

2017/2018 – Q3

Performance Measures Report

HALIFAX
TRANSIT

*Revised March 22, 2018 – Average Daily Boardings Comparison Chart, Page 11
Q3 Boardings figures revised*

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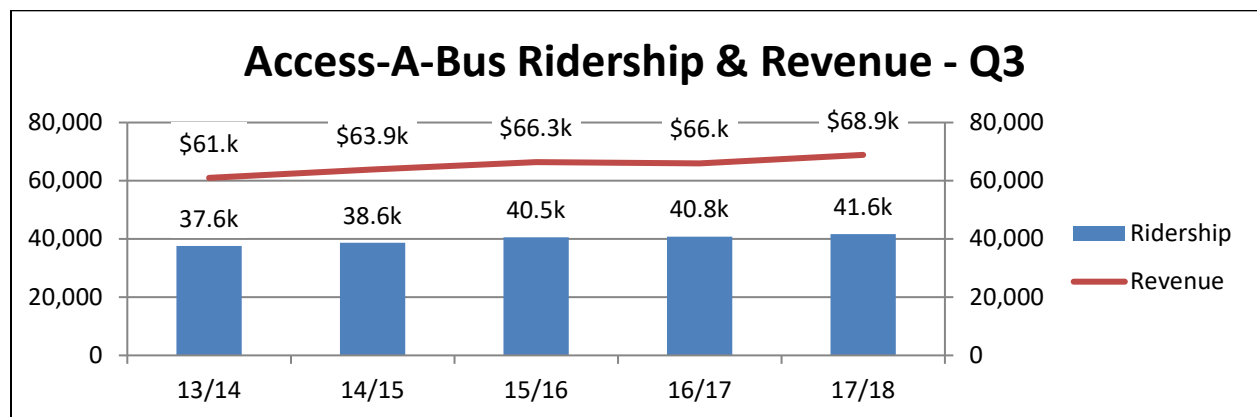
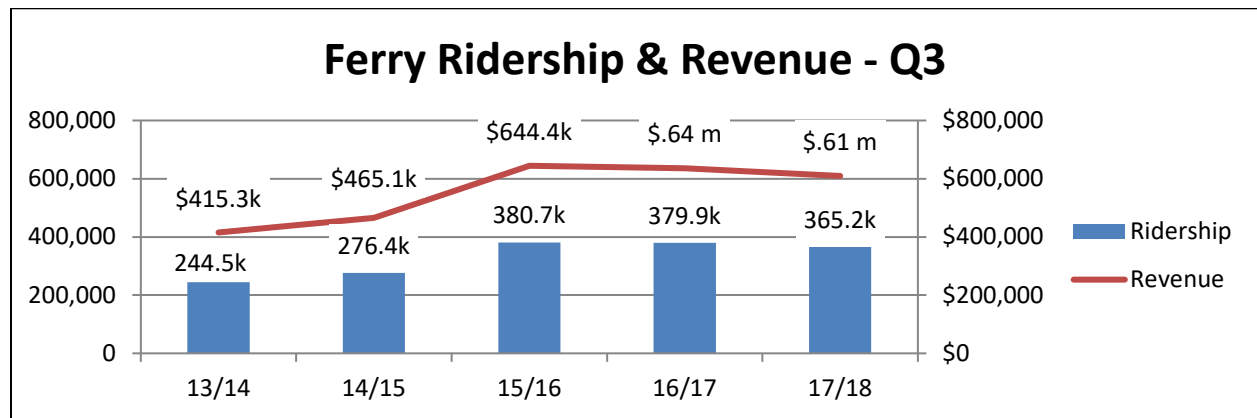
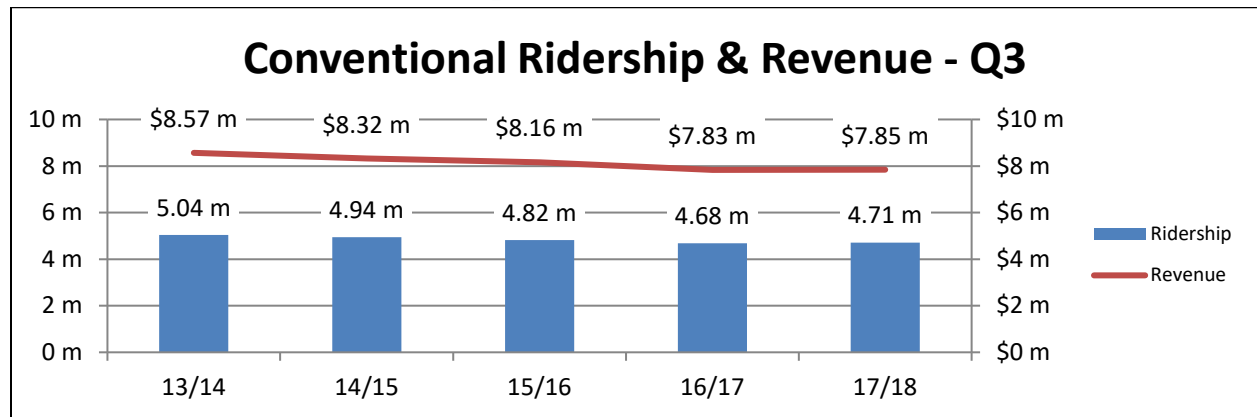
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Ridership & Revenue

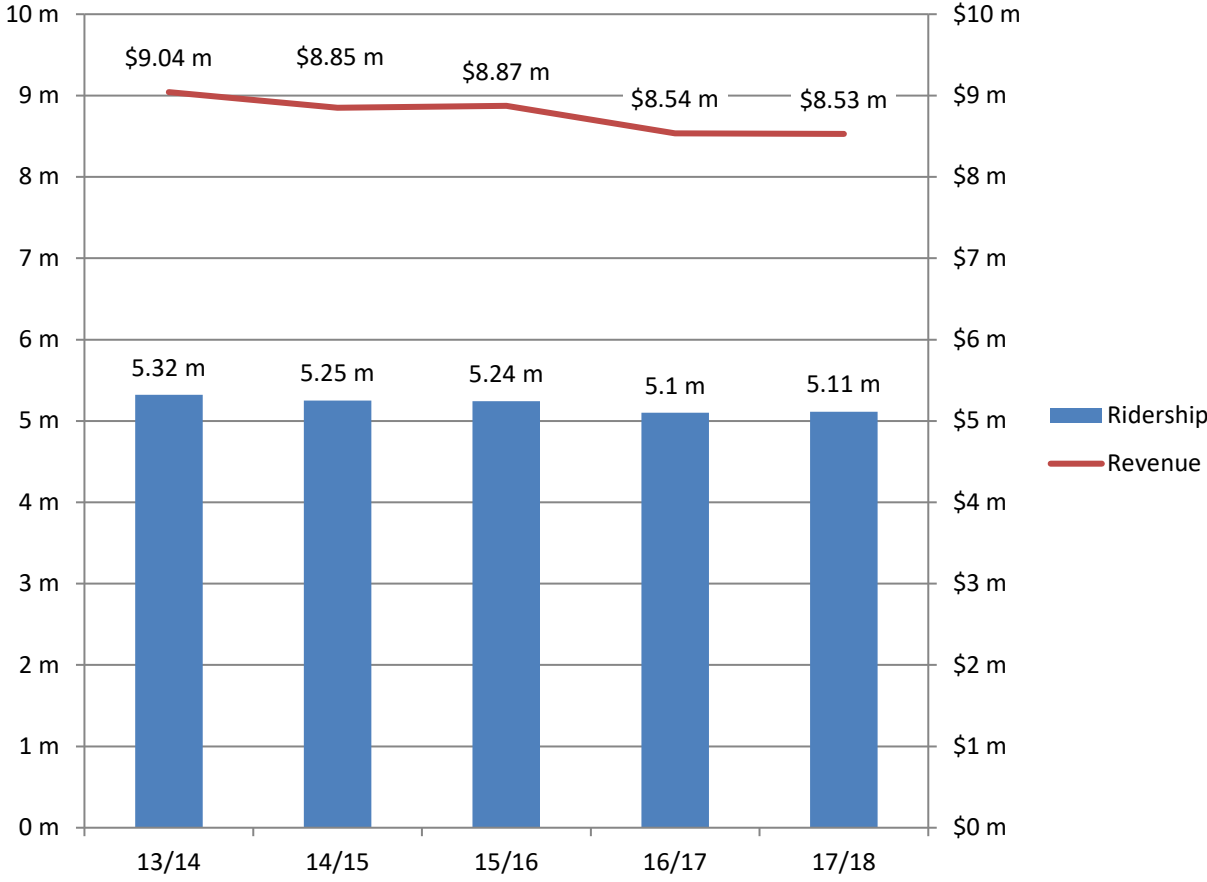
Revenue and ridership measures demonstrate how well transit services were used during the past quarter in comparison to the same period of the previous year. Ridership figures are calculated based on revenue generated by fare type.

In the third quarter, Conventional ridership increased 0.61% from last year, Ferry ridership decreased 3.85% and Access-A-Bus ridership increased 2.13%. Overall, system wide ridership increased in the third quarter by 0.29% compared to last year. Revenue this quarter decreased 0.08% from last year, which can be attributed to a shift in passengers switching to lower cost payment methods.

