# 2022/23 – Q3 Performance Measures Report HALIFAX TRANSIT

## **Contents**

| COVID-19 Pandemic Data Impacts                         | 3  |
|--|----|
| Conventional Bus Boardings During Pandemic             | 3  |
| Ferry Boardings During Pandemic                        | 4  |
| Access-A-Bus Boardings During Pandemic                 | 4  |
| Boardings & Revenue                                    | 5  |
| Historical Boardings & Revenue                         | 5  |
| Revenue – Actual vs. Planned                           | 8  |
| Loss of Service  | 10 |
| Mean Distance Between Failures                         | 11 |
| Mean Distance Between Service Calls                    | 12 |
| Bus Maintenance Cost – Quarter Average vs Budget       | 13 |
| Diesel Fuel Price – Annual Average vs Budget           | 14 |
| Access-A-Bus Trip Details                              | 15 |
| Customer Service – All Services                        | 17 |
| Service Utilization                                    | 19 |
| Boardings  | 19 |
| Average Daily Boardings by Service Day                 | 19 |
| Boardings by District                                  | 20 |
| Weekday Boardings by District – All Day                | 20 |
| Weekday Boardings by District – AM Peak Period         | 21 |
| Passengers per Hour                                    | 22 |
| Boardings & Passengers per Hour                        | 22 |
| Passengers per Hour by Route                           | 24 |
| Express Service Peak Boardings and Passengers per Trip | 25 |
| Express Service Peak Passengers per Trip by Route      | 26 |
| Regional Express Peak Passengers per Trip by Route     | 27 |
| Ferry Passengers per Hour                              | 27 |
| Passenger Overloads                                    | 28 |
| Passenger Overloads by Route                           | 28 |
| Passenger Overloads by Quarter                         | 28 |
| On-Time Performance                                    | 29 |
| Overall Network On-Time Performance                    | 29 |

| Weekday On-Time Performance             | 30 |
|---|----|
| Weekday Peak Period On-Time Performance | 32 |
| Express Service On-Time Performance     | 34 |



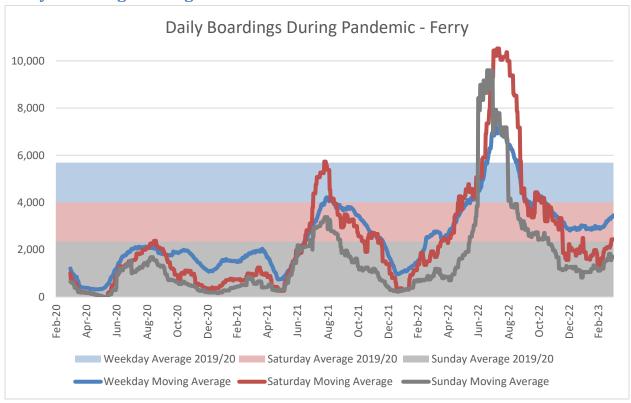
## **COVID-19 Pandemic Data Impacts**

Ridership levels have continued to rebound from the impacts of the COVID-19 pandemic. The following graphs show the 30 day moving averages for boardings on the different service types, compared with the average daily boarding figures from before Covid impacts in 2019/20.

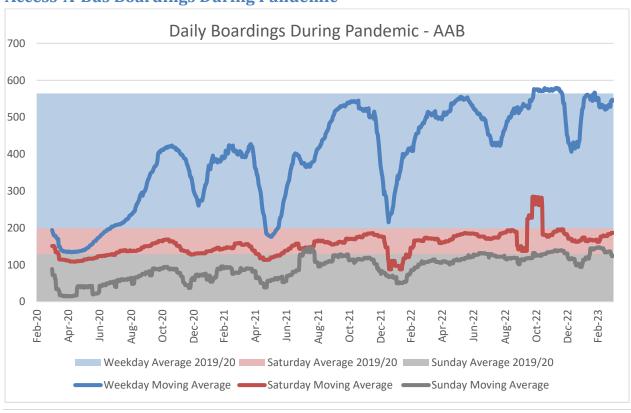
## **Conventional Bus Boardings During Pandemic**



## **Ferry Boardings During Pandemic**



## **Access-A-Bus Boardings During Pandemic**

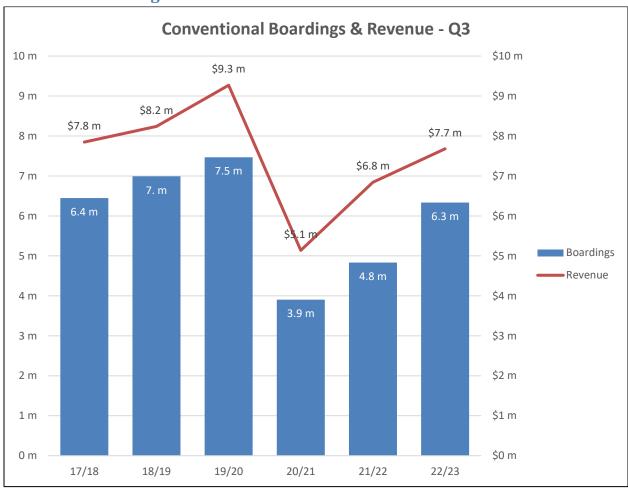


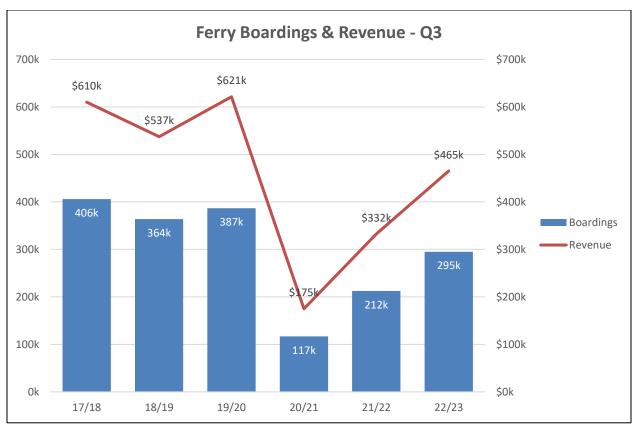
## **Boardings & Revenue**

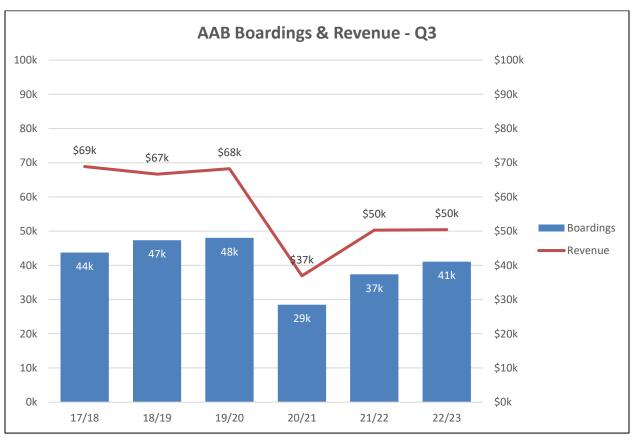
Revenue and boardings are reported to demonstrate how well transit services were used over the quarter, in comparison to the same quarter the previous year.

