

DASH Free Fares Program Annual Report - 2022



Prepared by Alexandria Transit Company (DASH) Planning Staff
Presented to the ATC (DASH) Board of Directors on December 14, 2022



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1. Executive Summary

This document comprises the first annual report on the DASH Fare Free program, which began in September 2021. The purpose of this report is to evaluate the successes and challenges of the first year. This report is a requirement of the DASH Fare Free Framework Policy that was adopted by the ATC Board of Directors in September 2021. As outlined in the following list and sections, the first year of the free fares program has been a tremendously successful by nearly every performance metric:

- DASH has seen historic ridership growth in the first year of the fare-free New DASH Network. Average daily ridership has more than doubled (+117%) from August 2021 to August 2022 with the biggest ridership increases occurring during middays, evenings, and weekends.
- In September 2022, DASH recorded over 380,000 boardings, making it the single highest month since 2015. DASH is one of the only agencies in the region that has returned to, and surpassed, pre-COVID ridership levels.
- Recent customer survey data indicates that the network redesign and free fares have been the two biggest factors in the historic ridership growth.
 - 71% of riders surveyed indicated that they are riding DASH more now than they had before September 2021 because it is free to ride.
 - Over 80% of low-income riders said they are riding DASH more now because it is free.
 - 22% of current DASH riders were not riding DASH before the launch of the new fare-free bus network in 2021. Among these new riders, over half (52%) rated “increased frequency” as a “most important” factor and 44% cited free fares.
 - 67% of customers said that free fares have improved their perception of DASH.
- Customer feedback has been largely positive with many survey respondents expressing their appreciation for the discontinuation of fares. Some customers have raised concerns about overcrowding, particularly on routes serving large numbers of high school students.
- DASH operators have reported an increase in overall job satisfaction and perceived safety while onboard DASH buses; however, negative interactions with passengers have increased slightly.
- DASH has recouped fare revenues in FY 2022 with \$2.6 million in state grant funding from the DRPT Transit Ridership Incentive Program (TRIP) and a \$1.5 million increase in the DASH subsidy from the City of Alexandria. Additional savings have been realized with the termination of cash collection services, discontinuation of the DASH smartphone app, reduced labor resources for farebox maintenance, and the cancellation of a \$5 million capital project to install new fareboxes.

Based on the findings outlined above and in the following sections, staff concludes that the free fare program has been successful in its first year due to the historic ridership growth, benefits for low-income riders, positive customer feedback and the reduced financial burden from grants and other cost savings.

2. Background

On September 5, 2021, DASH eliminated fare collection on all DASH buses. Although DASH had suspended fares during the COVID-19 pandemic, the 2021 decision was characterized as a more permanent policy change championed by the Alexandria City Council to promote transit usage, reduce barriers to transit, improve equity in transit services, and to spur economic recovery. This decision made DASH the first transit agency in the Washington D.C. region and in the Commonwealth of Virginia to establish a multi-year fare-free program.

The change was initially funded by a \$1.5 million increase in the annual city subsidy for DASH that was approved by the Alexandria City Council for FY 2022. The City of Alexandria was subsequently awarded \$7.2 million Transit Ridership Improvement Program (TRIP) grant by the Virginia Department of Rail and Public Transit (DRPT). The TRIP program was introduced in 2021 to encourage transit ridership across the state. Based on the TRIP grant program requirements, DASH is required to operate fare-free for a period of no less than four years, or until September 2025. The funding requires a local funding match, which gradually increases over the duration of the program.

The transition to free fares in September 2021 also coincided with the launch of the New DASH Network (NDN). The NDN was the first implementation phase of the 2030 Alexandria Transit Vision Plan (ATV), which outlines a redesigned bus network emphasizing a more useful bus service for more people at more times of day. More information on the ATV can be found at www.dashbus.com/transitvision.



3. Fare-Free Framework Policy

The ATC Board of Directors approved a Fare Free Framework Policy in September 2021 to document the scope of the fare-free program and to provide policy guidance on future program administration. The policy document includes information on the program goals, funding sources, fare collection equipment considerations, promotional outreach, and program evaluation. The policy also outlines the timeline, costs, and administrative processes should DASH ever need to resume fare collection in the future. The full text of the DASH Fare-Free Framework Policy may be reviewed on the DASH website at www.dashbus.com/free.

The Fare-Free Framework includes a requirement that staff must evaluate the performance of the fare-free program on an annual basis. This evaluation should be presented as a report to the ATC Board of Directors that assesses program costs and benefits. The relevant text from Section VI of the Fare-Free Framework Policy document is included below:



VI. Program Evaluation.

The following steps will be taken to evaluate the DASH Fare Free program:

- a. Staff will conduct an annual review of program effectiveness at the end of each fiscal year in which free fares have been provided.*
- b. Potential Metrics include Ridership, Ridership Demographics, Customer Survey Responses, Operator Feedback, and Fare Collection Cost Savings.*
- c. Any evaluation of the Fare Free program that also contemplates the effect of service improvements should note that new transit service changes should not be evaluated until a period of 12-18 months has passed since their implementation. This is the typical period of time that is required for new transit services to attain maturity in terms of public awareness, shifting travel behaviors and ridership attainment.*
- d. The annual "DASH Fare Free Program Summary" Report to be presented to the DASH Board of Directors each Fall for review and consideration.*

Based on the program goals and objectives identified in the Fare-Free Framework, the following sections outline the relevant program metrics and the DASH performance in each category during the first twelve (12) months of fare-free operations.

4. Program Evaluation Methodology

The main goals of the fare-free program are to reduce cost-related barriers to transit usage, especially for low-income riders, and to increase DASH ridership by drawing new customers and encouraging existing customers to ride DASH more frequently. Other goals include reducing costs associated with fare collection and promoting awareness and positive perceptions of the New DASH Network.

Based on these goals, staff have identified the following five (5) metrics to help evaluate the performance of the fare-free program to date:

- **System Ridership.** A review of systemwide ridership levels – including total annual boardings, monthly boardings, and average daily boardings – will quantify the degree to which transit usage is increasing or decreasing during the first year of the free fare program.
- **Customer Feedback.** Customer feedback is collected via regular surveys and by tracking statistics on complaints and commendations. DASH recently conducted a customer survey that yielded many insights into ridership behavior trends, rider demographics, and the extent to which free fares may be driving any changes in ridership behavior. The demographic information from passenger surveys is used to provide insights into how DASH service is benefitting riders from disadvantaged communities across the City.

DASH also collects monthly data on customer complaints and commendations that are received via telephone, e-mail, or social media. The purpose of this metric is to review data on this feedback to identify any trends or recurring themes relating to the free fare program.