Historical Revenue & Ridership

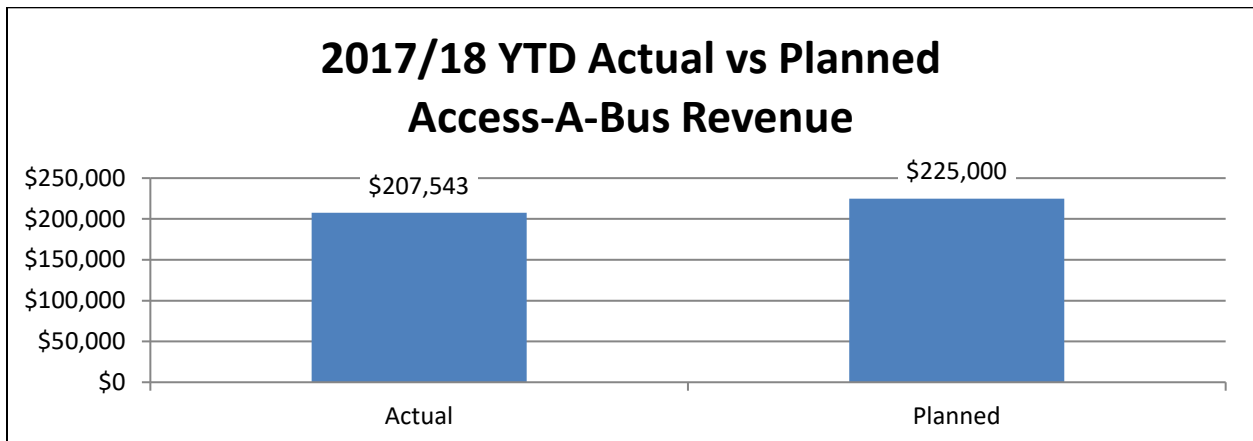
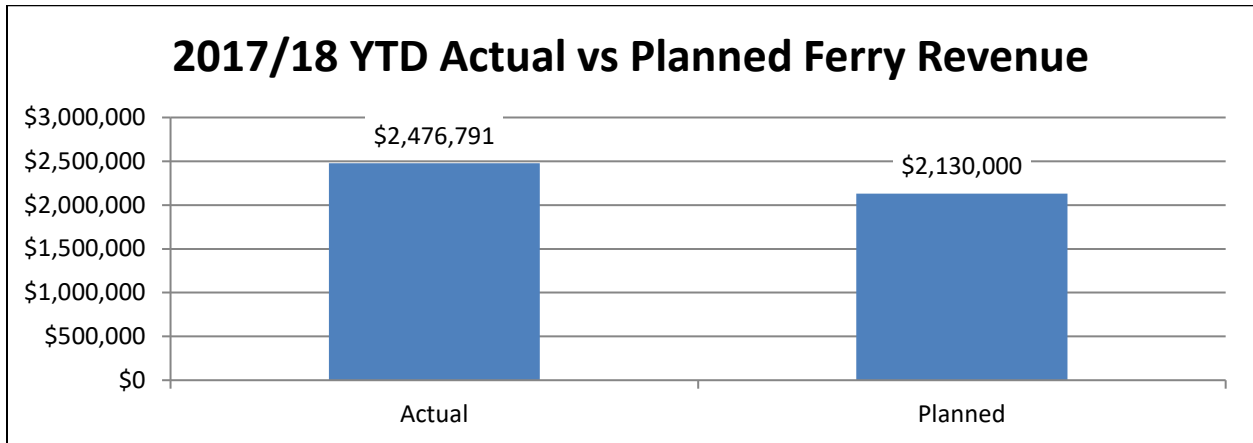
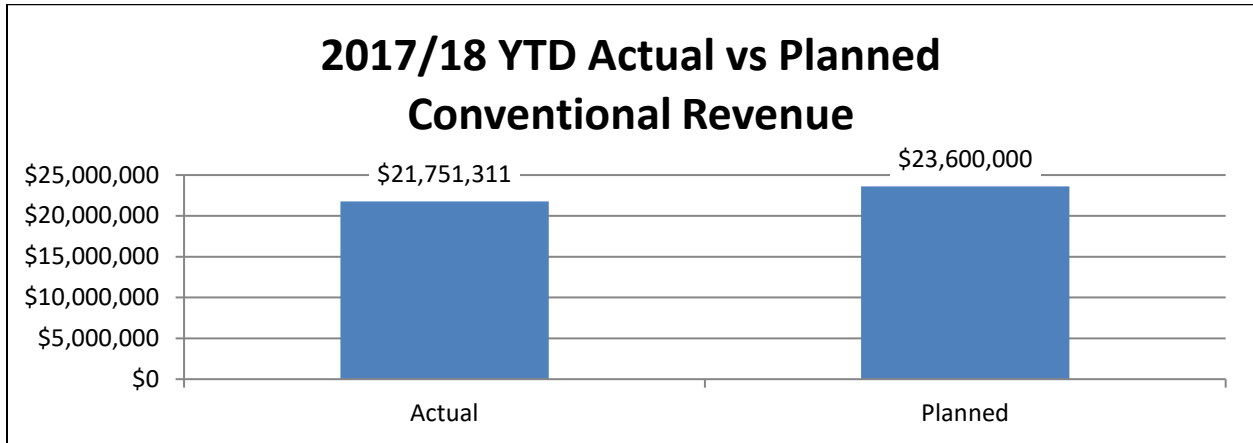


Halifax Transit Ridership & Revenue - Q3

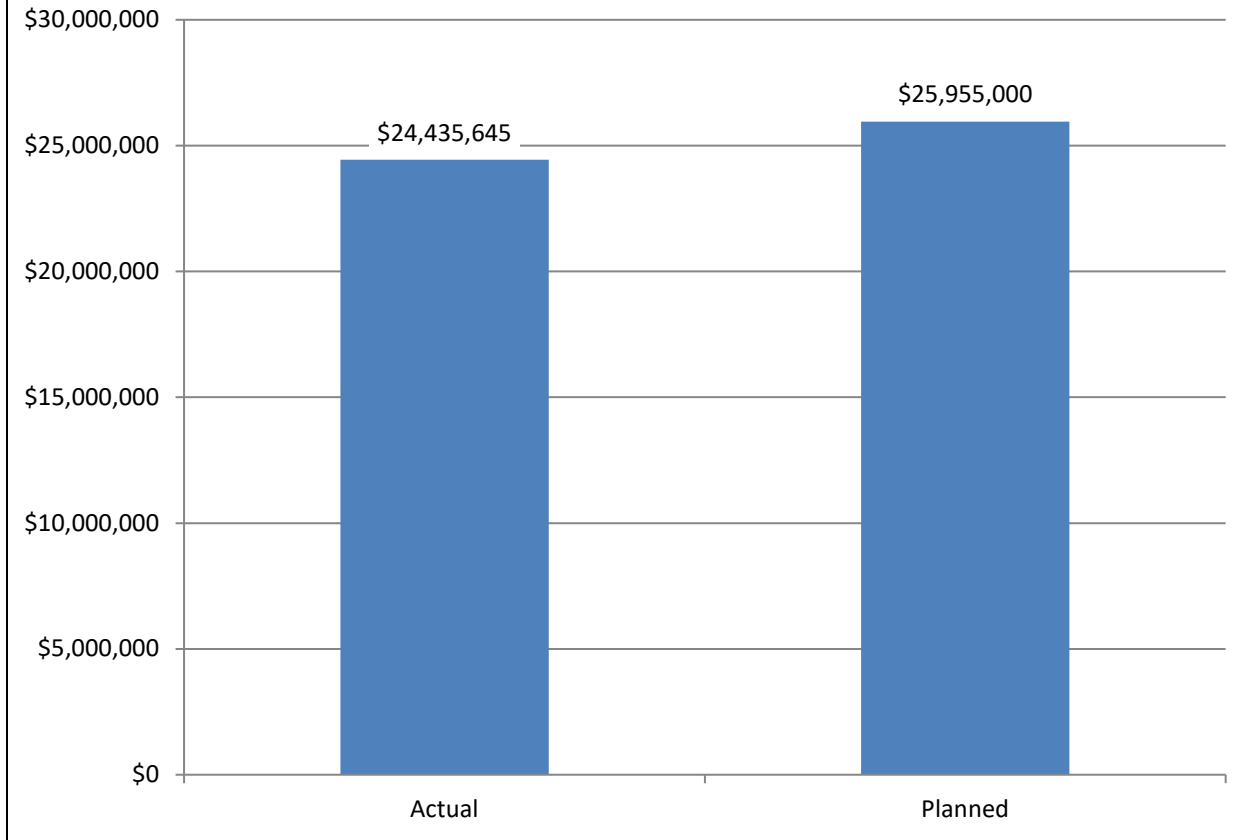


Revenue – Actual vs. Planned

The following charts provide an indication of how much revenue has been generated by each service type and by Halifax Transit in comparison to the planned budget revenue. Conventional revenue to date decreased 0.88% from this time last year and is trending 8% below the planned amount. Ferry revenue to date decreased 2.9% from last year, however is trending 14% above the planned amount. Access-A-Bus revenue to date has increased 3.65% and is trending 8% below the planned amount. Overall revenue to date has decreased 1.05% from this time last year and stands at 6% lower than the planned amount, which is consistent with the ridership decrease of 0.11% experienced to date.



2017/18 YTD Actual vs Planned Halifax Transit Revenue



Mean Distance Between Failures

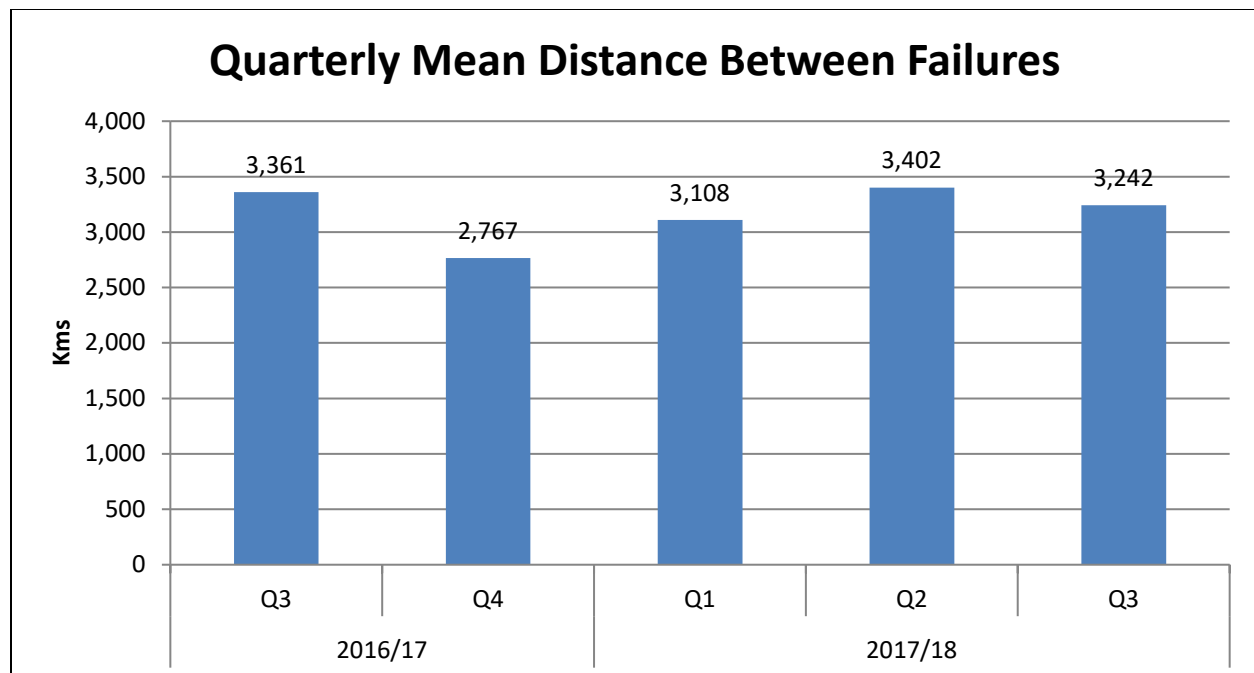
Halifax Transit's mean distance between failures (MDBF) indicates the number of service truck calls and the number of tows that have resulted from a vehicle breakdown. This metric is not comparable with jurisdictions like Toronto Transit Commission (TTC) and Calgary Transit; these properties do not consider all potential service impacting issues, such as: fare box, bike rack, AVL system, accessories, lights, windows, or stop announcements in the metric. Instead these jurisdictions measure failures that have to do with the bus itself and/or breakdowns only. Halifax Transit also includes all classes of vehicle in its measurement.