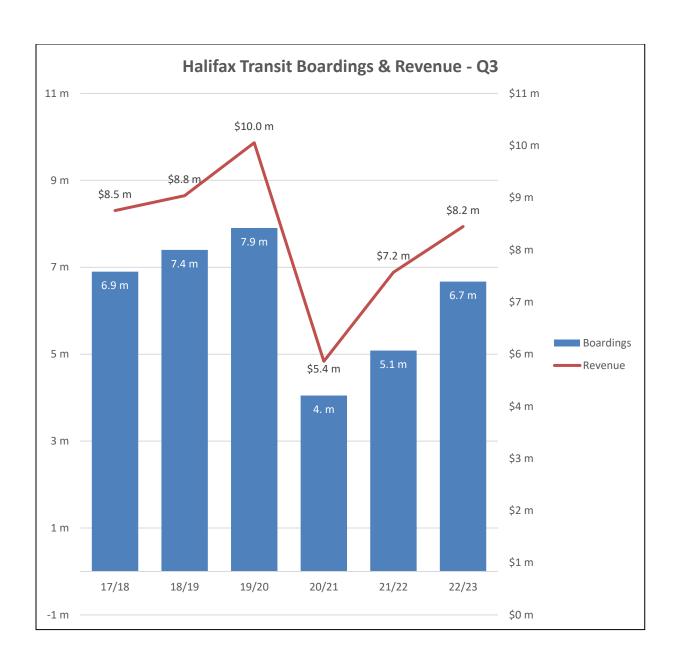
Recovery from the COVID-19 pandemic continued through the third quarter this year. Conventional boardings increased 31% from this quarter last year, Ferry boardings increased 39% and Access-A-Bus boardings increased 10%. Overall, system wide boardings increased this quarter by 31% compared to last year, which is still 16% lower than third quarter 2019/20. Overall revenue this quarter increased 13% from last year, but remains 18% lower than third quarter 2019/20.

#### **Historical Boardings & Revenue**



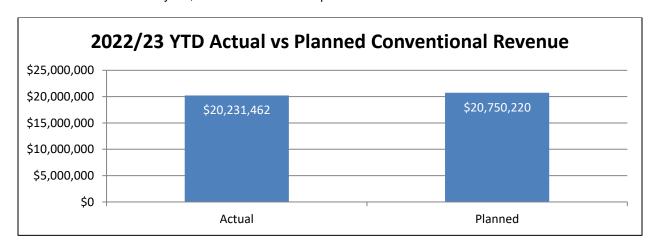


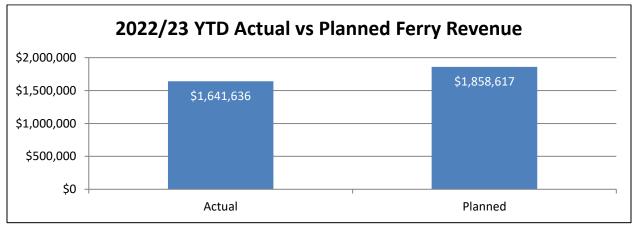


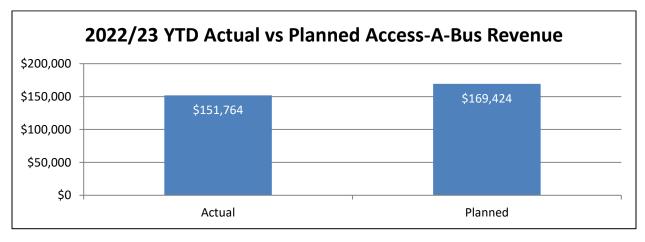


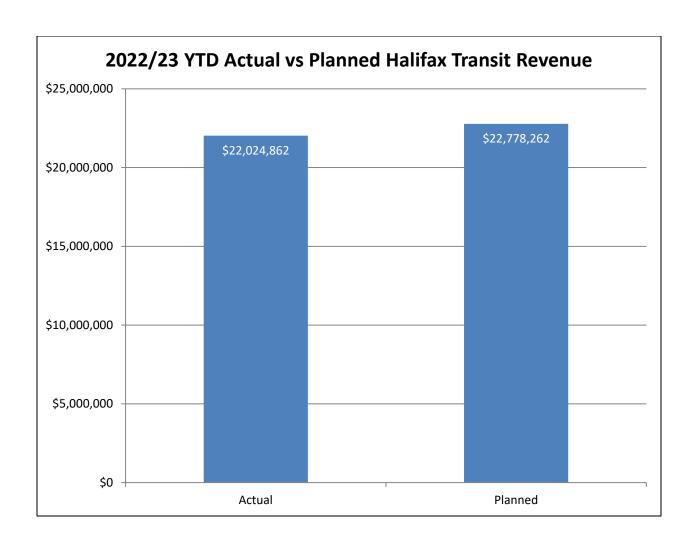
#### Revenue - Actual vs. Planned

The following charts provide an indication of how much revenue has been generated by each service type and by Halifax Transit overall in comparison to the planned budget revenue. As of the end of the third quarter conventional revenue has increased 23% over last year and is 2.5% below the planned amount. Ferry revenue has increased 54% and is 12% below the planned amount. Access-A-Bus revenue this year increased 19% over last year and is 10% below the planned amount. Overall revenue this year has increased 25% over last year, and is 3% below the planned amount.





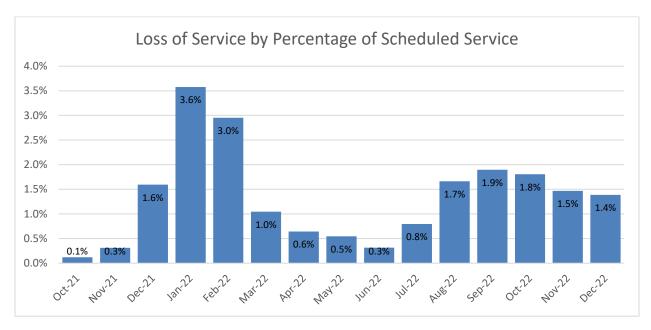




#### **Loss of Service**

Loss of service represents the total number of scheduled bus service hours that were not completed.

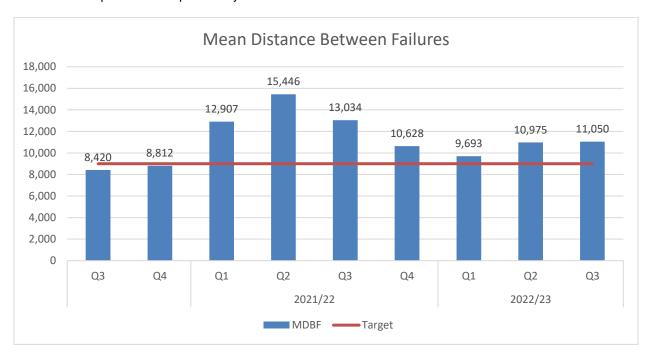
In the third quarter, the total loss of service was 3,273 hours, which is 1.6% of the quarterly revenue hours. The table below shows the total loss of service for each month.



#### Mean Distance Between Failures

Halifax Transit's Mean Distance Between Failures (MDBF) is the distance in kilometres covered between failures. CUTA references the Federal Transit Administration's definition of failures which states that there are two classes of failures. The first being major mechanical system failures, which is the "failure of some mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns." The second type is other mechanical system failures which is the "failure of some other mechanical element of the revenue vehicle that, because of local agency policy, prevents the revenue vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip even though the vehicle is physically able to continue in revenue service". Therefore, the MDBF is equal to the number of instances whereby a failure resulted in a change-off of the bus or service being lost. This metric does not consider failures resulting from passenger-related events (i.e. sickness on the bus), farebox defects or accident damages as they do not impede the scheduled revenue trips, which aligns with other transit authorities surveyed.