- **Employee Feedback.** Another critical data point in the assessment of the free fares program is any feedback received from frontline personnel such as bus operators. DASH conducted an operator survey in September 2022 which included several questions about free fares. Several informal interviews were also conducted with Operations and Safety team members to assess the program and identify any specific issues or challenges.
- **Financial Impacts.** The budgetary impact of the free fares program must also be considered as part of the performance evaluation. This includes any special additional cost increases or decreases that have resulted from program implementation, as well as any additional budgetary impacts that would result from reinstating fare collection.

The specific performance metrics listed above may be subject to revision in subsequent annual reports as the free fare program evolves and different data sources become available.

5. System Ridership

DASH system ridership has fluctuated significantly over the last three years due to the COVID-19 pandemic and other external factors but has increased significantly in the months since the fare-free New DASH Network was implemented in September 2021.

As shown in Figures 5-1 - 5-3, DASH ridership in FY 2022 (July 1, 2021 – June 30, 2022) has rebounded from the previous years and now exceeds pre-pandemic ridership levels. Though DASH only recorded 3 million boardings in FY 2022, that period includes three months prior with fare collection. **Based on current trends, DASH will reach 4 million annual boardings in FY 2023 for the first time since FY 2016.**

Total Monthly Ridership. Total monthly ridership for the last six years is depicted on Figure 5-2. The month-by-month ridership growth in FY 2022 is shown by the green line, while the red line shows the first few months of FY 2023. DASH recorded over 380,000 boardings in September 2022, the highest single month of DASH ridership in over seven years. This graph also shows that DASH is one of the only bus agencies that has returned to, and surpassed, pre-COVID ridership levels.

Average Daily Ridership. As shown in Figure 5-3, average daily ridership for DASH has also surged in the first year with free fares. Average weekday ridership grew by 117 percent from 6,247 average weekday boardings in August 2021 to 13,574 average weekday boardings in August 2022. Average weekend boardings also doubled with average Saturday boardings rising from 4,368 to 9,495 (+117%) and average Sunday boardings increasing from 3,336 to 7,132 (+114%).

In comparison to pre-pandemic ridership levels from 2018, average weekday boardings in August 2022 were up by 21% compared to August 2018, and average weekend ridership is up by 22%. Peak ridership has only increased by 8%, while off-peak ridership, including middays, evenings, and weekends, has increased by 27%. As shown in Figure 5-4, the largest growth in weekday ridership has occurred during middays and evenings, while ridership during the AM peak period is still lagging below pre-COVID levels. The largest growth in ridership has occurred on Line 35, which averages upwards of 5,000 boardings per weekday. This route serves many communities in West Alexandria with higher percentages of low-income households which could be indicative of the impact of free fares.

DASH recorded over 380,000 boardings in September 2022, the highest single month of DASH ridership in over seven years.

Lastly, to isolate the ridership impact of free fares from service improvements in the New DASH Network, staff reviewed ridership data on several routes that remained largely unchanged from the old DASH network. These routes include Line 30 (former AT-8), Line 33 (former AT-10), and Line 36 (former AT-9). Average weekday boardings for each of these routes have increased by 119%, which is slightly higher than the system as a whole. Since the service on these routes was not significantly improved but the ridership still increased, this finding supports the idea that free fares may be the biggest factor contributing to increased ridership.

Figure 5-1
DASH Systemwide Ridership by Year (FY 2017 – FY 2023)

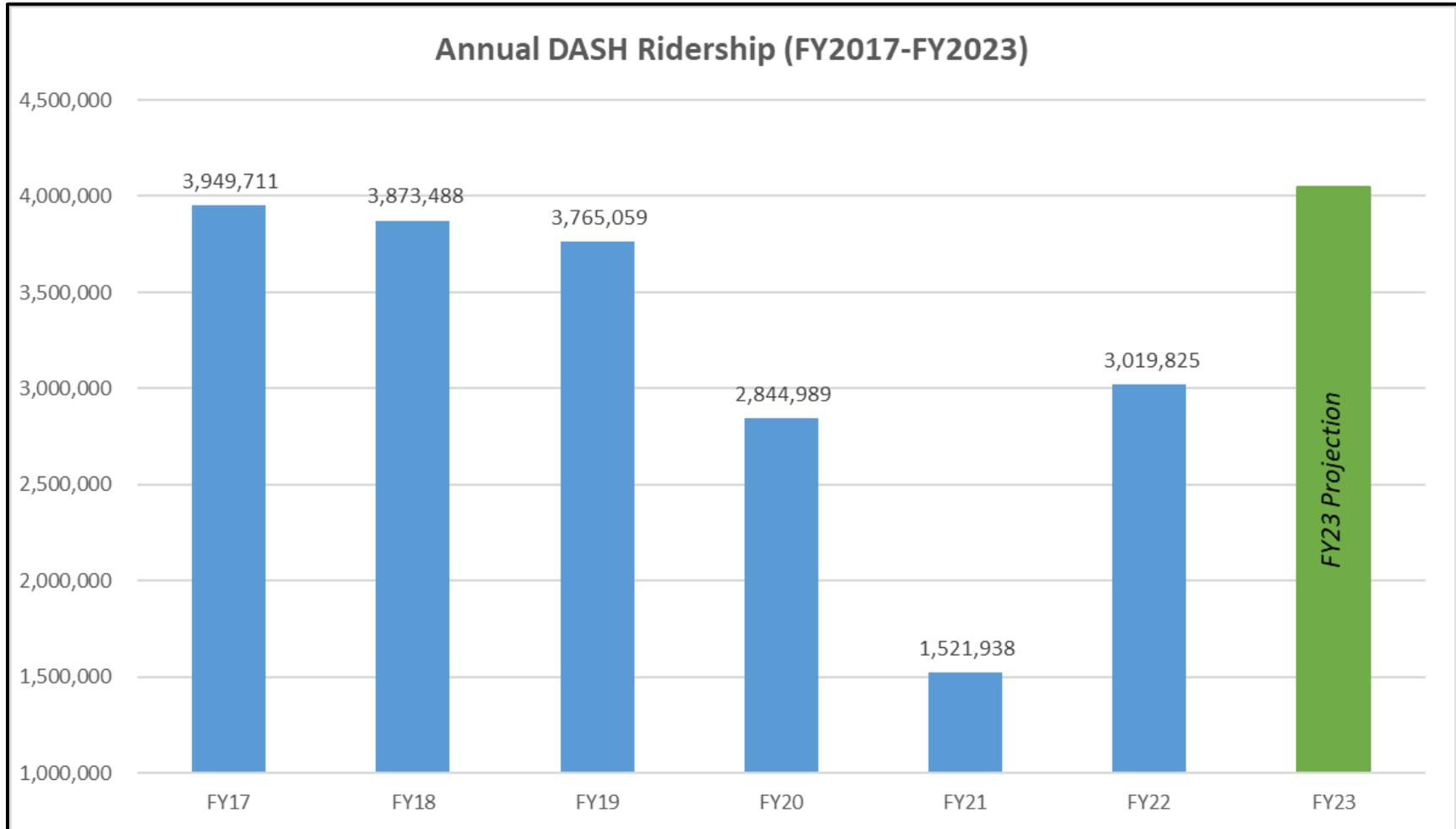


Figure 5-2
DASH Systemwide Ridership by Month (FY 2017 - 2022)