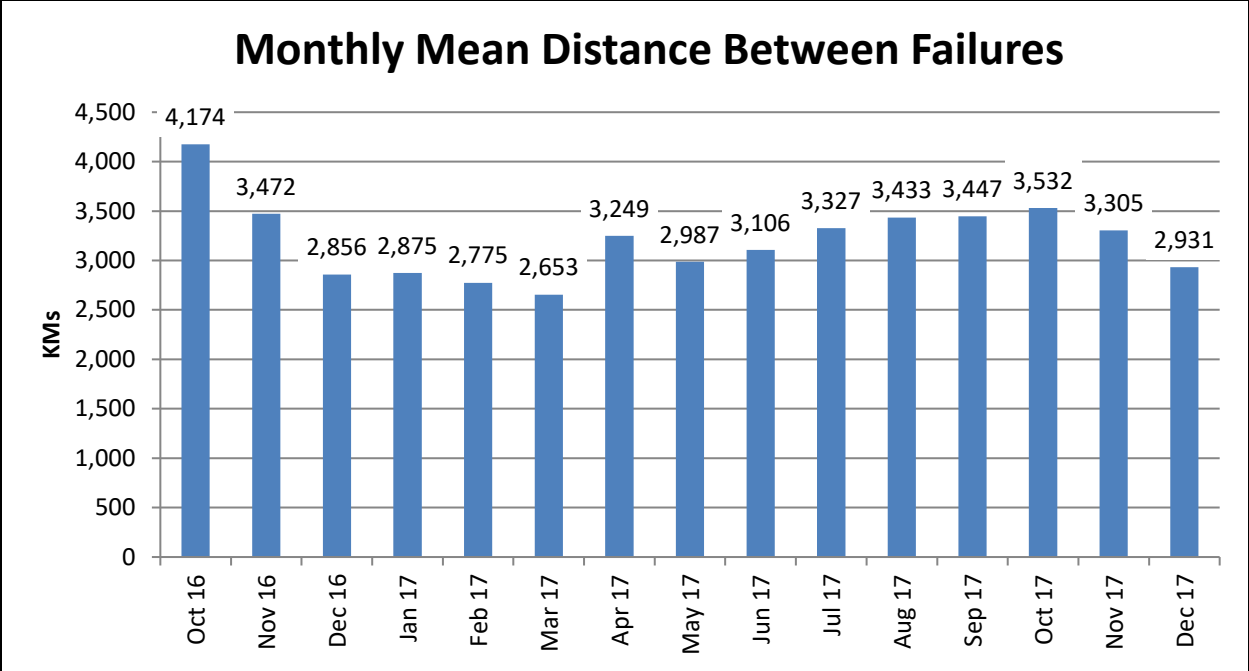
Halifax Transit implemented MDBF in 2014 before systems such as Fleet Focus and Trapeze AVL were implemented in 2015 and 2017; without these systems it was difficult to categorize the information based on a severity index. Halifax Transit has continued to report all service impacting factors because of the requirement to compare historical data.

If Halifax Transit were to measure MDBF like the TTC the resultant MDBF would be between 6000-6500 km, including Access-A-Bus. Using TTC's criteria, it is possible to see the decrease in customer impacting breakdowns, which is likely due to the large addition of new vehicles to the fleet and a robust preventative maintenance program. In the last year MDBF has improved by 20%; this trend is anticipated to continue as a result of continuous improvement initiatives.

It should be noted, based on an industry scan, that no two jurisdictions report this metric the same, there is no CUTA or MBN Canada standard. Information gleaned from our systems is also reliant on consistent reporting by Halifax Transit Operations and therefore any change in measurement would require a training program.

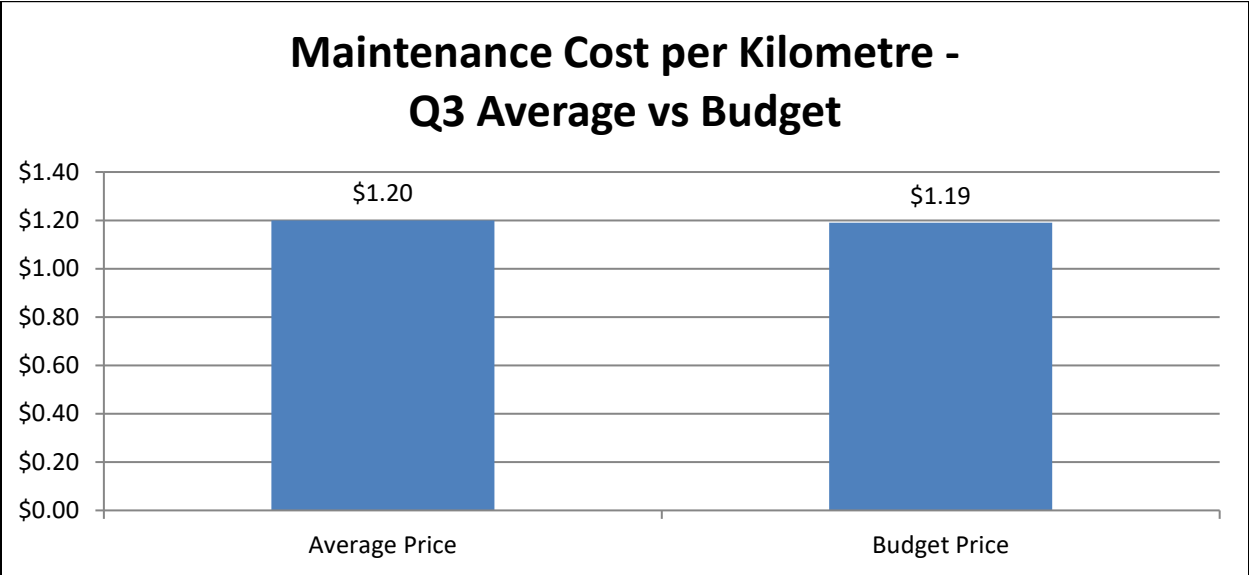
This quarter, MDBF was 3,242 kilometres per defect. In relation to prior quarters, the mean distance between failures is within the expected threshold, with no improvement over third quarter last year. However, comparing all three quarters for 2017/18 versus 2016/17, the mean distance between failures has improved by 6%.





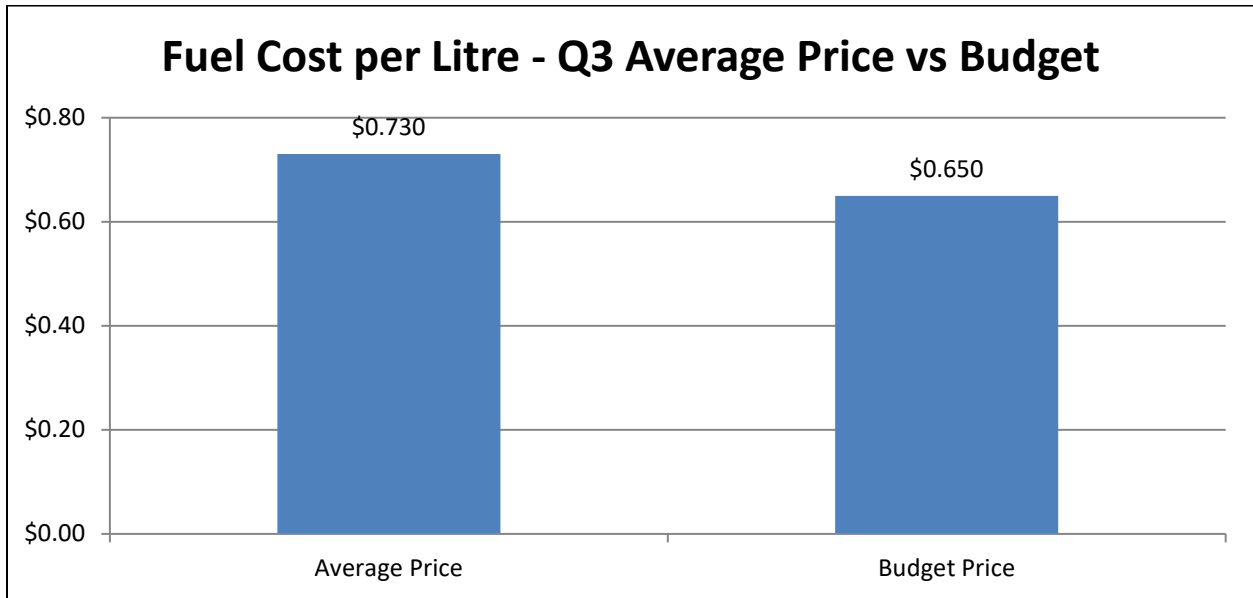
Bus Maintenance Cost – Quarter Average vs Budget

Maintenance costs may fluctuate from budgeted costs due to environmental factors and unpredictability of the business. In the third quarter, Bus Maintenance cost was \$1.20/km, while the budgeted Bus Maintenance cost was \$1.19/km. Overall, the actual cost was only over by a marginal amount with a variance from budget of 0.3%. The overage of \$0.01/km is mostly attributed to lower actual mileage travelled by the fleet versus the budgeted mileage. The cost of maintaining a fleet is not necessarily linearly proportional to distance travelled in a month and therefore may result in a disproportionate rate of cost per distance travelled.



Fuel Cost – Quarter Average vs Budget

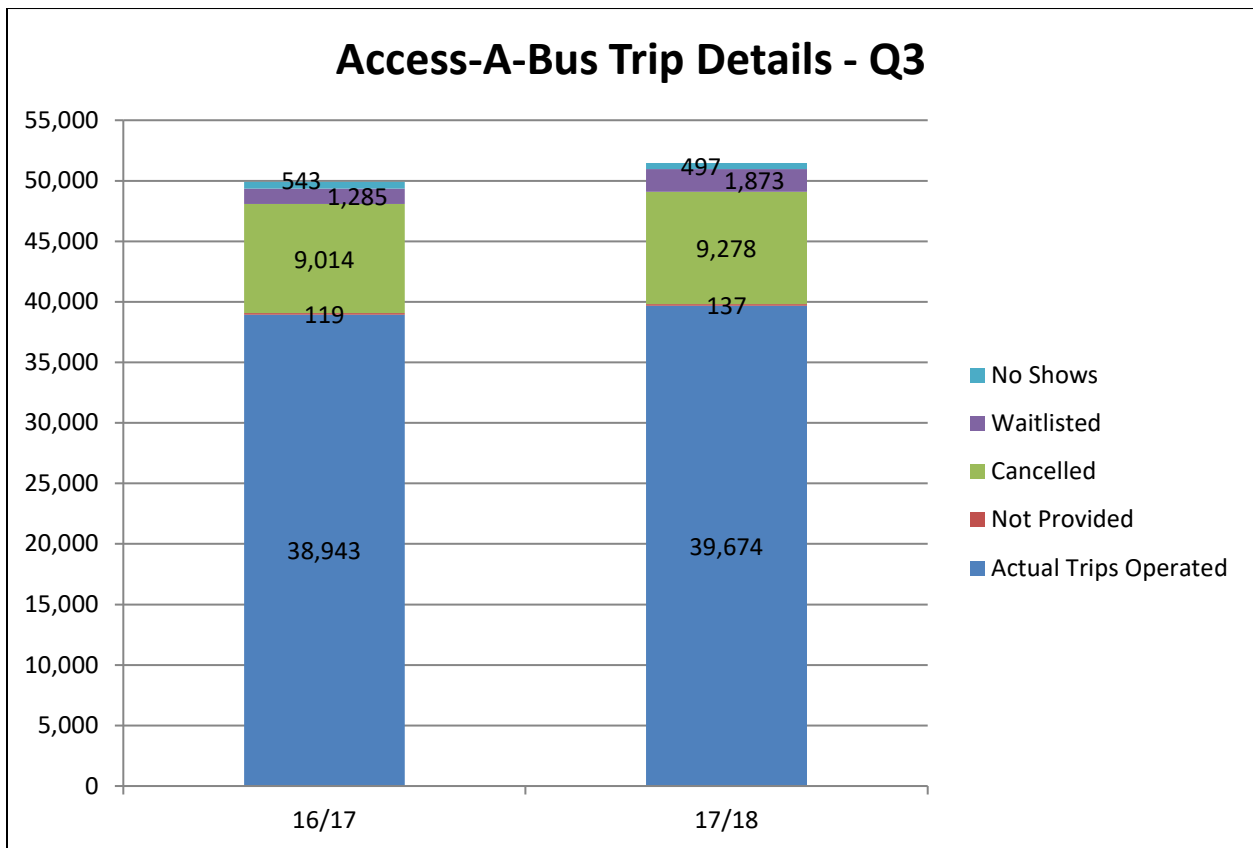
The budgeted fuel cost for 2017/18 was set at 65 cents/litre. Average fuel cost this quarter was 73 cents/litre, eight cents per litre higher than the budgeted cost.