For the third quarter of 2022/23, the MDBF for conventional transit was 11,050 kms. This is a ~1% increase from the third quarter of the previous year.



#### **Mean Distance Between Service Calls**

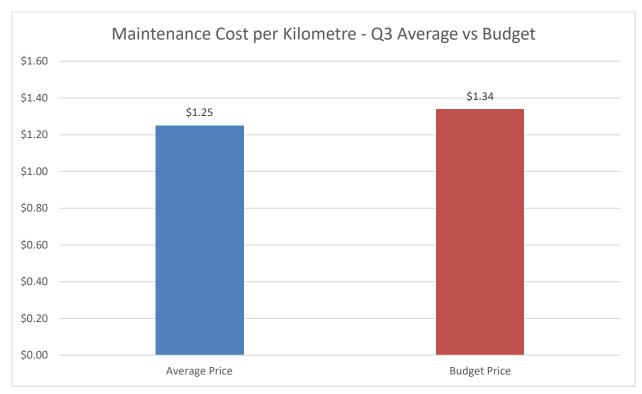
Mean Distance Between Service Calls (MDBS) reflects the average distance in kilometres covered between maintenance service calls. This metric includes all instances of service calls, including issues with secondary equipment, passenger-related events and damages to the bus resulting from minor accidents.

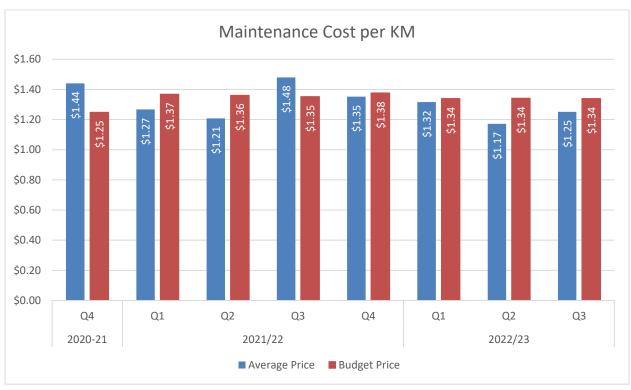
For the third quarter of 2022/23, the MDBS for conventional transit was 5,818 kms. In comparison to the third quarter of 2021/22 (6,132), this is a decrease of 5%. The MDBS for Access-A-Bus service was 172,672 kms, a 339% increase from the previous year.



## **Bus Maintenance Cost - Quarter Average vs Budget**

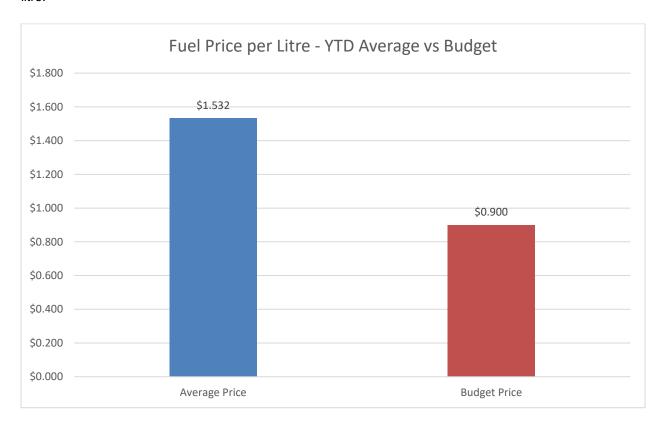
In the third quarter, bus maintenance costs were \$1.25/km, while the budgeted maintenance cost was \$1.34/km.





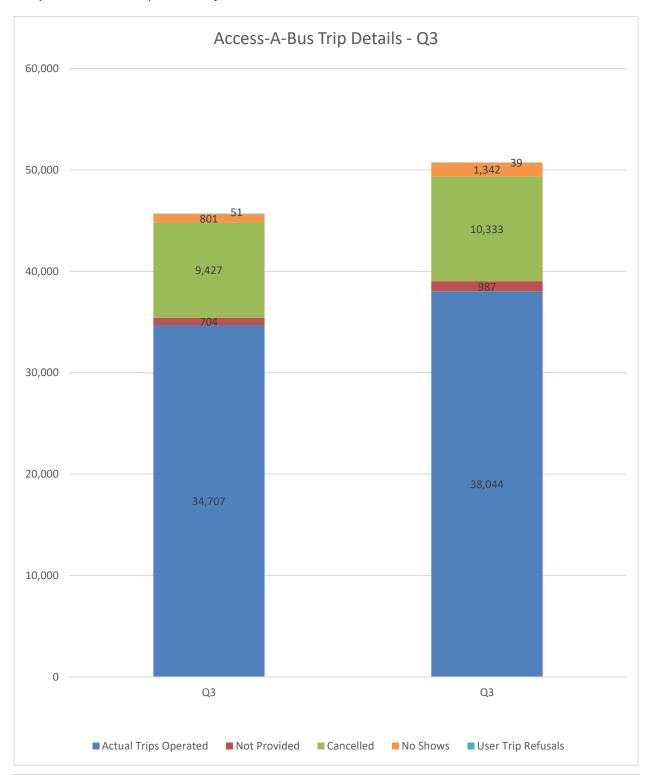
## Diesel Fuel Price - Annual Average vs Budget

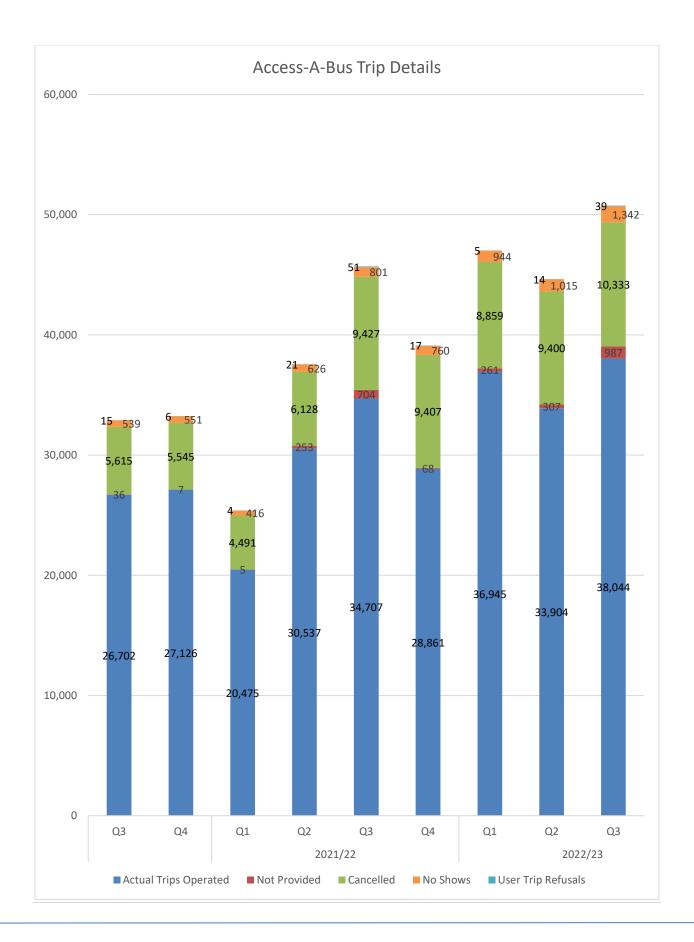
The budgeted diesel fuel price for 2022/23 was set at 90 cents/litre. The average diesel fuel price for 2022/23 as of the end the third quarter was \$1.723 per litre, 63 cents higher than the budgeted price per litre.



