi over a WAV provided by a rideshare company has strengths the public may not realize, including immediate availability from the taxi line at Union Station.