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. The demand for Access-A-Bus service continues to grow, with approximately 50 new applicants being accepted every month. Client growth is expected to continue throughout 2017/18.

In the third quarter, the number of trips provided by Access-A-Bus increased 1.9% compared to this period last year. The number of waitlisted clients this quarter increased 46%. This was due to fewer bus operators being available to assign to shifts, compared to third quarter last year. As such, trip cancellations were not actively filled, to avoid over booking trips with the reduction in staff in mind. New processes and procedures are being implemented immediately in response to this increase that will help mitigate impacts and help to prevent this happening in the future.

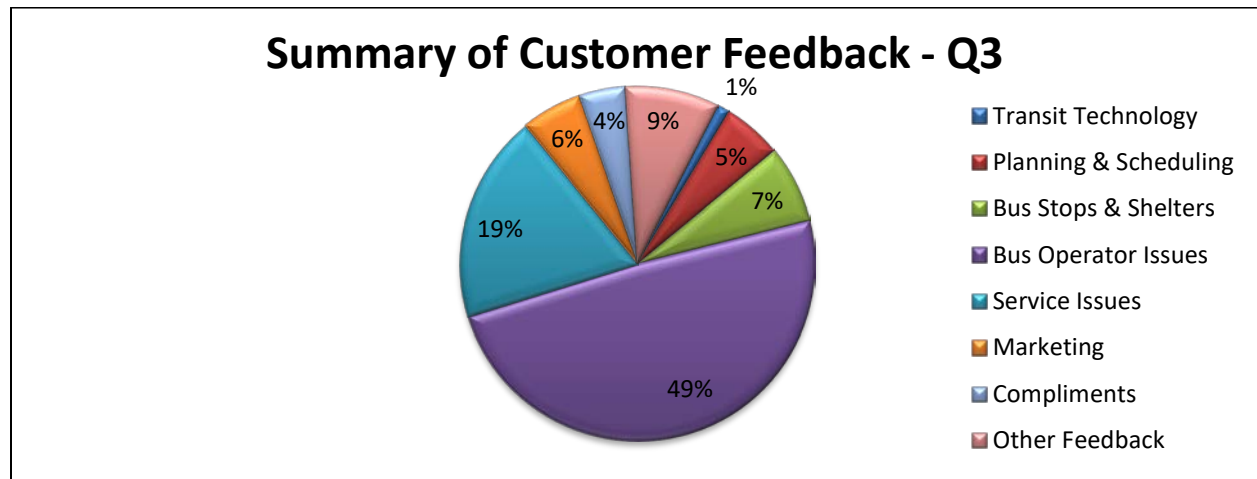
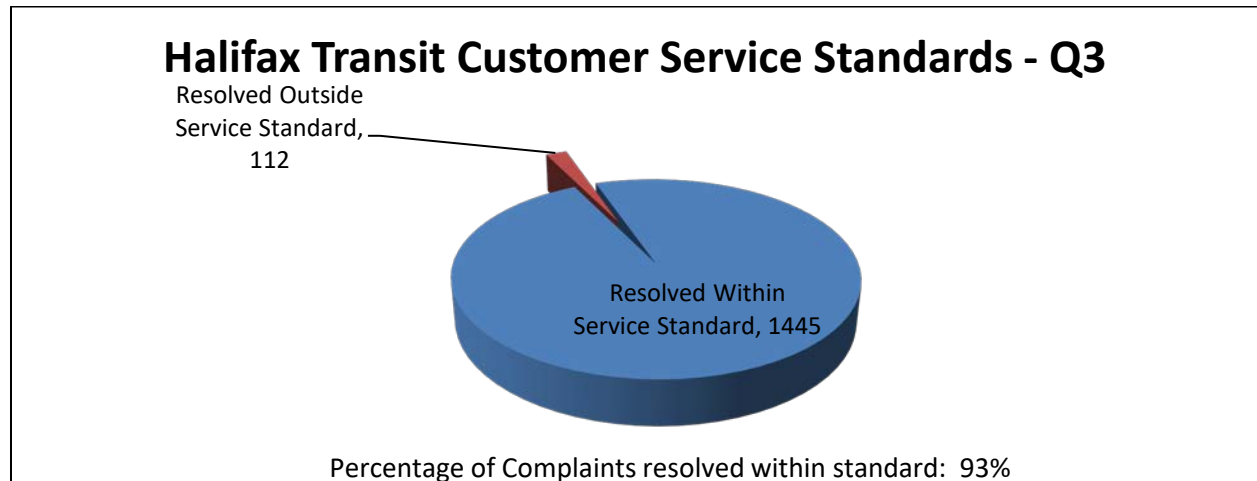


Customer Service – All Services

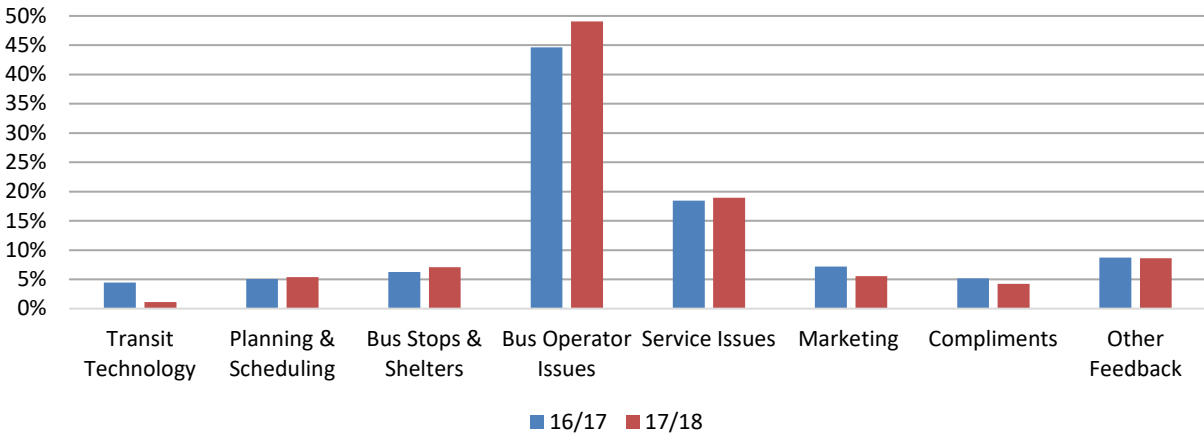
Customer service statistics are measured monthly using the Hansen Customer Relationship Management software along with Crystal Reports. Feedback is first categorized by subject matter and then divided into two categories: feedback resolved within service standard and feedback resolved outside service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

This quarter, 49% of feedback received was related to bus operators and 19% regarding service issues. The remaining 32% is comprised of feedback regarding 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 was achieved this quarter, with 93% of customer feedback being resolved within standard, which is consistent with previous quarters.

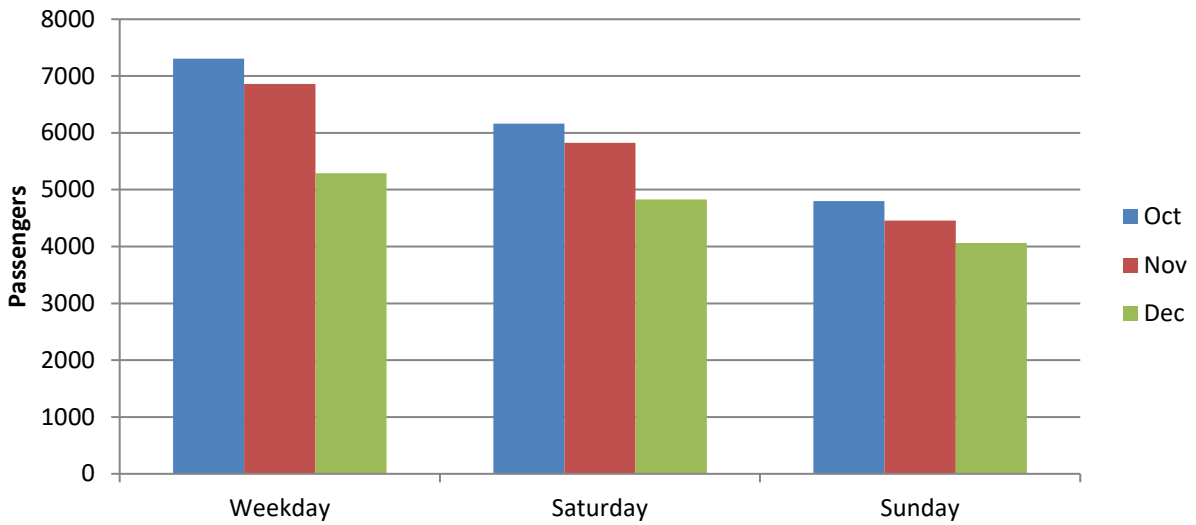
The Departures Line replaced the former GoTime system in May 2016. Passengers can now call this new phone number, (902-480-8000) to acquire real-time bus departure information. Call volumes to the Departures Line are displayed by day of the week and by month.