## **Access-A-Bus Trip Details**

Access-A-Bus trip details are tracked monthly to provide an indication of efficiency in Access-A-Bus usage and booking. In the third quarter of 2022/23 a total of 38,044 trips were operated, an increase of 10% compared to the third quarter last year.



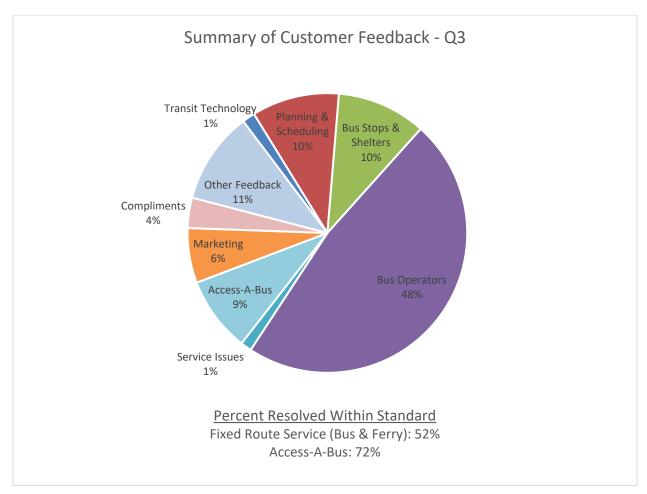


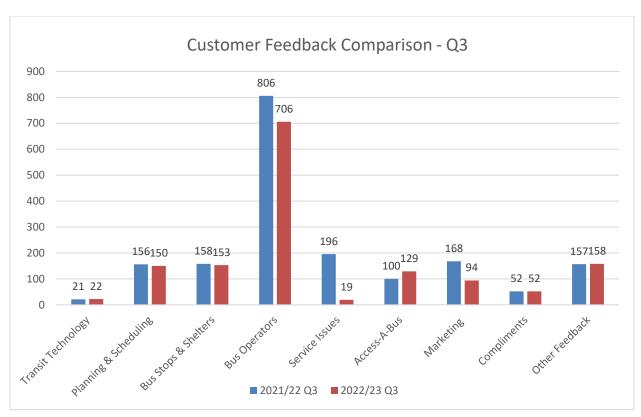
#### **Customer Service - All Services**

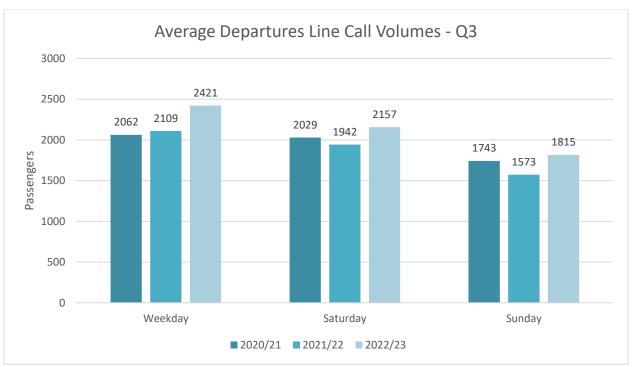
Customer service statistics are measured monthly using the Cityworks Customer Relationship Management software. Feedback is first categorized by subject matter and then divided into two categories: feedback resolved within service standard and feedback resolved outside service standard. The service standard varies depending on the subject matter.

In the third quarter, 48% of feedback received was related to Bus Operators. The remaining 52% is comprised of feedback regarding service issues, planning and scheduling, bus stops and shelters, marketing, compliments and other miscellaneous comments. Halifax Transit aims to address 90% of feedback within service standard. This quarter, 52% of customer feedback was resolved within standard. This drop was anticipated due to staffing challenges, as well as the transition from the Hansen platform to Cityworks. Staff have developed and implemented a plan to address staffing challenges, and have made adjustments to the Cityworks platform to increase efficiency and processing time for service inquiries. These measures are expected to be completed in the coming days, and will bring the response time back within the service standard by February, 2023.

Call volumes to the Departures Line (902-480-8000) are displayed by day of the week.





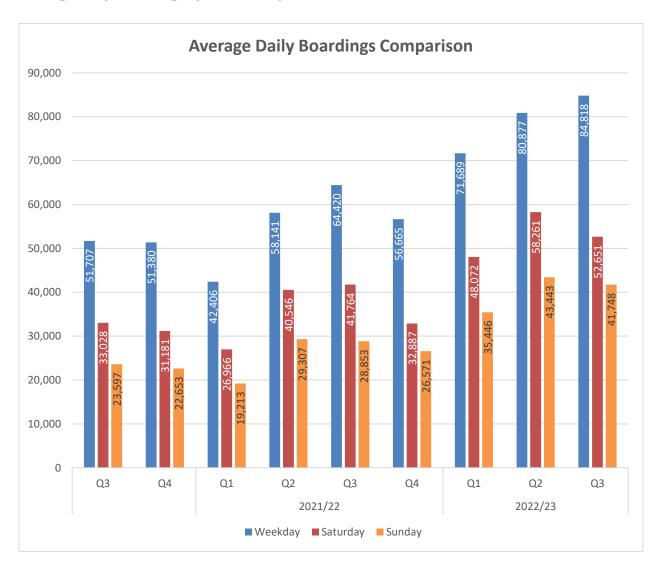


#### **Service Utilization**

## **Boardings**

Average weekday boardings in the third quarter were  $84,818 \pm 10,078$  (12% variance). Average Saturday boardings this quarter were  $52,651 \pm 7,960$  (15% variance). Average Sunday boardings this quarter were  $41,748 \pm 2,046$  (5% variance).

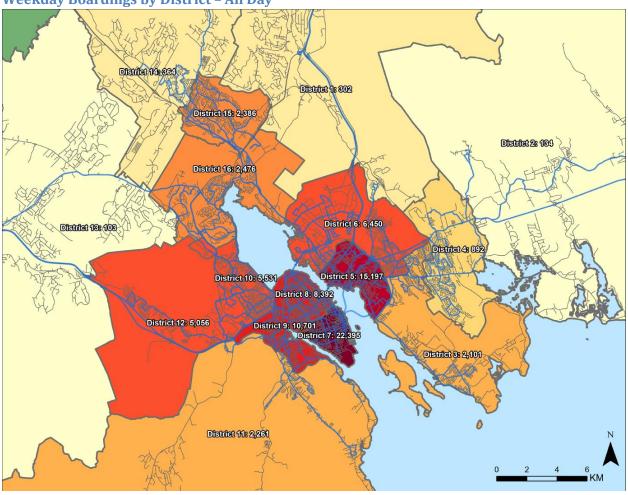
#### **Average Daily Boardings by Service Day**



#### **Boardings by District**

To assist in visualizing where ridership demands exist, boardings have been mapped by district. The all-day boardings map illustrates typical boardings over an entire service day, whereas the AM Peak Period map represents boardings during the morning peak period only and therefore generally illustrates passenger origins.