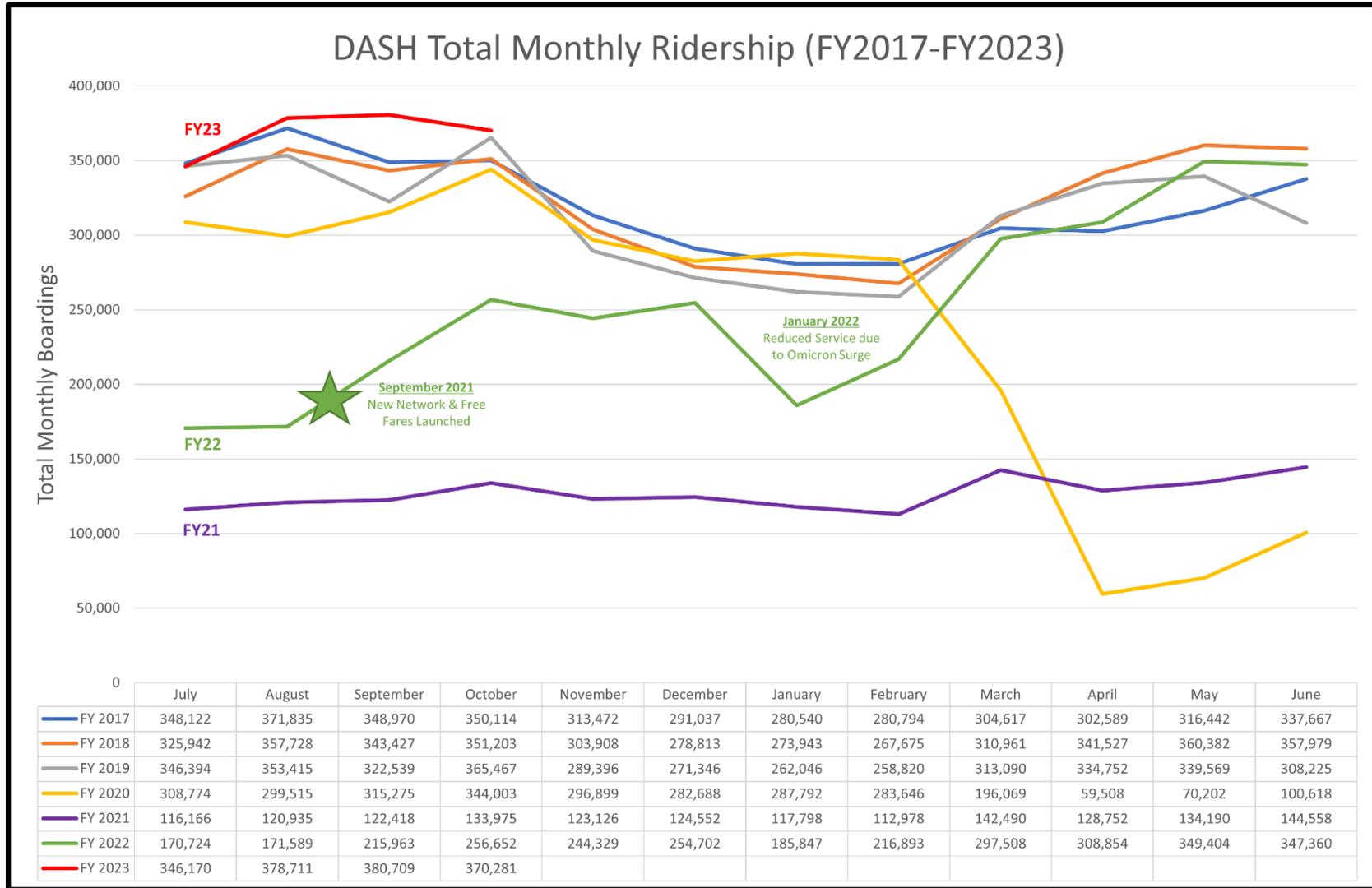


Figure 5-3
 DASH Average Daily Boardings by Month (FY 2022 – FY 2023)