Customer Feedback Comparison - Q3



Average Departures Line Call Volumes - Q3



Boardings

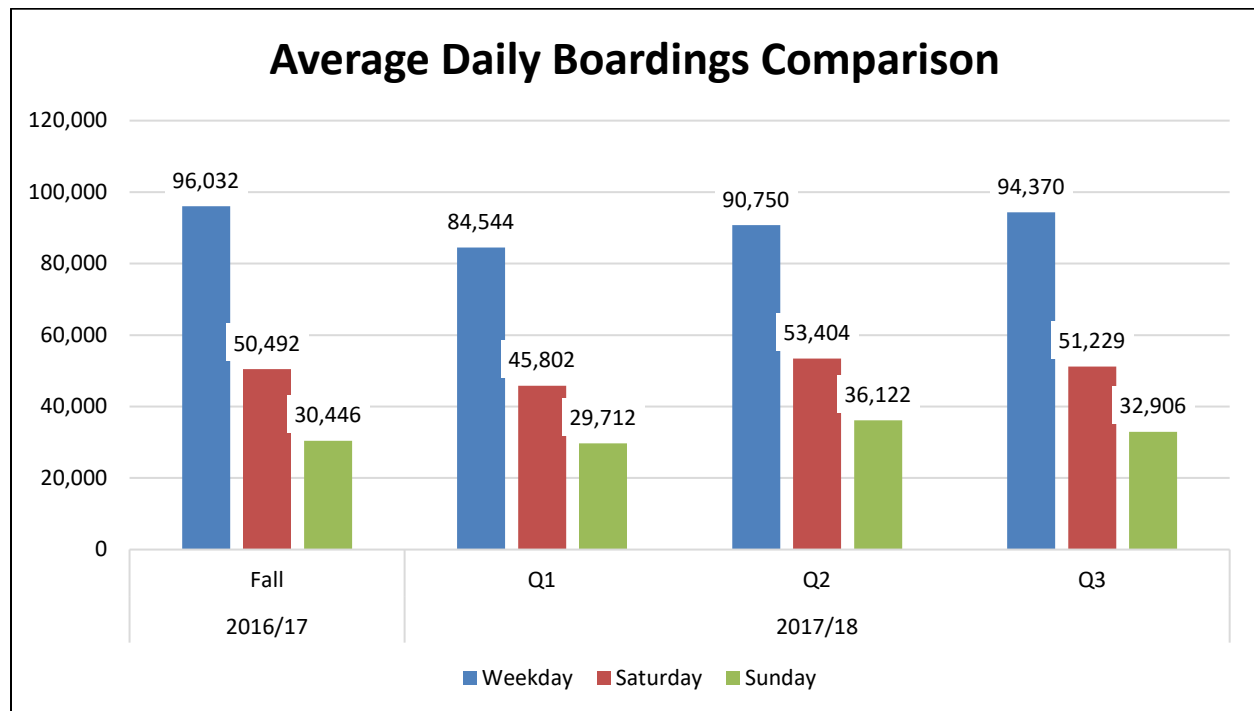
Automatic Passenger Counter (APC) data is now being used to report bus ridership statistics. The APCs provide data within a 90% degree of accuracy. Boardings by Route demonstrate passenger usage during the past quarter. APC data has been collected since September 2016. Comparisons of quarterly ridership data will begin in the fourth quarter of 2017.

Route 6 Stonehaven and Route 9 Barrington were discontinued November 26, 2017 and did not run for the entire quarter. As such, boardings data for these routes is not comparable and has not been shown. On November 27, 2017, new Route 9 Herring Cove replaced service on the former Route 19 Greystone and 20 Herring Cove and new Route 29 Barrington replaced service on former Route 9 Barrington. December ridership tends to be lower than an average month and therefore data for these new routes is not comparable to other routes in this quarter.

Standard Deviation

The standard deviation in boardings is the degree of variance in data from the daily average passenger count.

Average weekday boardings in third quarter were **94,370** \pm 6,578 (7.0% variance). Average Saturday boardings this quarter were **51,229** \pm 5,206 (10.2% variance). Average Sunday boardings this quarter were **32,906** \pm 2,619 (8.0% variance).



Boardings by Route by Service Day

Q3 2017/18 Average Daily Boardings by Route						
Route	Weekday		Saturday		Sunday	
	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr
1	10,347	71	8,218	73	4,962	62
2	2,693	44	2,081	39	983	32
4	2,474	40	1,815	31	1,149	37
5	142	35				
7	5,315	46	3,495	37	2,090	40
* New 9	5,291	31	2,630	35	2,295	32
10	5,167	47	3,193	43	1,902	40
11	101	41				
14	2,898	45	1,313	39	1,230	42
15	214	14	115	12	108	12
16	1,206	26	662	15		
17	1,307	32				
18	2,031	34	1,498	30	742	39
21	1,265	29	684	18	309	13
22	436	12	410	12	307	9
23	370	19				
* New 29	2,430	26	1,368	22	1,087	18
41	1,399	49				
42	1,422	38				
51	1,046	43	576	35	311	38
52	5,775	48	4,108	43	3,584	39
53	1,381	52	791	52	418	53
54	830	38	501	32	272	27
55	411	18	249	16	170	11
56	882	25	1,011	29	635	20
57	605	15	270	9	147	8
58	701	25	432	23	370	21
59	2,019	26	792	34	530	23
60	2,857	37	1,730	43	1,261	44
61	2,247	29	1,033	27	875	24
62	826	26	523	23	230	16
63	810	47				
64	326	31				
65	253	15	92	7	50	8
66	1,446	23	480	30	370	23
68	1,343	27	813	28	511	18

* Blanks in this table indicate the route runs weekdays only.

Q3 2017/18 Average Daily Boardings by Route						
Route	Weekday		Saturday		Sunday	
	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr
72	1,423	31	1,094	23	478	19
80	4,215	33	3,503	33	2,588	27
81	1,357	26				
82	996	22	222	10	100	9
83	147	12	91	10	43	9
87	1,310	29	996	20	511	17
88	90	16	64	12	25	11
89	423	19				
90	1,254	26	763	17	466	19
400	234	18	64	9	53	8
401	131	10				
Alderney	3,166	106	3,169	181	1,447	83
Woodside	2,562	122				

** Blanks in this table indicate the route runs weekdays only.*

Express Service Peak Boardings by Route by Service Day

Q3 2017/18 Average Daily Peak Boardings by Route				
Route	Weekday		Saturday	Sunday
	Boardings	Peak Pass/Trip	Boardings	Boardings
31	290	32		
32	519	29		
33	176	41		
34	722	42		
35	279	31		
78	110	8		
79	124	10		
84	951	35		
85	132	33		
86	131	33		
159	797	19		
185	1,150	25		
194	314	14		
320	529	15	382	299
330	427	18		
370	143	10		

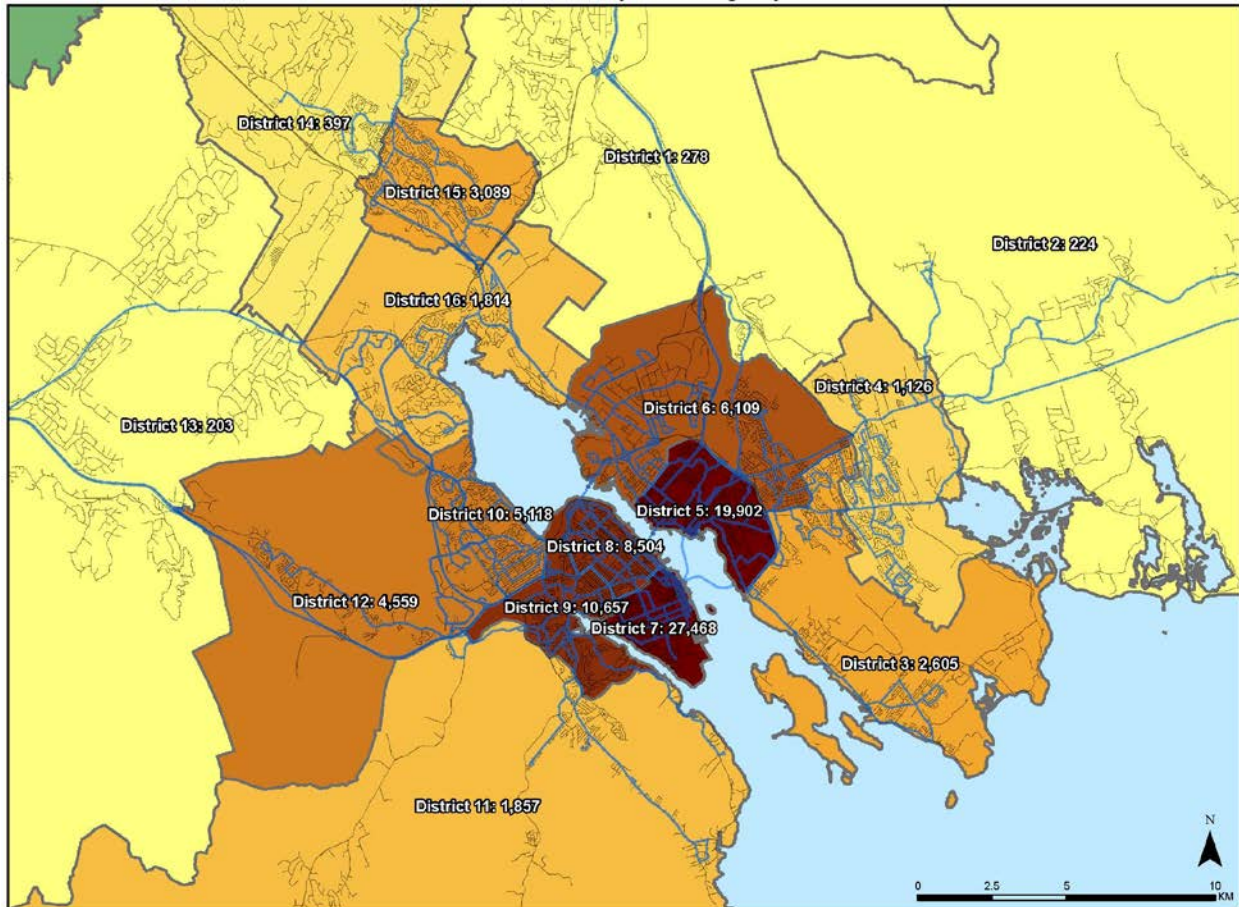
** Blanks in this table indicate the route runs weekdays only.*

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.