# Weekday Boardings by District - AM Peak Period DISTRICT 1/2: 107 District 1: 59 District 15: 788 District 2: 64 District 16: 698 District 6: 1,530 District 18k 90 District 4: 316 District 5: 3,539 District 10: 1,642 District 8: 1,840 District 12: 1,050 District 9: 1,982 District 7: 2,329 District 3: 547 District 11: 568

#### **Passengers per Hour**

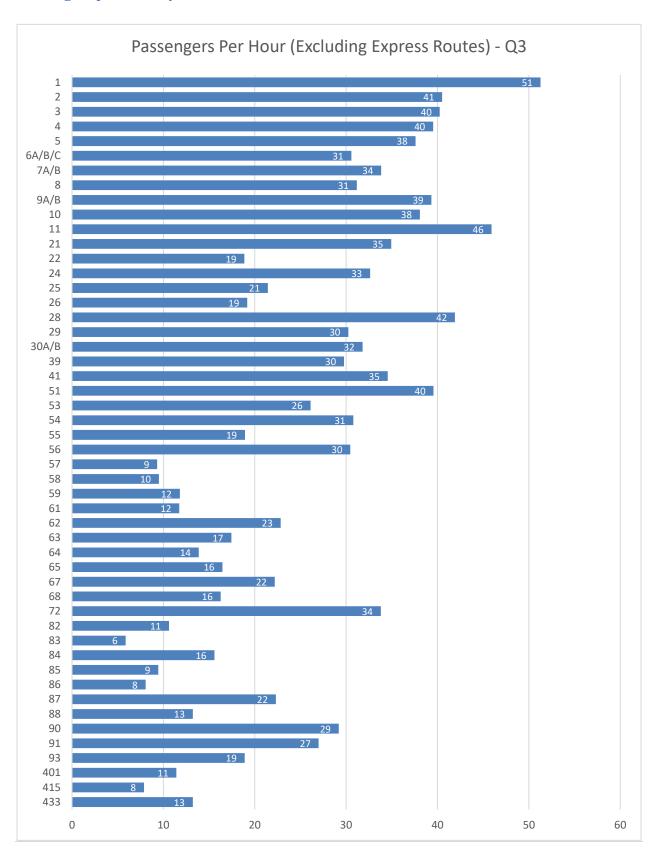
Passengers per hour measures the volume of passengers carried per service hour by route. Due to differences in service model/design, Express Routes are measured instead by passengers per trip. Ridership fluctuates significantly by season and therefore figures are compared to the same quarter in the previous year. Conventional route targets vary by time of day and are not illustrated at this time as data is being presented over the entire service day only. Express routes have a ridership target of 20 passengers per trip, while Regional Express Routes have a target of 15 passengers per trip. Significant service changes were implemented on November 22, 2021, former routes are listed for comparison from Q3 2021/22.

**Boardings & Passengers per Hour** 

| Q3 Comparison - Average Daily Boardings by Route |           |         |           |         |           |          |           |         |           |         |           |         |  |
|--|-----------|---------|-----------|---------|-----------|----------|-----------|---------|-----------|---------|-----------|---------|--|
| Weekday  |           |         | kday      | y       |           | Saturday |           |         |           | Sunday  |           |         |  |
| Route  | 2021/22   |         | 2022/23   |         | 2021/22   |          | 2022/23   |         | 2021/22   |         | 2022/23   |         |  |
|  | Boardings | Pass/Hr | Boardings | Pass/Hr | Boardings | Pass/Hr  | Boardings | Pass/Hr | Boardings | Pass/Hr | Boardings | Pass/Hr |  |
| 1  | 6,305     | 40      | 8,054     | 51      | 5,025     | 44       | 5,866     | 52      | 3,130     | 37      | 3,802     | 44      |  |
| 2  | 3,511     | 32      | 4,476     | 41      | 3,287     | 33       | 4,094     | 41      | 1,879     | 27      | 2,733     | 39      |  |
| 3  | 4,881     | 32      | 6,102     | 40      | 2,673     | 32       | 3,222     | 38      | 2,641     | 28      | 3,358     | 35      |  |
| 4  | 3,852     | 30      | 5,177     | 40      | 1,704     | 34       | 1,993     | 41      | 1,384     | 30      | 1,825     | 40      |  |
| 5  | 2,436     | 26      | 3,437     | 38      | 1,981     | 29       | 2,450     | 35      | 1,025     | 25      | 1,651     | 38      |  |
| 6A/B/C   | 1,922     | 20      | 2,781     | 31      | 1,107     | 25       | 1,510     | 33      | 749       | 18      | 1,154     | 27      |  |
| Former 60  | 1,849     | 24      |           |         | 1,305     | 32       |           |         | 919       | 33      |           |         |  |
| Former 63  | 557       | 34      |           |         |           |          |           |         |           |         |           |         |  |
| Former 7   | 3,866     | 34      |           |         | 2,553     | 27       |           |         | 1,395     | 26      |           |         |  |
| 7A/B   | 3,016     | 22      | 4,639     | 34      | 2,307     | 23       | 2,944     | 29      | 1,260     | 18      | 1,876     | 27      |  |
| 8  | 2,930     | 21      | 3,927     | 31      | 2,289     | 21       | 2,947     | 30      | 1,671     | 15      | 3,783     | 41      |  |
| 9A/B   | 4,734     | 28      | 5,993     | 39      | 2,675     | 37       | 3,248     | 50      | 1,960     | 27      | 2,752     | 45      |  |
| 10   | 3,447     | 32      | 4,030     | 38      | 2,386     | 33       | 2,649     | 36      | 1,435     | 29      | 1,901     | 39      |  |
| 11   | 68        | 30      | 50        | 46      |           |          |           |         |           |         |           |         |  |
| Former 14  | 1,046     | 31      |           |         | 689       | 31       |           |         | 444       | 24      |           |         |  |
| 21   | 789       | 26      | 1,022     | 35      | 717       | 20       | 927       | 27      | 402       | 21      | 665       | 37      |  |
| 22   | 475       | 15      | 617       | 19      | 357       | 10       | 443       | 13      | 264       | 8       | 405       | 12      |  |
| 24   | 1,083     | 20      | 1,826     | 33      | 1,223     | 22       | 1,812     | 32      | 780       | 15      | 1,437     | 27      |  |
| 25   | 305       | 14      | 452       | 21      | 183       | 12       | 283       | 19      | 142       | 12      | 258       | 19      |  |
| Former 5   | 87        | 24      |           |         |           |          |           |         |           |         |           |         |  |
| 26   | 31        | 14      | 49        | 19      |           |          |           |         |           |         |           |         |  |
| 28   | 1,250     | 33      | 1,700     | 42      | 1,120     | 26       | 1,580     | 38      | 553       | 27      | 874       | 41      |  |
| 29   | 1,954     | 21      | 2,784     | 30      | 1,311     | 21       | 1,900     | 30      | 904       | 15      | 1,445     | 24      |  |
| 30A/B  | 693       | 19      | 1,125     | 32      | 459       | 13       | 716       | 20      | 293       | 16      | 510       | 24      |  |
| 30A  | 376       | 21      | 612       | 35      | 218       | 13       | 359       | 21      | 135       | 14      | 232       | 19      |  |
| 30B  | 317       | 18      | 513       | 29      | 242       | 14       | 357       | 20      | 159       | 18      | 279       | 31      |  |
| 39   | 959       | 22      | 1,317     | 30      | 875       | 18       | 1,060     | 21      | 354       | 17      | 514       | 24      |  |
| 41   | 903       | 27      | 1,179     | 35      |           |          |           |         |           |         |           |         |  |
| 51   | 694       | 29      | 987       | 40      | 406       | 26       | 540       | 34      | 206       | 17      | 300       | 20      |  |