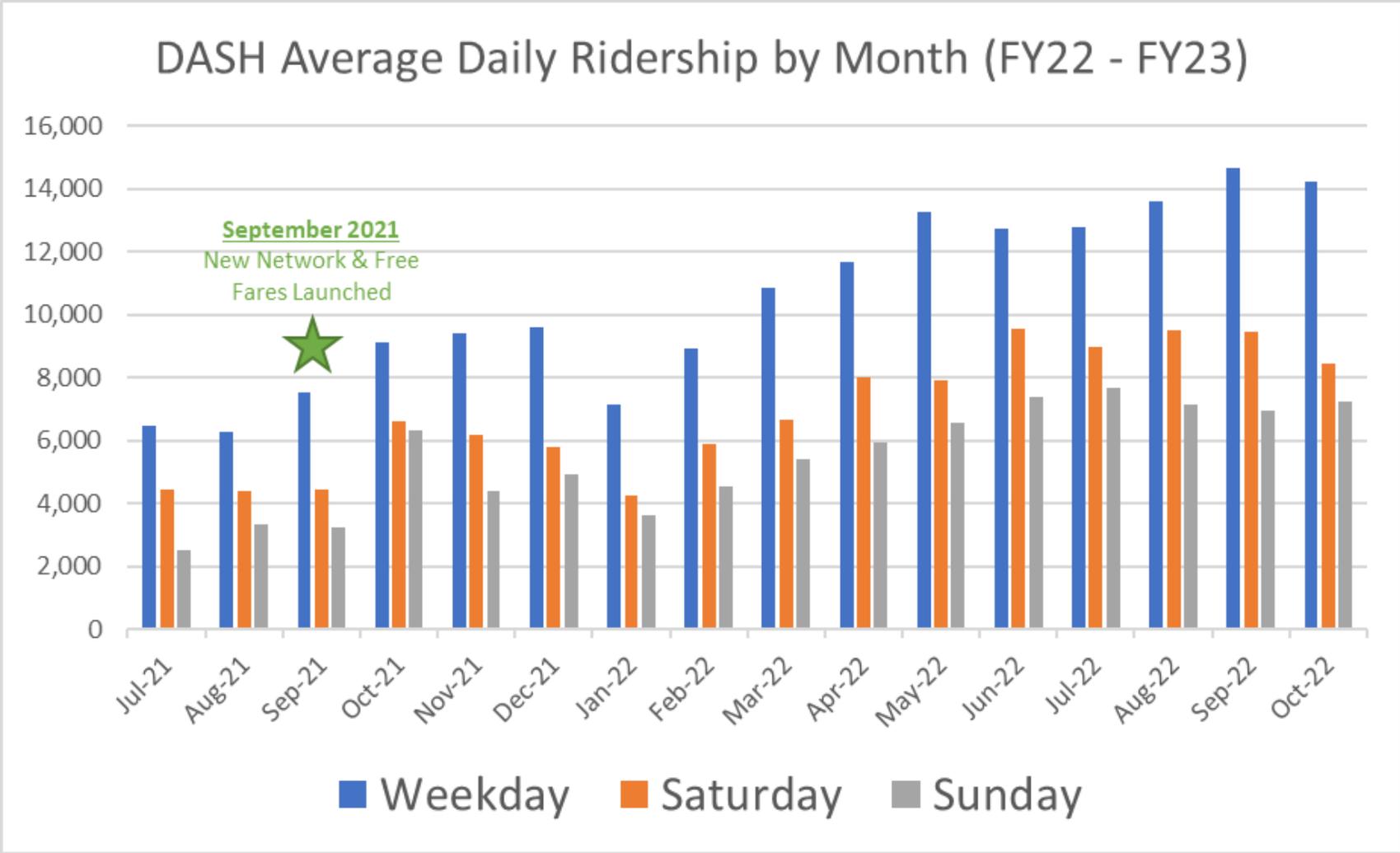
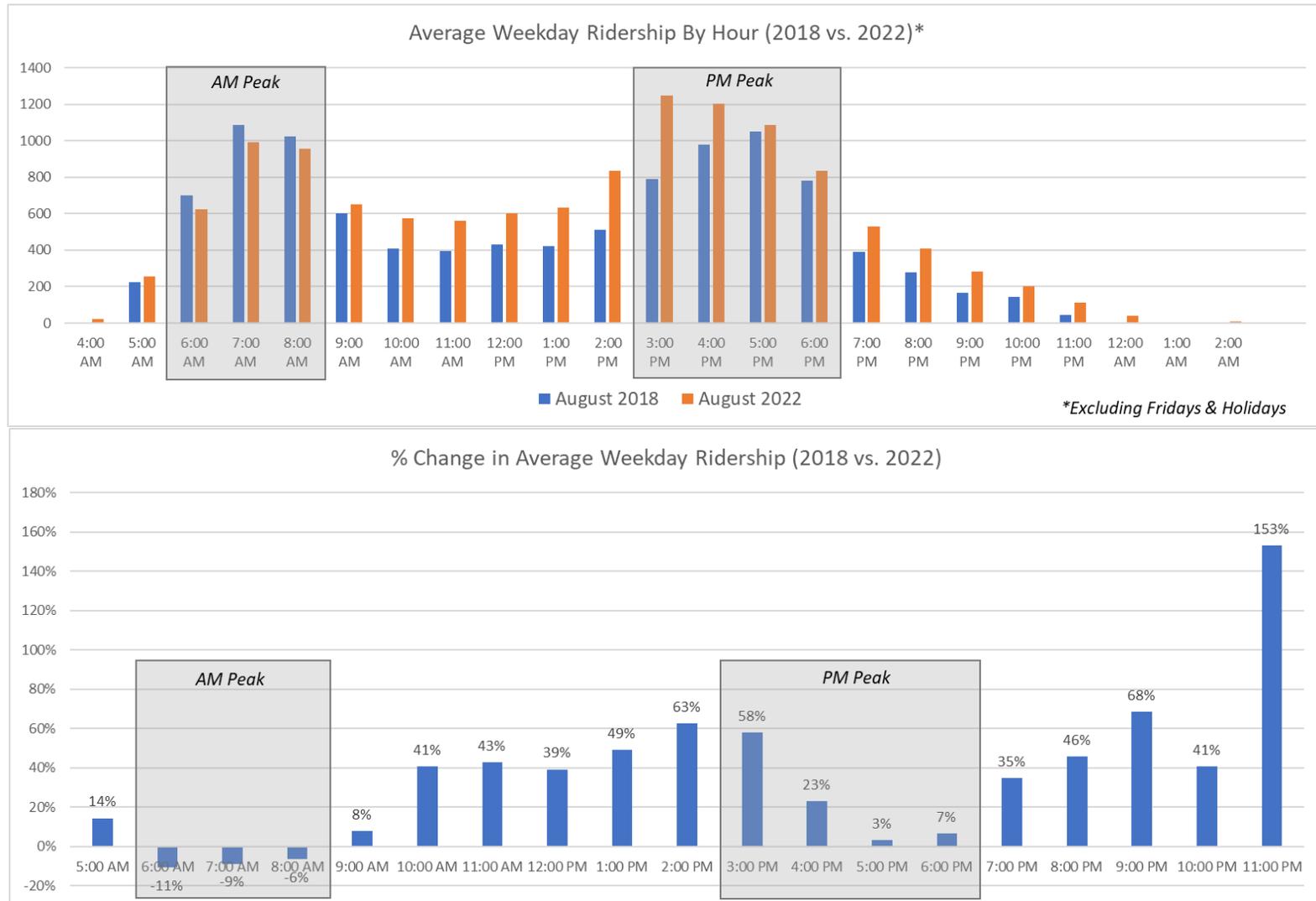


Figure 5-4
Average Daily Ridership by Hour (2018 vs. 2022)



Overcrowding. On several Line 31, 35 and 36 trips that serve a larger number of high school students, DASH has seen regular overcrowding. Each of these routes are typically running every 10-15 minutes, however, DASH has mostly addressed these overcrowding hotspots by assigning larger 40-foot and 60-foot buses to the busiest trips and adding several unscheduled trips designed to provide adequate capacity during these periods of heightened ridership demand.

Ridership Data Challenges. In addition to overcrowding, the change to free fares has also created several challenges for ridership data collection processes.

First, since DASH has not yet finished its project to install automated passenger counters (APC's) on all DASH buses, ridership data is still being collected manually by operators pressing a button for each passenger boarding. This method is not ideal as it means that bus operators need to count passengers in addition to their regular driving duties, which can be difficult with increased ridership and all-door boarding. DASH expects to complete the validation of its new APC equipment by mid-2023 and will no longer require manual ridership counts by operators.

Second, the removal of fares means that any ridership data that was previously collected via SmarTrip card taps is no longer available. This includes information on transfers (e.g. passengers who are transferring from other routes) and rider types (e.g. students, seniors/persons with disabilities). DASH is exploring other ways by which this information could be obtained but has not found any suitable methods to date.