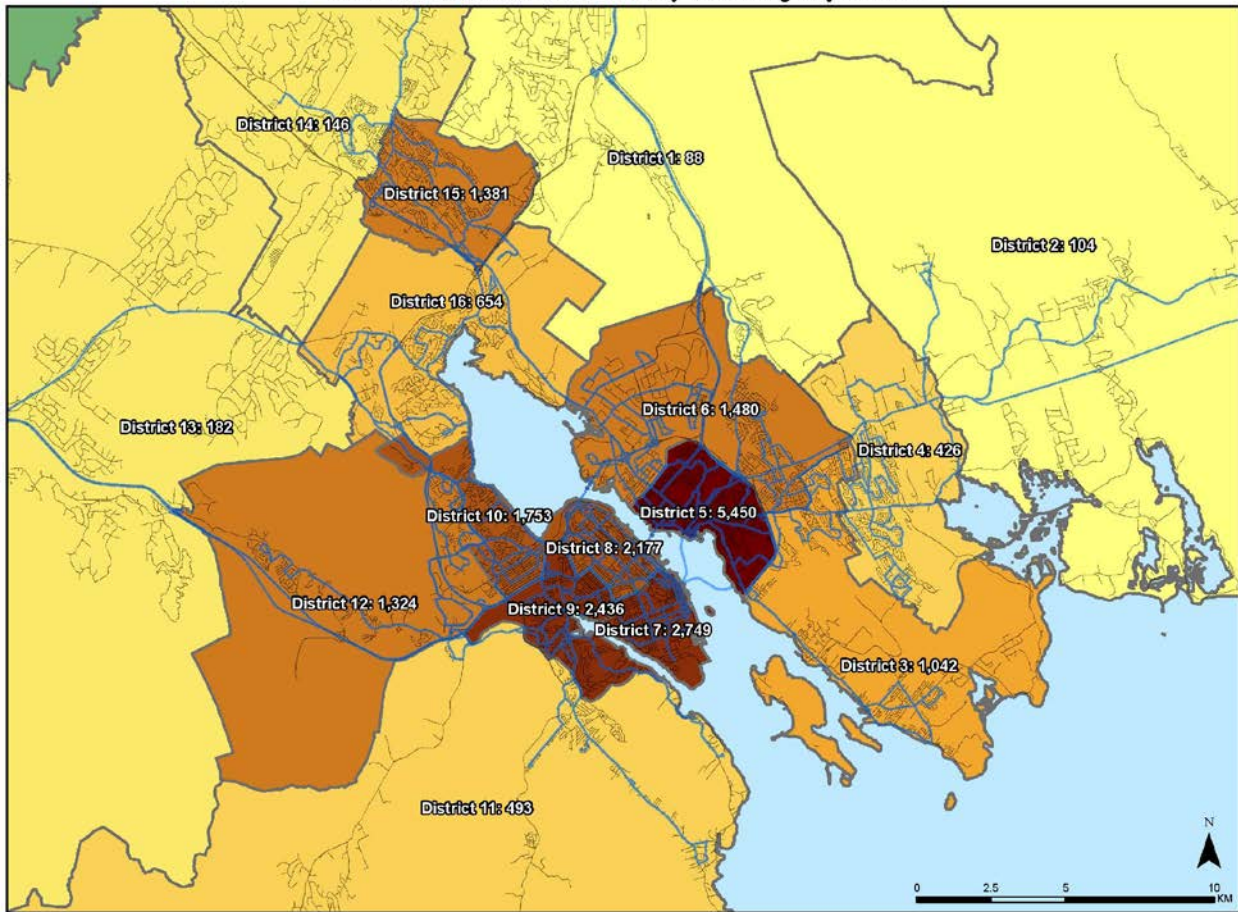
Weekday Boardings by District - All Day

2017-18 Q3 Weekday Boardings by District



Weekday Boardings by District – AM Peak Period

2017-18 Q3 AM Peak Weekday Boardings by District



Passengers per Hour

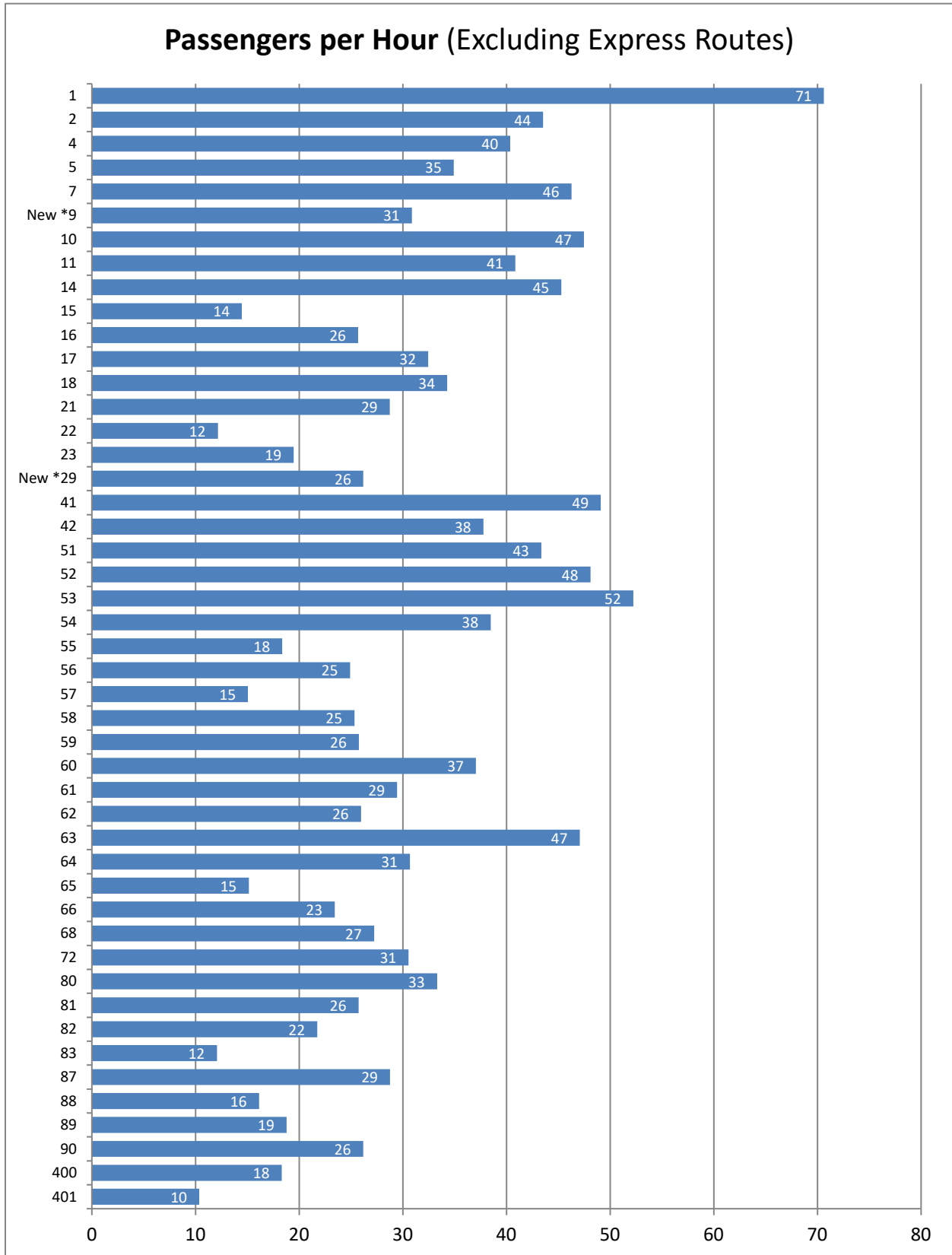
Passengers per hour measures the volume of passengers carried per service hour by route. Due to differences in service model/design, Express Routes are measured instead by passengers per trip. Ridership fluctuates significantly by season and therefore figures will be compared to the same quarter in the previous year once data becomes available. 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.

Due to the importance of the ferry to the regional transportation network and its historic and cultural heritage value, ferry routes are not held to a minimum ridership standard. In much the same way, due to the regional significance of the Route 320 Airport from a tourism and economic development perspective, service to the Halifax International Airport is also exempt from minimum ridership guidelines.

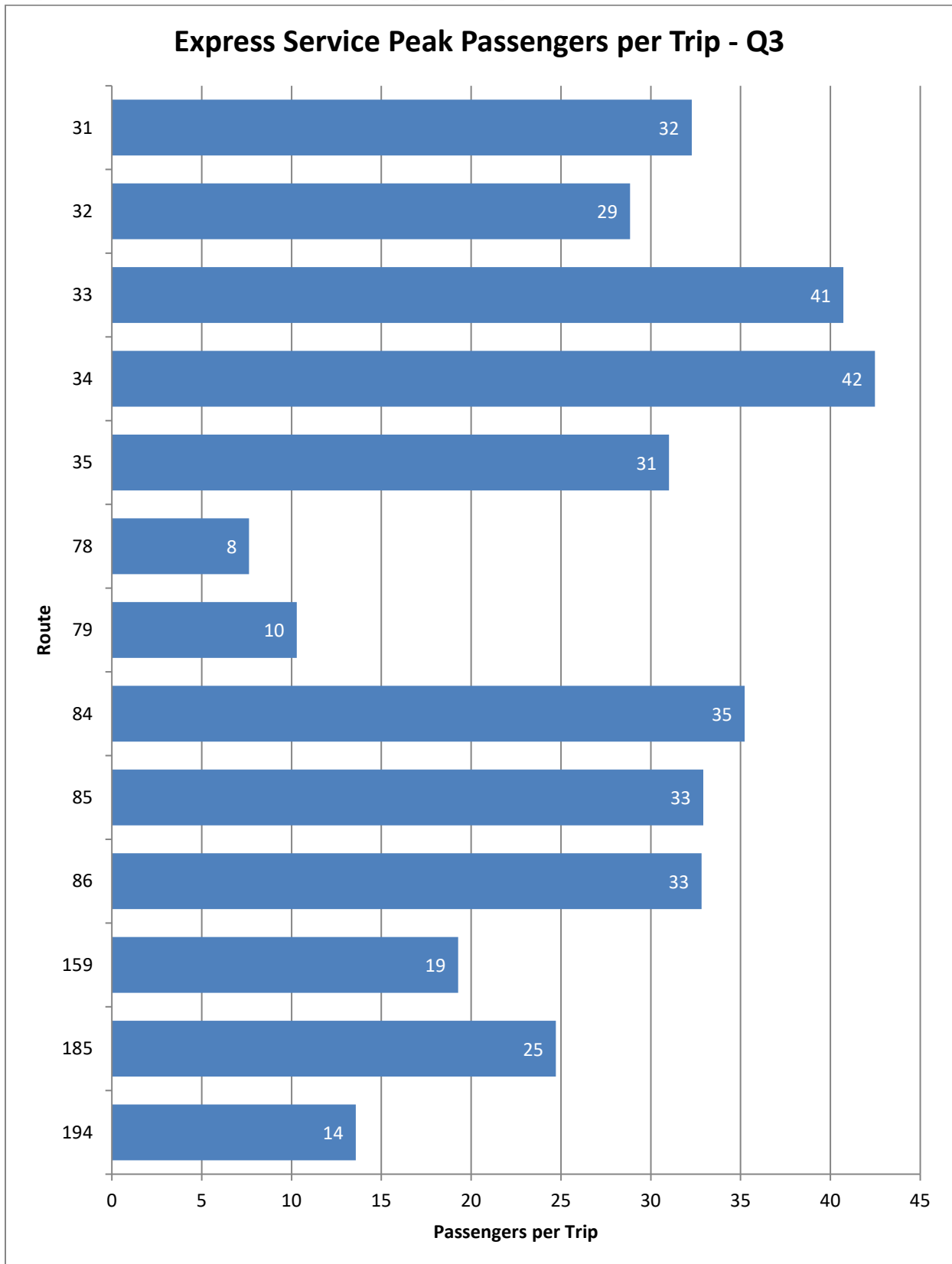
Route 6 Stonehaven and Route 9 Barrington were discontinued November 26, 2017 and did not run for the entire quarter. As such, passenger data for these routes is not comparable and has not been shown. On November 27, 2017, new Route 9 Herring Cove replaced service on the former Route 19 Greystone and 20 Herring Cove and new Route 29 Barrington replaced service on former Route 9 Barrington. December ridership tends to be lower than an average month and therefore data for these new routes is not comparable to other routes in this quarter.