| Q3 Comparison - Average Daily Boardings by Route |           |         |           |         |           |         |           |         |           |         |           |         |
|--|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| Weekday  |           |         |           |         | Saturday  |         |           |         | Sunday    |         |           |         |
| Route  | 2021/22   |         | 2022/23   |         | 2021/22   |         | 2022/23   |         | 2021/22   |         | 2022/23   |         |
|  | Boardings | Pass/Hr |
| Former 53  | 843       | 33      |           |         | 529       | 34      |           |         | 233       | 28      |           |         |
| 53   | 369       | 23      | 874       | 26      | 222       | 21      | 747       | 23      | 102       | 13      | 396       | 20      |
| 54   | 571       | 22      | 899       | 31      | 375       | 22      | 537       | 26      | 191       | 16      | 363       | 22      |
| 55   | 261       | 12      | 375       | 19      | 199       | 13      | 336       | 21      | 118       | 8       | 223       | 15      |
| 56   | 802       | 24      | 1,018     | 30      | 931       | 27      | 1,069     | 34      | 567       | 18      | 731       | 24      |
| Former 57  | 441       | 11      |           |         | 227       | 8       |           |         | 117       | 7       |           |         |
| 57   | 34        | 7       | 35        | 9       |           |         |           |         |           |         |           |         |
| Former 58  | 524       | 19      |           |         | 327       | 17      |           |         | 238       | 14      |           |         |
| 58   | 103       | 7       | 143       | 10      | 89        | 6       | 103       | 6       | 63        | 4       | 80        | 5       |
| Former 59  | 1,278     | 16      |           |         | 568       | 24      |           |         | 359       | 15      |           |         |
| 59   | 109       | 11      | 129       | 12      | 109       | 14      | 105       | 14      | 53        | 8       | 93        | 14      |
| Former 61  | 1,664     | 21      |           |         | 850       | 21      |           |         | 625       | 16      |           |         |
| 61   | 138       | 9       | 183       | 12      | 147       | 9       | 173       | 10      | 84        | 6       | 140       | 9       |
| Former 62  | 510       | 16      |           |         | 340       | 16      |           |         | 160       | 10      |           |         |
| 62   | 389       | 17      | 516       | 23      | 230       | 13      | 279       | 17      | 183       | 12      | 276       | 17      |
| 63   | 244       | 11      | 403       | 17      | 133       | 9       | 252       | 16      | 84        | 6       | 179       | 13      |
| 64   | 416       | 10      | 563       | 14      |           |         |           |         |           |         |           |         |
| 65   | 367       | 14      | 135       | 16      | 201       | 5       | 72        | 7       | 114       | 6       | 73        | 7       |
| Former 66  | 748       | 24      |           |         | 406       | 25      |           |         | 255       | 16      |           |         |
| 67   | 402       | 14      | 641       | 22      | 194       | 12      | 263       | 16      | 122       | 8       | 191       | 12      |
| Former 68  | 893       | 19      |           |         | 526       | 18      |           |         | 334       | 11      |           |         |
| 68   | 185       | 11      | 269       | 16      | 204       | 13      | 199       | 11      | 89        | 6       | 154       | 10      |
| 72   | 1,107     | 24      | 1,607     | 34      | 931       | 21      | 1,194     | 27      | 406       | 15      | 638       | 24      |
| 82   | 143       | 7       | 208       | 11      | 106       | 7       | 173       | 11      | 76        | 5       | 134       | 8       |
| 83   | 61        | 5       | 77        | 6       | 65        | 7       | 74        | 7       | 37        | 3       | 63        | 6       |
| 84   | 679       | 12      | 883       | 16      | 297       | 9       | 375       | 12      | 205       | 7       | 369       | 11      |
| 85   | 113       | 8       | 140       | 9       | 75        | 9       | 105       | 13      | 49        | 7       | 89        | 11      |
| 86   | 104       | 7       | 122       | 8       | 92        | 6       | 117       | 7       | 58        | 4       | 90        | 6       |
| 87   | 900       | 16      | 1,236     | 22      | 638       | 12      | 786       | 15      | 322       | 11      | 438       | 17      |
| 88   | 147       | 10      | 182       | 13      | 112       | 7       | 142       | 10      | 61        | 4       | 94        | 7       |
| 90   | 1,309     | 19      | 1,988     | 29      | 962       | 15      | 1,342     | 21      | 460       | 13      | 754       | 22      |
| 91   | 544       | 16      | 888       | 27      | 300       | 14      | 448       | 20      | 264       | 10      | 443       | 21      |
| 93   | 133       | 13      | 191       | 19      |           |         |           |         |           |         |           |         |
| 401  | 43        | 9       | 119       | 11      | 9         | 6       | 45        | 10      | 10        | 5       | 38        | 7       |
| 415  | 38        | 6       | 51        | 8       |           |         |           |         |           |         |           |         |
| 433  | 48        | 8       | 86        | 13      |           |         |           |         |           |         |           |         |
| Alderney   | 1,469     | 51      | 1,914     | 69      | 2,389     | 133     | 3,143     | 171     | 996       | 62      | 1,837     | 113     |
| Woodside   | 1,153     | 57      | 1,659     | 80      |           |         |           |         |           |         |           |         |

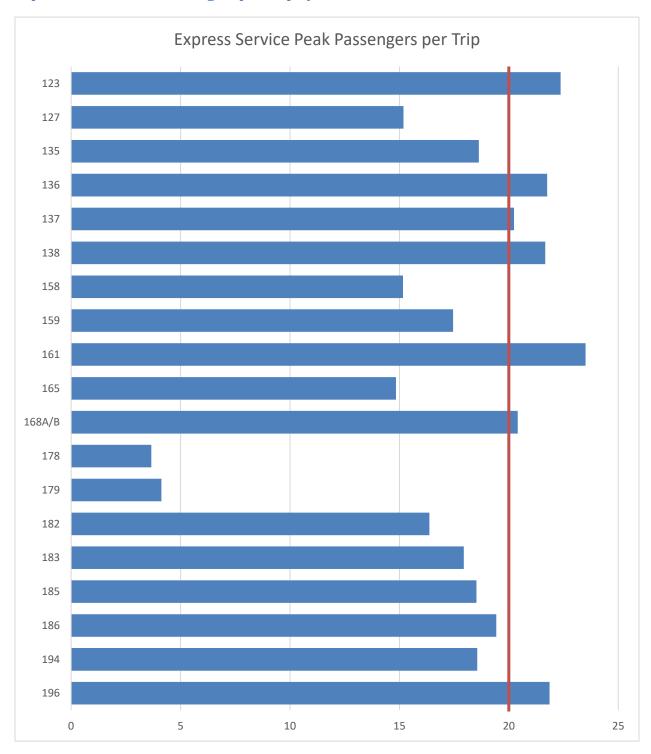
## Passengers per Hour by Route



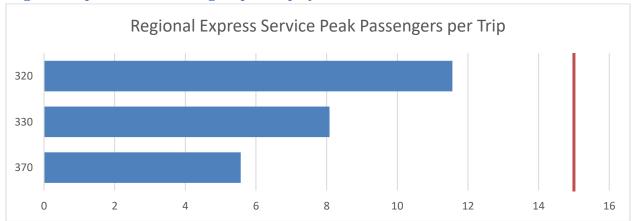
**Express Service Peak Boardings and Passengers per Trip** 