6. Customer Feedback

The following section summarizes feedback that has been received from DASH customers through a recent customer survey and monthly complaint and commendations.

Customer Survey. DASH conducted an online customer survey during the months of July and August 2022. The survey included 15-20 questions and was available online in both English and Spanish. A total of 825 valid survey responses were received, including 749 current DASH riders.

The main purpose of the survey was to learn more about DASH riders, including their current ridership behaviors, any changes to their ridership behavior since the launch of the fare-free New DASH Network, and any specific reasons behind those changes. One of the biggest questions that the survey sought to answer was -- if customers are riding more since the fare and service changes in September 2021, what factors are contributing most to that trend?

Some of the key findings from this survey are outlined below:

- **As shown in Figure 6-1, 71% of riders surveyed indicated that they are riding DASH more now than they had before September 2021 because it is free to ride.** Among lower-income riders (Annual Household Income < \$50,000), more than 80% indicated that they are riding more often due to free fares, which suggests the program is achieving its goal of benefitting low-income households.
- When asked about their decision to use DASH more often, 40% of respondents cited “increased frequency” as the “most important” factor, while 35% identified “free fares” as most important. Additional factors are shown in Figure 6-2 (*Note that respondents were not limited to identifying one “most” important factor so some respondents may have selected both factors as the “most important”*).
- 22% of current DASH riders are *new* customers who have started riding DASH since the introduction of free fares and the New DASH Network in September 2021. Among these new riders, over half (52%) rated “increased frequency” as a “most important” factor. Free fares were the second-highest percentage with 44% of new respondents indicating that they were a “most important” factor.
- 37% of riders indicated that they are riding “much more often” now than before free fares. Among riders reporting under \$20,000 in annual household income, more than 50% reported that they were riding “much more often.”

Over 80% of low-income riders reported that they are riding DASH more now than before because it is free.

- 35% of current riders agreed with the statement that their bus is “sometimes too crowded because it is free to ride,” while 47% of respondents disagreed.
- 30% of respondents agreed with the statement that “Free fares have had a negative impact on my feelings of comfort and/or safety while riding DASH”, while 51% disagreed.
- 67% of customers indicated that free fares have improved their perception of DASH.

Additional comments received by survey respondents related to free fares are shown below:

- “Free buses have changed my life! I am so portable again! I can go anywhere I want again and as much as I want.”
- “Thanks for having the courage to rework the routes to serve more passengers and test fare-free network. Proud that Alexandria is taking the lead on forward-thinking public transit!”
- “(I) strongly support the decision to make dash free, it's great for the community!”
- “We love the DASH buses! Please keep them around and free!”
- “(I am a) big supporter of free fares. Makes bus system very easy to use, especially for visitors.”
- “Thank you for offering the rides for free. This is helping a lot of low-income families.”

“Free fares are a lifesaver... It is helping those that are very much in need right now.”



-Courtney, DASH Rider (Line 32)