New Route 194 West Bedford Express was implemented toward the end of the second quarter on August 21, 2017 and has been in service for approx. six months. This route was implemented early in the development stage to ensure transit was an option for new residents. During the end of the second quarter this new route carried an average of 12 passengers per trip, which has increased in third quarter to an average of 14 passengers per trip. Growth is anticipated to continue over the next year, as this subdivision is still under development.

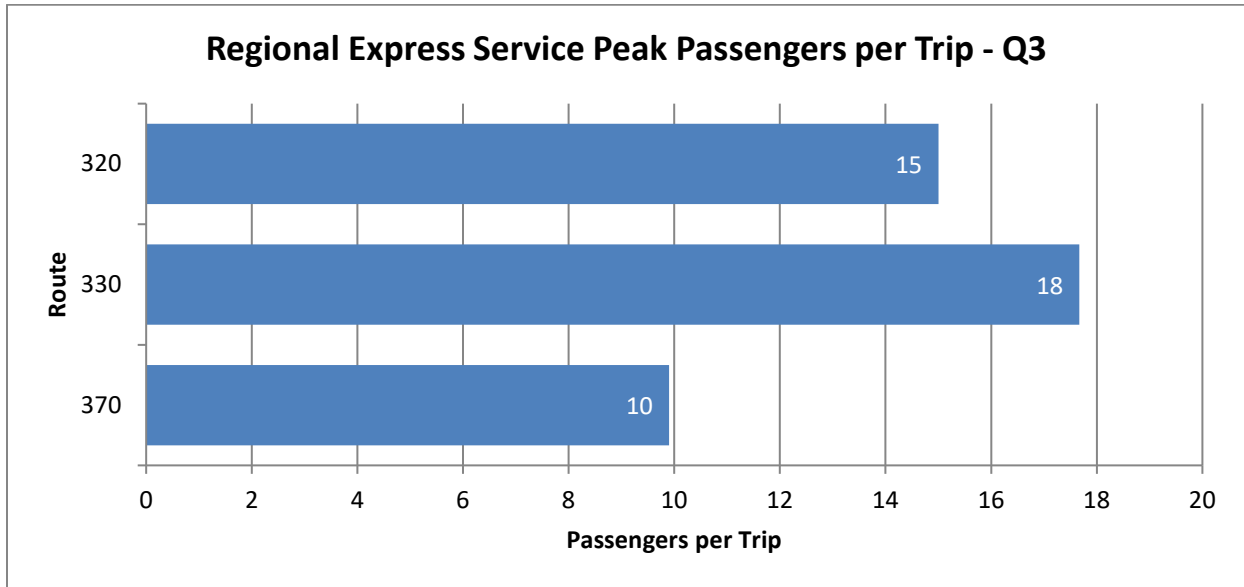
Passengers per Hour by Route



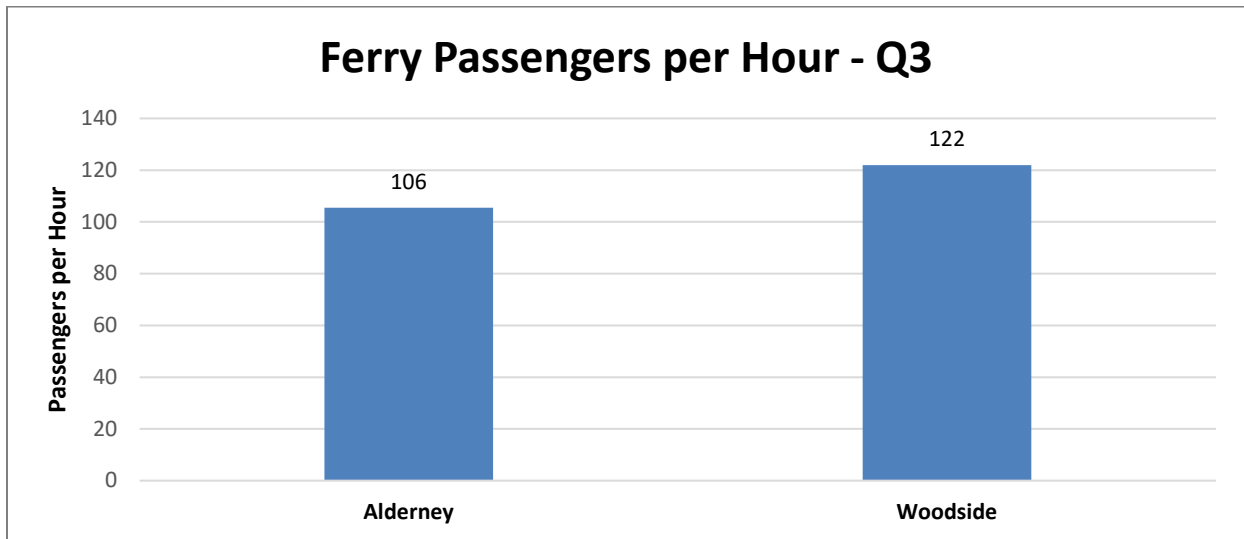
Express Service Peak Passengers per Trip



Regional Express Peak Passengers per Trip



Ferry Passengers per Hour



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 time-points and have assigned and publicized scheduled arrival times. On-time performance demonstrates the percentage of observed time-point arrivals that are between one minute early and three minutes late.

Transit Industry standard targets for on-time performance tend to range between 85% and 90%, although service types are not always comparably grouped, nor are schedule adherence definitions consistent between agencies. Halifax Transit will analyze On-time performance across the network in order to establish a benchmark and target for the minimum percentage of trips to depart on time.

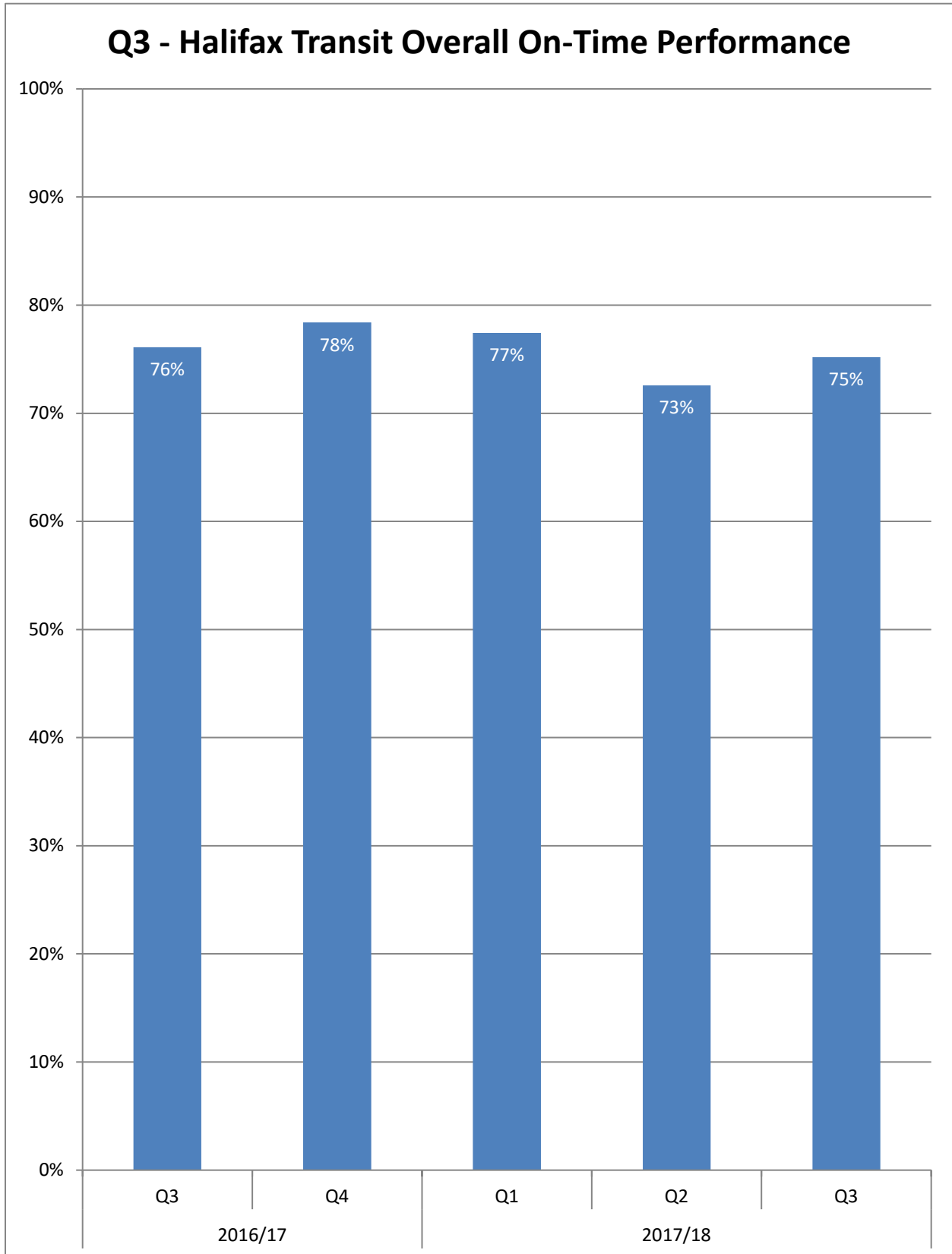
On-time performance continued to be impacted in the third quarter, by a number of construction projects still underway. Compared to third quarter last year, on-time performance decreased by 1%, which was anticipated due to the increased congestion resulting from these major construction projects. The St. Margarets Bay Road Construction Project is now complete and affected routes resumed regular routing December 1, 2017. The Leiblin Drive Wastewater Project is now complete and affected routes resumed regular routing November 27, 2017. Details for these projects are outlined below:

- The St. Margarets Bay Road Construction Project
 - Project completed November 30, 2017.
 - St. Margarets Bay Road was closed, between Walter Havill Drive and the Armdale Roundabout
 - Route 1 Spring Garden was often detoured outbound at PM Peak away from Bayers Road, turning instead onto Roslyn Road to Connaught Avenue, back to Bayers Road.
 - Route 194 West Bedford Express was often detoured away from Highway 102 inbound, travelling instead to Highway 102 outbound, to Lacewood Drive to Main Avenue
 - Routes from Ragged Lake Transit Centre were often detoured to mitigate delays. Traffic volumes using the Highway 102/Bayers Road Corridor had increased significantly in response to all-day closures of St. Margarets Bay Road, requiring detours on several routes.