| Q3 Comparison - Average Daily Peak Boardings by Express Route |           |           |           |           |  |  |  |  |  |  |
|---|-----------|-----------|-----------|-----------|--|--|--|--|--|--|
|   | Weekday   |           |           |           |  |  |  |  |  |  |
|   | 202:      | 1/22      | 202       | 2/23      |  |  |  |  |  |  |
|   | Boardings | Pass/Trip | Boardings | Pass/Trip |  |  |  |  |  |  |
| 123   | 181       | 14        | 291       | 22        |  |  |  |  |  |  |
| 127   | 246       | 14        | 273       | 15        |  |  |  |  |  |  |
| 135   | 233       | 17        | 261       | 19        |  |  |  |  |  |  |
| 136   | 334       | 21        | 348       | 22        |  |  |  |  |  |  |
| 137   | 185       | 15        | 243       | 20        |  |  |  |  |  |  |
| 138   | 225       | 17        | 303       | 22        |  |  |  |  |  |  |
| 158   | 90        | 11        | 121       | 15        |  |  |  |  |  |  |
| Former 159  | 282       | 8         |           |           |  |  |  |  |  |  |
| 159   | 177       | 10        | 314       | 17        |  |  |  |  |  |  |
| 161   | 159       | 14        | 282       | 24        |  |  |  |  |  |  |
| 165   | 96        | 8         | 178       | 15        |  |  |  |  |  |  |
| 168A/B  | 336       | 8         | 510       | 20        |  |  |  |  |  |  |
| 178   | 30        | 4         | 33        | 4         |  |  |  |  |  |  |
| 179   | 19        | 2         | 33        | 4         |  |  |  |  |  |  |
| 182   | 280       | 11        | 458       | 16        |  |  |  |  |  |  |
| 183   | 168       | 13        | 233       | 18        |  |  |  |  |  |  |
| 185   | 323       | 13        | 482       | 19        |  |  |  |  |  |  |
| 186   | 152       | 14        | 233       | 19        |  |  |  |  |  |  |
| 194   | 87        | 7         | 148       | 19        |  |  |  |  |  |  |
| 196   | 53        | 13        | 87        | 22        |  |  |  |  |  |  |
| 320   | 99        | 8         | 301       | 12        |  |  |  |  |  |  |
| 330   | 128       | 5         | 218       | 8         |  |  |  |  |  |  |
| 370   | 67        | 6         | 78        | 6         |  |  |  |  |  |  |

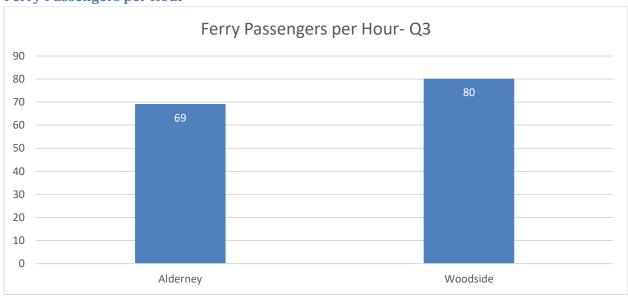
## **Express Service Peak Passengers per Trip by Route**



## Regional Express Peak Passengers per Trip by Route



## Ferry Passengers per Hour

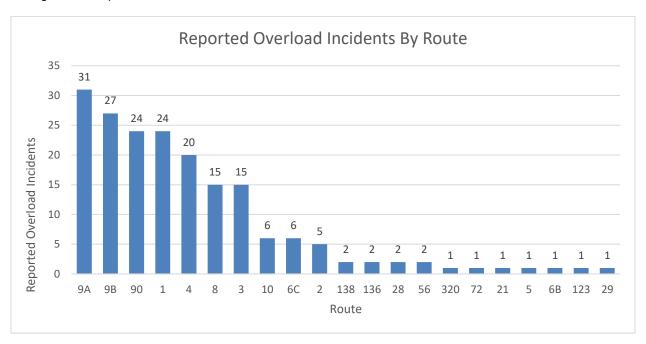


#### **Passenger Overloads**

Halifax Transit tracks overloads that are reported to help match scheduling requirements to passenger demands.

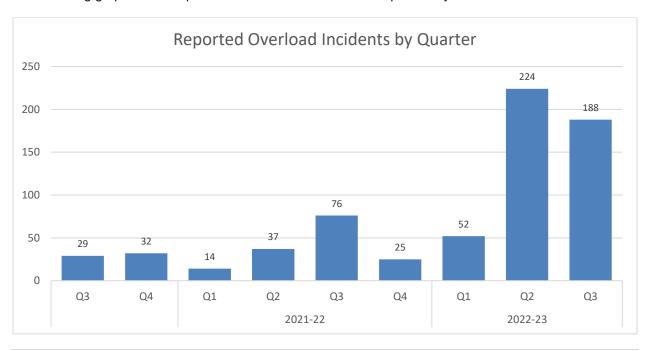
#### **Passenger Overloads by Route**

The following graph shows overloaded routes during the quarter. 188 overload incidents were reported during the third quarter of 2022/23.



#### **Passenger Overloads by Quarter**

The following graph shows reported overload incidents over the past two years.



#### **On-Time Performance**

On-time performance is a measure of route reliability and is tracked monthly to demonstrate schedule adherence across the network of routes. Terminals and select bus stops along each route are classified as timepoints and have assigned and publicized scheduled arrival times. On-time performance demonstrates the percentage of observed timepoint arrivals that are between one minute early and three minutes late.

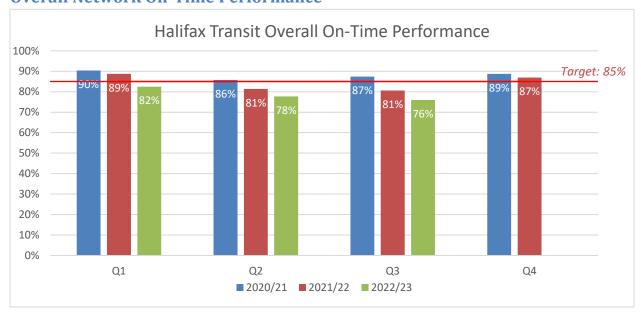
Halifax Transit has established a target for on-time performance of 85%, which is in line with Transit industry standards. While this target has been exceeded in recent periods throughout the pandemic, this is largely due to reduced traffic demands, these conditions have mostly subsided. During these times when on time performance has exceeded 90% issues with excessive layovers and buses arriving early have been problematic for on street operations and customer experience, indicating that too high of a target for on time performance may cause unintended side effects. A target of 85% encourages improvement on many services, adjustments will be made as part of future service changes in order to bring poor performing routes to this target.

Several routes performed well below the target during the second quarter including Routes 1, 2, 9A/B, 21, 39, 59, 65, and 91 which all performed below 70% on time performance. Adjustments had been planned for Route 1 to be implemented November 2022, however have been postponed due to staffing shortages. Other routes performing poorly during this quarter have not had significant on time performance issues in the past. Halifax Transit will continue to monitor these routes and make adjustments in the future if necessary.