Figure 6-1
Customer Survey Responses to Fare Free Questions

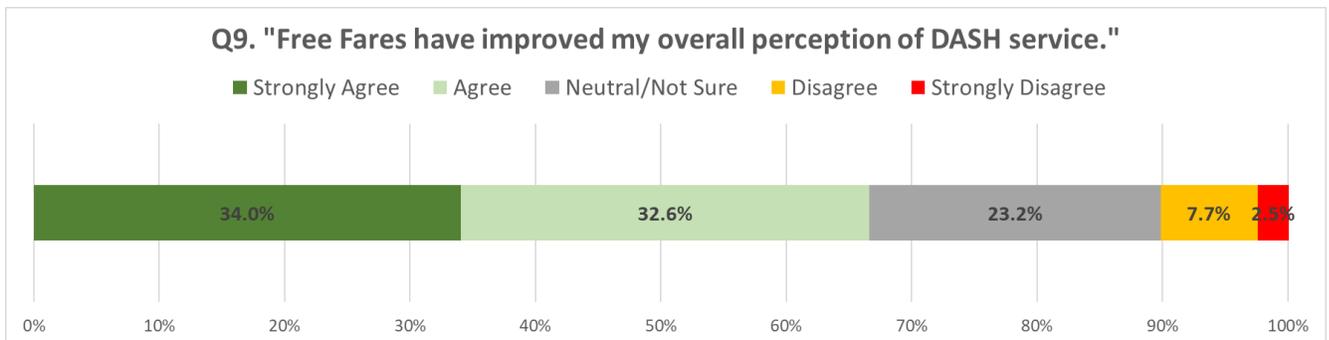
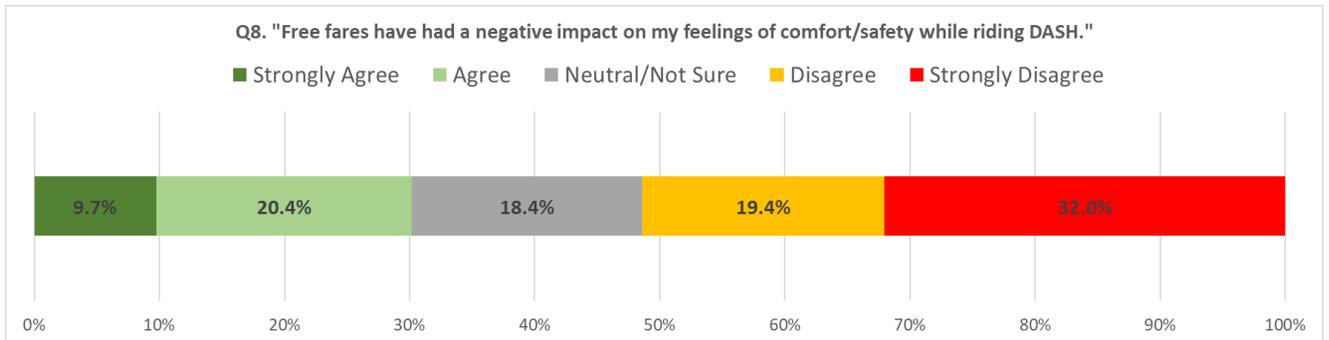
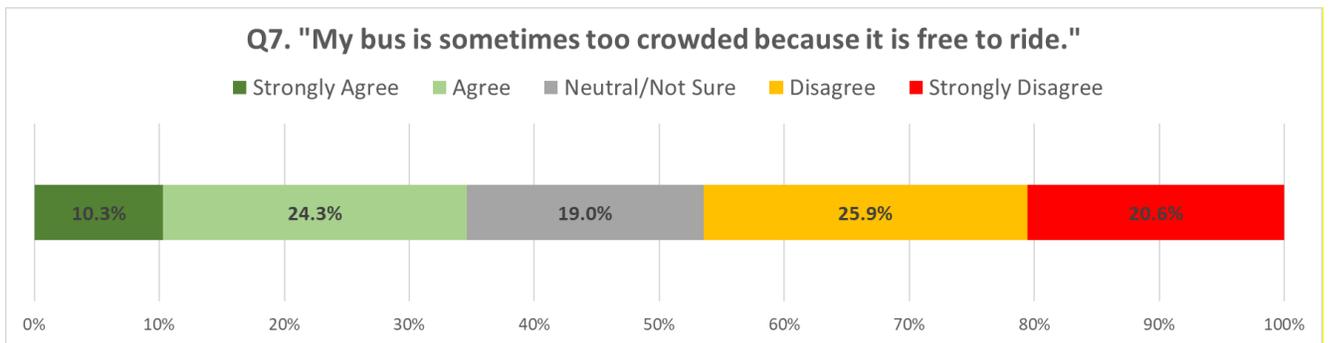
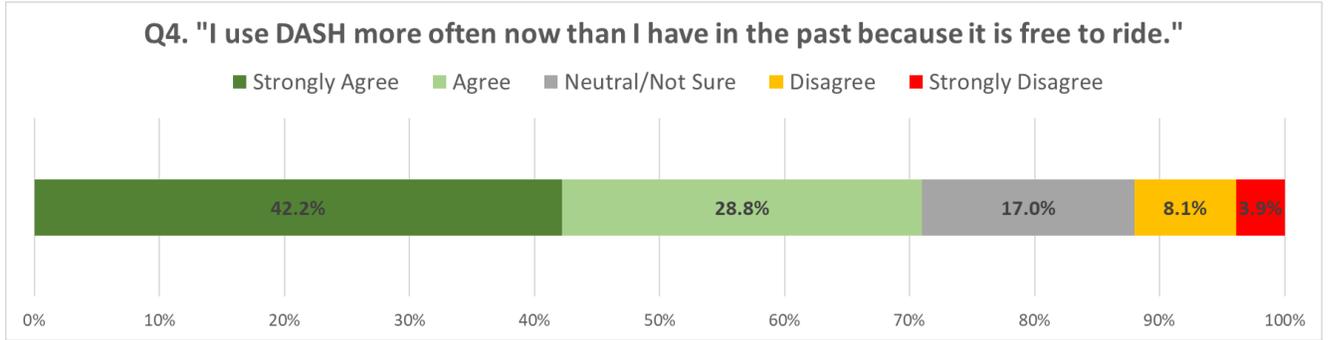
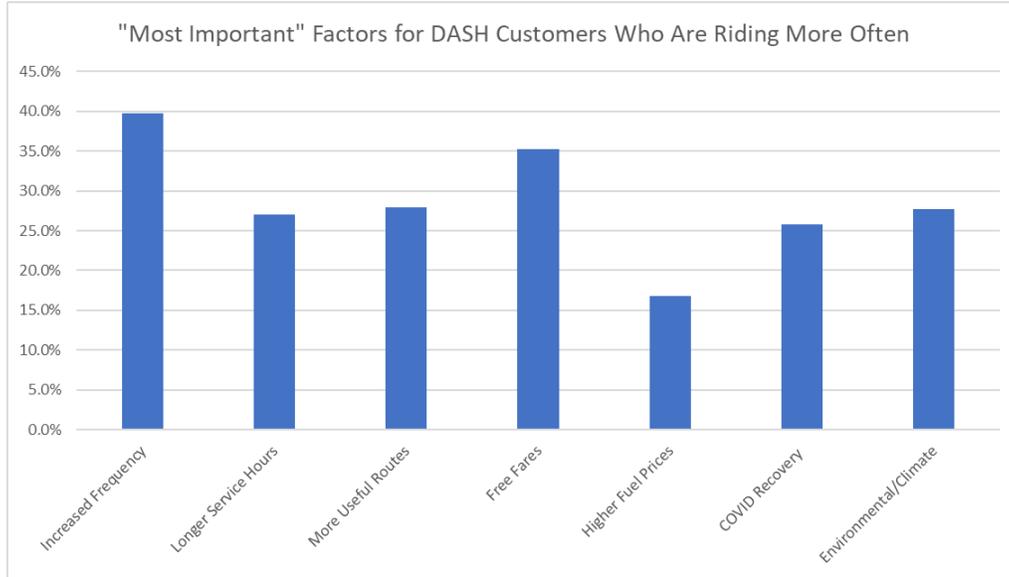
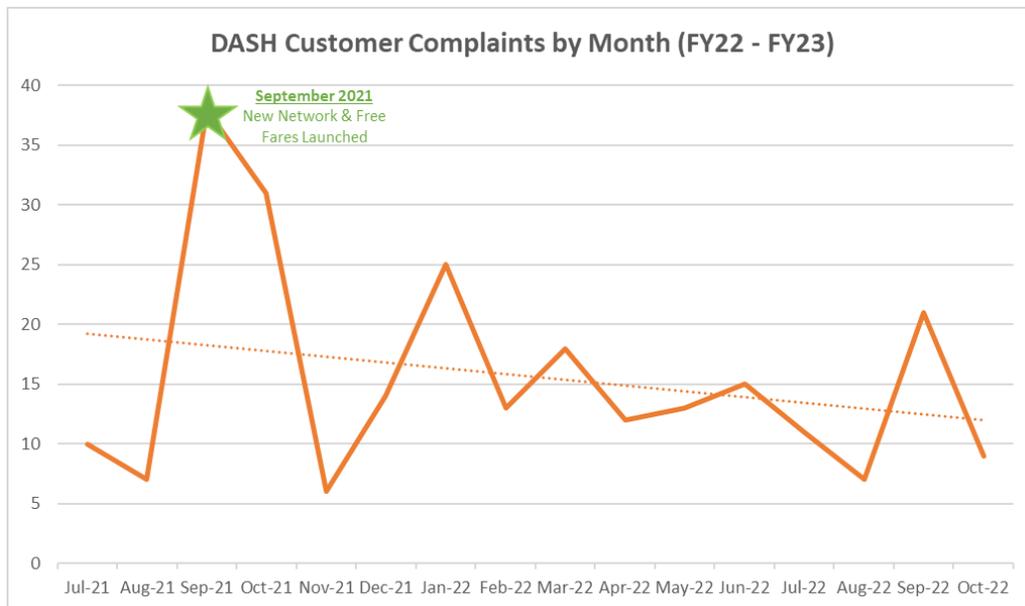


Figure 6-2
Customer Survey Responses to “Most Important” Factors for Increased DASH Usage



Customer Complaints. In addition to this survey, DASH also tracks the number and types of complaints that it receives from customers monthly. As shown in Figure 6-3, DASH saw a brief increase in customer complaints in the first two months of the fare-free New DASH Network, however, these were mostly due to expected confusion about the new routes and likely not due to any negative aspects of the free fare program.