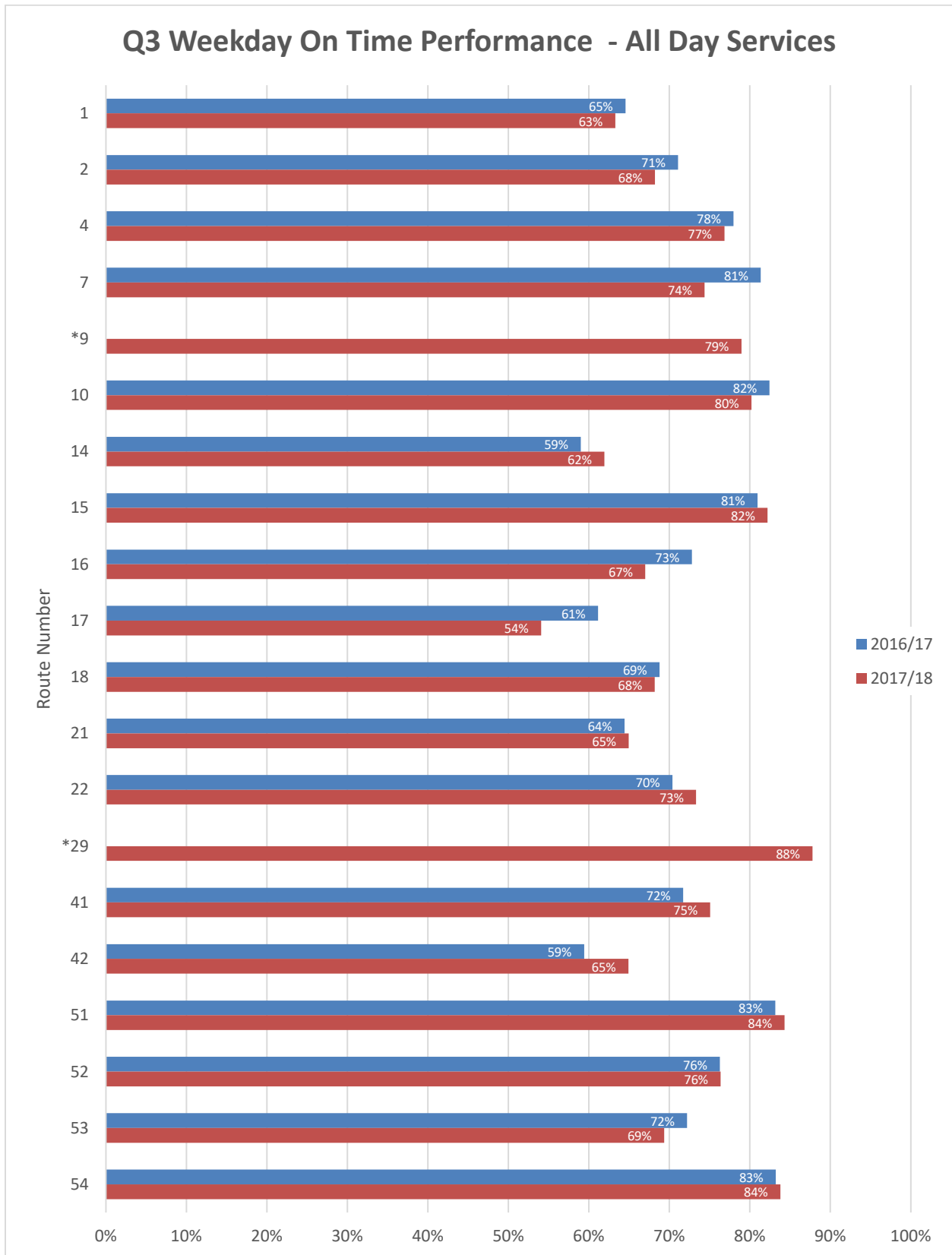
- The Leiblin Drive Wastewater Upgrade Project
 - Project completed November 24, 2017
 - Leiblin Drive was closed between Carnation Crescent and Guildwood Crescent.
 - Route 14 was detoured to service Leiblin Drive as far as the first turn onto Birchfield Crescent and return.

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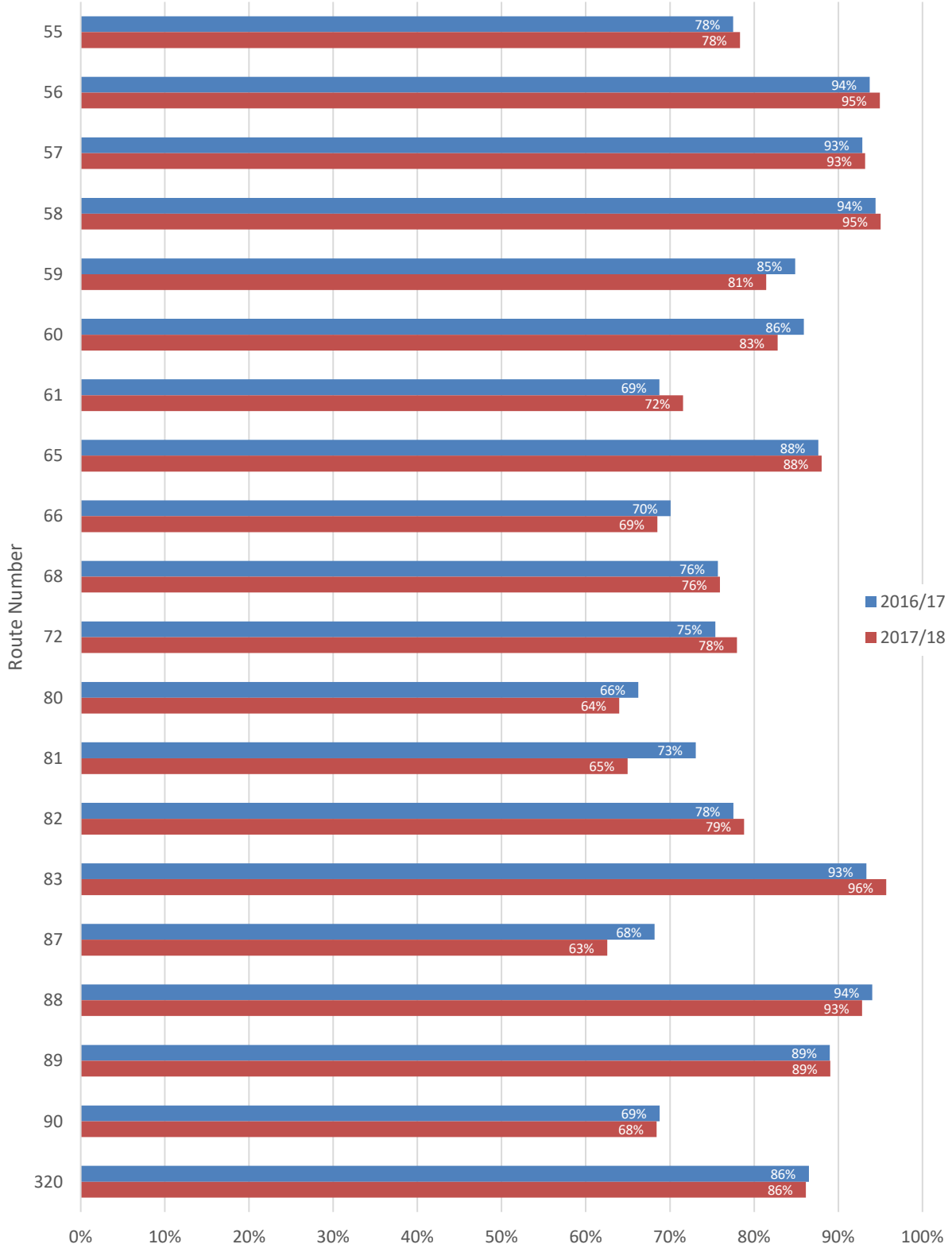
Overall Network On-Time Performance



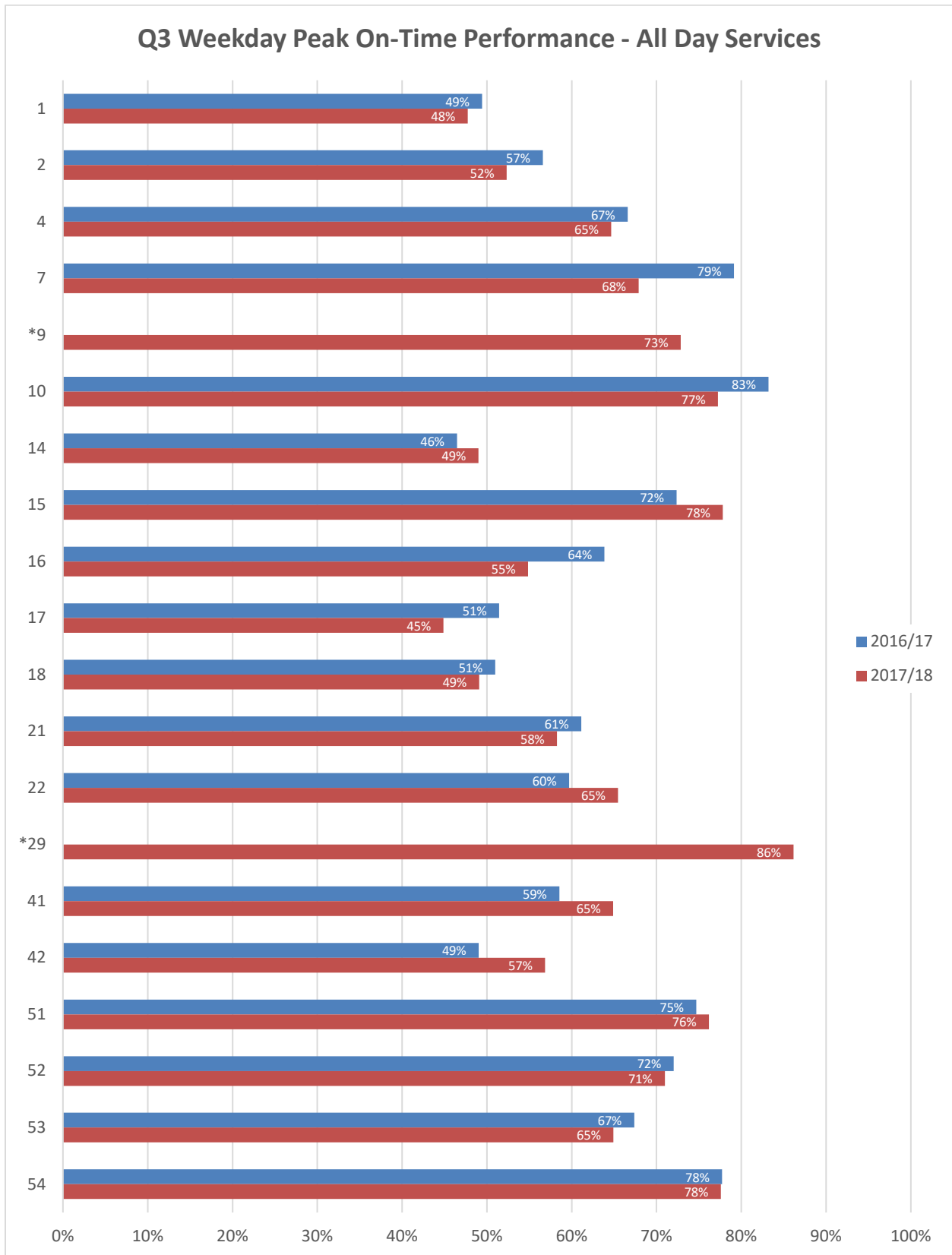
Weekday On-Time Performance - All Day Services



Q3 Weekday On Time Performance - All Day Services



Weekday Peak Period On-Time Performance – All Day Services



Q3 Weekday Peak On-Time Performance - All Day Services



Weekday Peak Period On-Time Performance – Peak Only Services