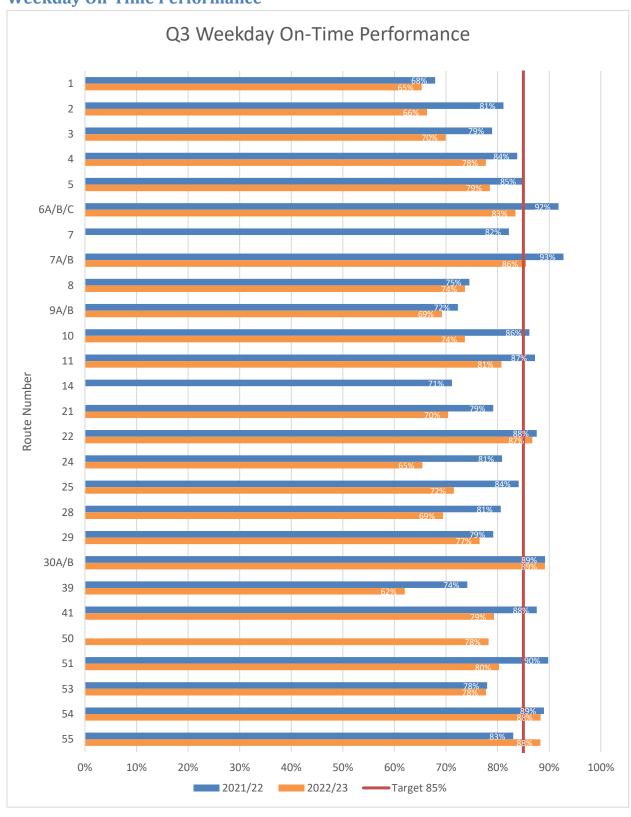
Portland Street Express routes (158, 159, 161, 165, 168A/B) continued to perform poorly in the third quarter, as mentioned in the previous report these routes will undergo minor schedule adjustments in the future to address this.

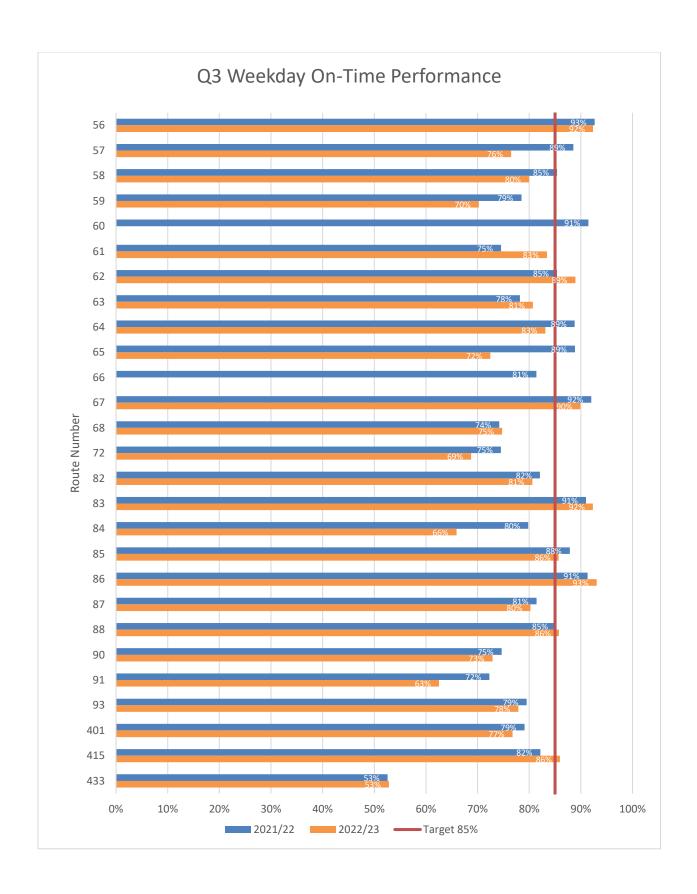
Route 433 Tantallon rural route also performed poorly in this period, this route underwent schedule adjustments to address on time performance effective November 21, 2022 and has seen moderate improvement in more recent months.

#### **Overall Network On-Time Performance**

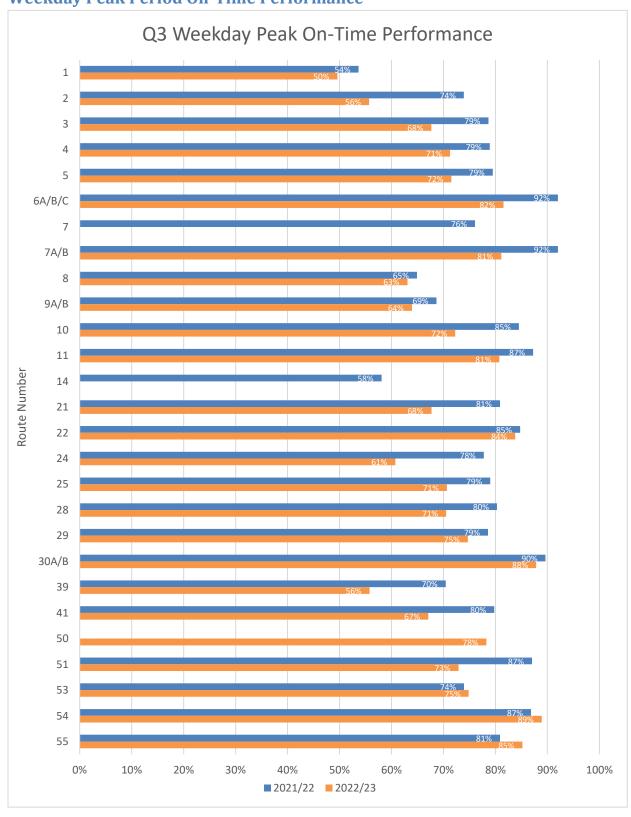


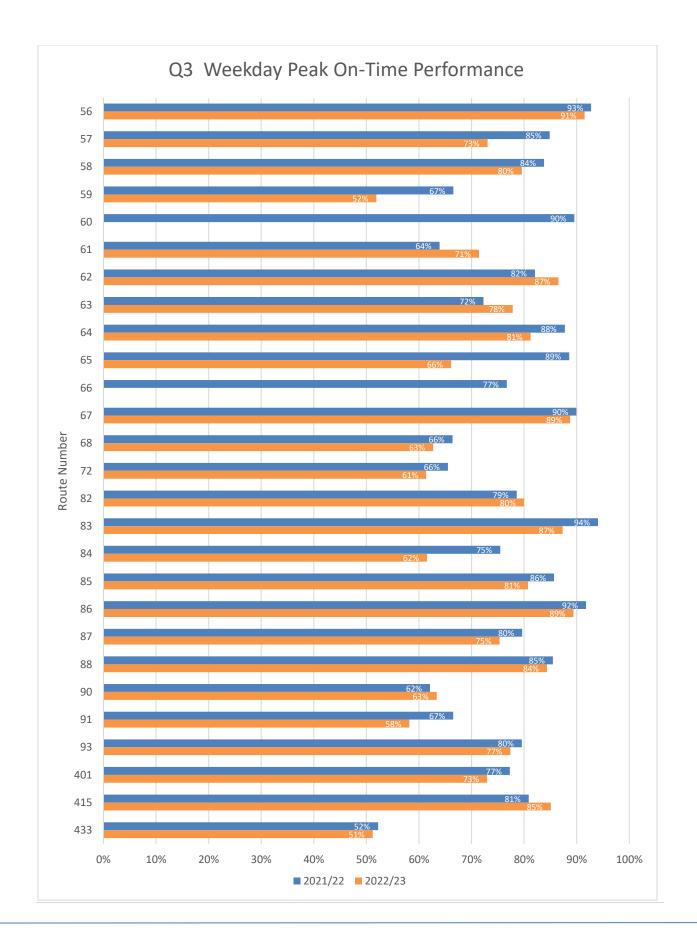
# **Weekday On-Time Performance**





# **Weekday Peak Period On-Time Performance**





## **Express Service On-Time Performance**