Figure 6-3
Total DASH Complaints by Month (2021-2022)



7. Employee Feedback

Staff has collected feedback from various departments over the last year to better understand the impact of the free fare program on frontline employees. This feedback has been collected through informal discussions and interviews, and a series of operator satisfaction surveys that were collected prior to the free fare program implementation and six months after fares were eliminated. The feedback has been largely positive but has shed light on some of the challenges resulting from free fares, including customer interactions, feelings of safety/security, ridership data collection and overall job satisfaction.

Operator surveys were conducted during the summer of 2021 and the spring of 2022 to quantify any significant changes in operator sentiments that might be related to the introduction of free fares in September 2021. A summary of the operator responses to several questions that are relevant to free fares are included below:

Table 7-1 / Selected Feedback from 2021-2022 DASH Operator Surveys

Survey Statement (Agree/Disagree)	Fall 2021 (Pre-Implementation)		Spring 2022 (Post-Implementation)		Net Change (+/-)	
	Agree	Disagree	Agree	Disagree	Agree	Disagree
2. I feel safe in DASH buses.	84%	6%	85%	3%	1%	-3%
3. Most interactions with customers are positive.	94%	2%	89%	1%	-5%	-1%
4. DASH provides the support I need to do a good job.	81%	2%	92%	1%	11%	-1%
8. I am not overly anxious when driving my route.	59%	12%	61%	12%	2%	0%
9. I believe management has my back.	75%	8%	78%	4%	3%	-4%
10. I am generally satisfied at DASH.	89%	2%	93%	0%	4%	-2%

Operator Satisfaction. As shown in Table 7-1, operator satisfaction has remained high following the fare-free implementation with 93 % of operators indicating that they are satisfied with the overall working environment at DASH. The percentage of operators who indicated that they feel safe on DASH buses rose slightly from 84 % before free fares, to 85 % afterwards. Operators have also noted that the elimination of fares has made their job simpler in that they no longer must assist the customer with fare payment or worry about fare evaders.

Passenger Incidents. One less positive trend that has been identified by operators since the transition to free fares is a decrease in operator perceptions of customer interactions. Prior to the fare-free program, the DASH leadership team had identified passenger conflicts – particularly involving riders without a specific destination – as a potential challenge. As shown in Figure 7-1, the number of passenger incidents involving unruly, intoxicated, or disruptive passengers has increased in the months since free fares were introduced, however, Figure 7-2 shows the trend is less significant when normalized against ridership levels. In other words, there are more negative driver-passenger interactions, however, attributable to the corresponding increase in DASH ridership.

Figure 7-1
DASH Passenger Incidents by Month (2021 – 2022)

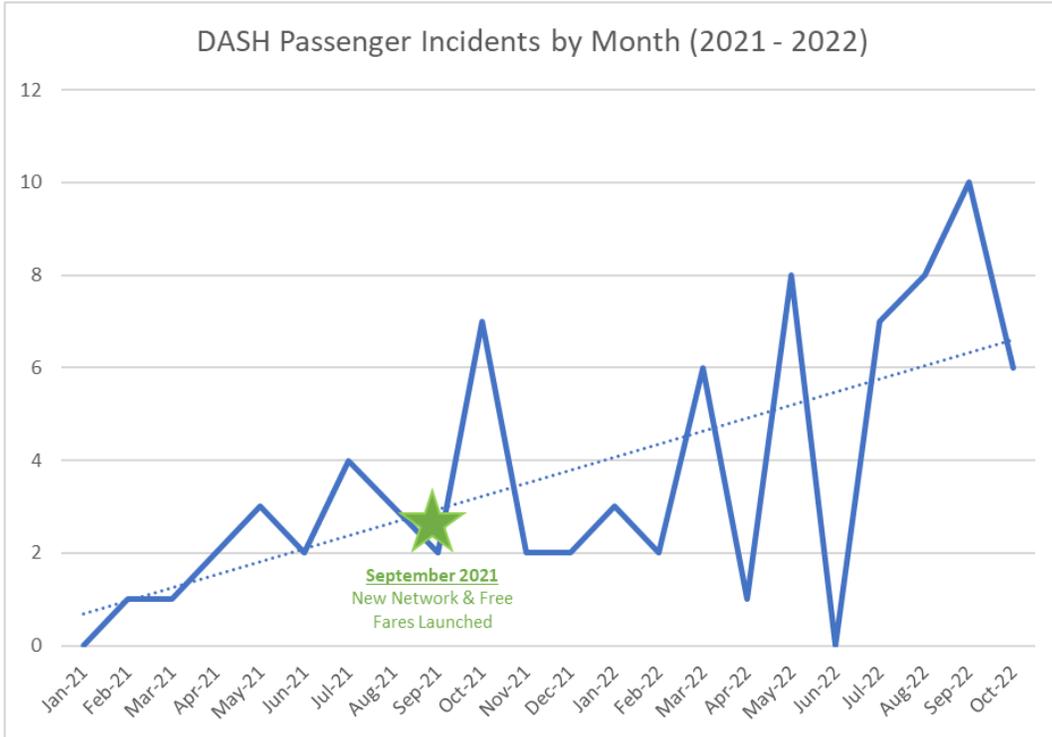
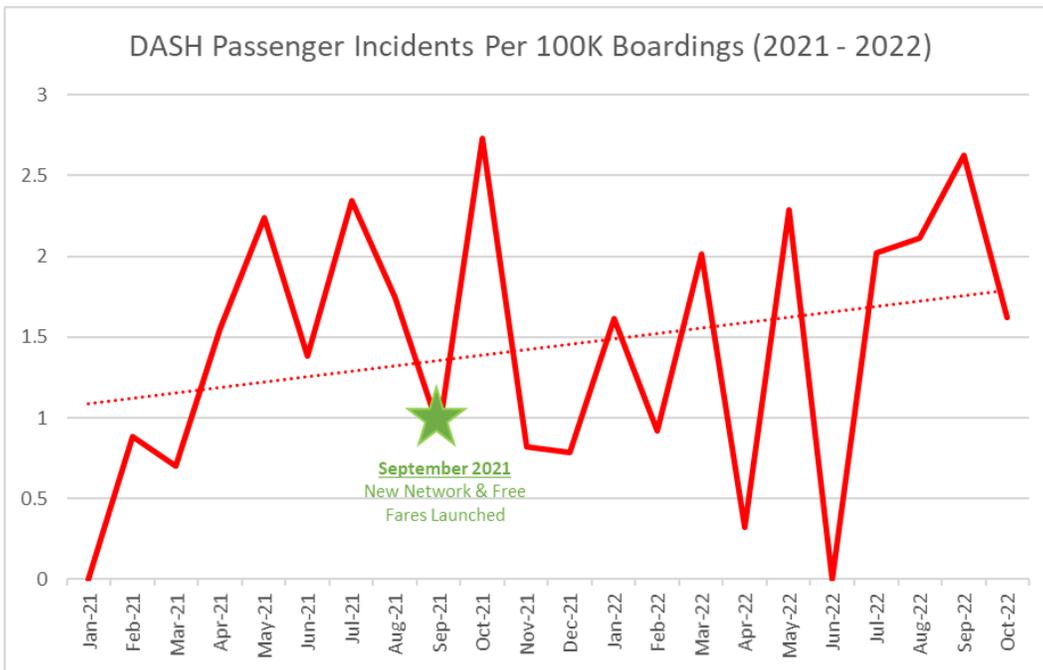


Figure 7-2
DASH Passenger Incidents Per 100,000 Boardings (2021 – 2022)



The DASH Training Department has provided – and continues to provide – specific guidance and best practices to operator on how to handle these situations with difficult passengers, including those without destinations who may be unhoused. The DASH training program is being revised for next year based on specific observations and lessons learned. The increase in negative passenger incidents is an issue that DASH continues to monitor, however, staff believes that the problem has not materialized as much as it has in other fare-free locales, and the overall percentage of DASH operator perceptions of customer engagement remains high with 89% of operators indicating that most customer interactions are positive.

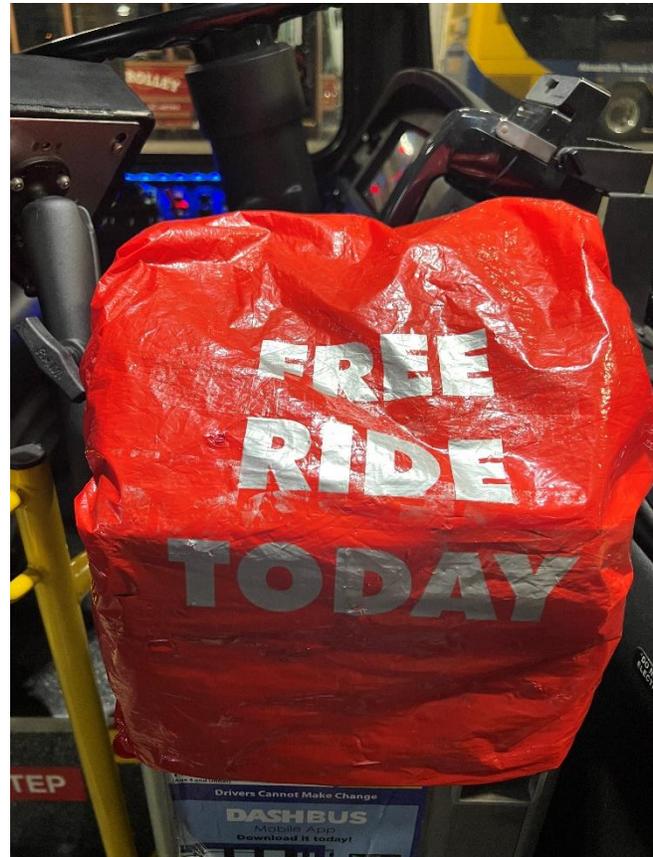
Lastly, as noted in the previous “Ridership” section, operators are currently required to manually count ridership data by pressing a button on the farebox for each boarding. Operators have indicated that this can be a challenge with all their other responsibilities and are looking forward to the discontinuation of this with the implementation of APC’s.



8. Financial Impacts

This section summarizes the budgetary impacts of the fare-free program during FY 2022. This includes foregone passenger revenues and cost savings resulting from the elimination of fares. In addition to securing significant amounts of grant funding to offset lost fare revenues, DASH has also identified several areas of cost savings and expects that additional savings will be realized with the pending removal of fareboxes from all DASH buses.

The most significant financial impact from free fares is the loss of passenger revenues, which has traditionally been the single largest revenue source for DASH. In a typical pre-COVID year, DASH would collect approximately \$4 million in passenger fares, however, that amount had decreased by more than half during the height of the pandemic. With the rapid return of ridership in FY 2022, DASH estimates that it might have collected an additional \$3.5-4.0 million in revenues if the regular \$2.00 fare had been collected. Lost revenue was offset by a \$1.5 million increase in the DASH subsidy from the City of Alexandria in FY 2022, and an additional \$2.6 million in grant funding from the new TRIP state grant program. Additional information on the DRPT Transit Ridership Incentive Program (TRIP) can be found at the DRPT website (<https://www.drpt.virginia.gov/ongoing-grant-programs/trip/>).



Additional operating costs savings in FY 2022 were realized with the discontinuation of a \$50,000 contract for cash collection services (e.g. Brinks truck pickups) the discontinuation of the DASH Bus app for mobile ticketing (\$8,000), and a re-allocation of maintenance labor resources required for farebox maintenance. Staff expects that maintenance costs will further decrease once the farebox equipment is completely removed from all buses and DASH will no longer be required to contribute \$65,000 per year as part of the Regional SmarTrip budget agreement. DASH also recently transitioned to all-door boarding which could result in further savings from faster and more efficient operations.

Finally, the elimination of fares has also allowed DASH and the City of Alexandria to avoid major capital costs required to upgrade the 20+ year old farebox systems on all buses that are years beyond their useful life and will no longer be supported. **The purchase and installation of new farebox equipment on all DASH buses would be required to collect passenger fares and is estimated to cost upwards of \$5 million. Additionally, if DASH were to resume fare collection prior to FY 2026, the total state grand award (\$7.2 million) would need to be returned.**

9. Conclusion

Based on the preceding sections, the fare-free program can be considered a major success story. The primary goals of the fare-free program are to reduce cost-related barriers to transit usage, especially for low-income riders, and to increase DASH ridership by drawing new customers and encouraging existing customer to ride DASH more frequently. Other goals include reducing costs associated with fare collection, promoting awareness of the New DASH Network, and improving bus speeds and reliability by decreasing dwell times at bus stops.

In terms of ridership, the program appears to be an overwhelming success. DASH has seen historic ridership growth in the program's first year and has far surpassed pre-COVID ridership levels while most peer agencies are still well below that benchmark. Customer survey data and detailed ridership analyses show that low-income riders are benefitting the most from this program and are riding more as a result, which is consistent with the goals of the program.

Operator feedback has been largely positive with overall satisfaction rising to 93% following program implementation. Frontline staff have noted a relatively minor increase in the number of passenger incidents involving unruly, intoxicated, or disruptive passengers. This is a trend that DASH leadership will continue to monitor and work with frontline employees to address.

Finally, the budgetary impact from the first year of free fares has been largely offset by subsidy increases and state grant funding, while DASH continues to identify additional savings in capital and operating expenses.

