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Item No.12.1.4
Transportation Standing Committee
March 26, 2018

TO: Chair and Members of Transportation Standing Committee

Original Signed

SUBMITTED BY:

Dave Reage, MCIP, LPP, Director, Halifax Transit

DATE: January 10, 2018

SUBJECT: **2017/18 Q3 Halifax Transit KPI Report**

INFORMATION REPORT

ORIGIN

This report originates from the following motion passed at the July 3, 2013 Transportation Standing Committee meeting:

> "That the Transportation Standing Committee receive a quarterly report and presentation regarding Metro Transit strategic planning and operations."

LEGISLATIVE AUTHORITY

Section 4(a) of the Terms of Reference for the Transportation Standing Committee provides that the Transportation Standing Committee is responsible for "overseeing HRM's Regional Transportation Objectives and Transportation outcome areas".

BACKGROUND

This report provides a summary of activities in the third quarter of the year and includes reporting on key performance measures. These include measures of revenue, ridership, boardings, on-time performance, customer service, service levels, and Access-A-Bus service details.

DISCUSSION

Halifax Transit is committed to advancing Regional Council's transportation priority outcomes of:

- A Safe and Accessible Transportation Network
- Interconnected and Strategic Growth
- A Well-maintained Transportation Network

To assist in achieving these priority outcomes, multi year initiatives were identified in the 2017/18 Halifax Transit Business Plan. These are described below, along with updates on relevant projects and programs that support the goals. Attachment B includes a detailed description of the deliverables identified in the business plan to support these priority outcomes.

A Safe and Accessible Transportation Network

Multi Year Initiative – *"Transit Accessibility - Halifax Transit is committed to improving the accessibility of transit services in HRM. This includes improvements to the conventional service to make it an inclusive, viable option for more persons with reduced mobility, as well as improvements to the Access-A-Bus system to ensure it is meeting the needs of people who rely on that service. This includes physical infrastructure, policy and process improvements, engagement with the community, staff training and vehicle improvements."*

Q3 Highlights – The indoor passenger waiting area at Scotia Square opened on November 27th. This new waiting area is a fully accessible and climate controlled environment, providing improved amenities for approximately 5000 daily passengers. It is complete with seating and equipped with indoor electronic departure signs as well as security cameras.

Federal Funding, through the Public Transit Infrastructure Fund (PTIF) increased the number of bus stop improvements/upgrades planned for 2017/18 to over 200 bus stops. Upgrades include new/replacement bus stop landing pads in many locations, replacement and/or new shelters in other locations, and paving road shoulders at many 'inaccessible stops' to upgrade them to 'non standard bus stops' where the ramp can be deployed. Four shelters were delayed arriving from the manufacturer and are scheduled for installation in February 2018. All other planned bus stop upgrades for 2017 were completed within the third quarter.

On December 13, 2017, the Province of Nova Scotia announced a new pilot project between the Department of Community Services and Halifax Regional Municipality. This pilot project will provide bus passes to more Nova Scotians on employment support and income assistance. Recipients who live within the municipal transit catchment area, along with their spouses and dependents, will each receive a free yearly pass to meet their transportation needs. The new pilot project removes current administrative requirements to access monthly transportation allowances and reduce barriers to transit access.

Scheduled to launch in Spring 2018, each transit pass recipient will be provided a personalized, photo ID bus pass, valid for one year from the date of issuance. It's expected that over 16,500 Nova Scotians will be eligible to participate in the new pilot project and Halifax Transit anticipates an increase in ridership once the project launches in the spring.

Multi-Year Initiative – *"Transit Technology - Through the implementation of improved transit technology including Computer Aided Dispatch/Automated Vehicle Location (CAD/AVL), Electronic Fare Management Systems, and Bus Stop Announcement, Halifax Transit is transforming the way customers interact with the transit system. In addition to providing improved service reliability and enhanced customer experience, new technology will provide data and management opportunities to inform increased efficiency of the transit system."*

Q3 Highlights – In the third quarter of 2017/18, the Halifax Transit Technology Program team ramped up on two large projects, Fixed Route Planning, Scheduling & Operations and Fare Management. In both

projects, the respective project team and business subject matter experts have worked with the selected vendor, Trapeze, to lay the foundation for systems configuration design. This will enable the project teams and Trapeze to configure the systems to align with Halifax Transit's business requirements. The Paratransit project team continued to work closely with the Access-A-Bus team in Q3, gaining more insights into business processes and practices. The project team will leverage these insights to improve systems configurations, to be rolled out concurrent with the systems upgrade and user training.

A Safe and Accessible Network	
Business Plan Deliverable	**Status**
Access-A-Bus Review Implementation	In Progress
Accessible Transit Vehicle Procurement Plan	In Progress
Bus Surveillance System Upgrade	In Progress
Bus Stop Accessibility & Improvement	In Progress
AVL+ Implementation	Complete
Fare Management Solution	In Progress
Fixed Route Planning, Scheduling, and Operations Software	In Progress
Halifax Transit Technology Program	In Progress

Interconnected and Strategic Growth

Multi Year Initiative – ***"Transit Service Plan - Halifax Transit intends to offer its residents a significantly improved transit service. Guided by principles of integrated mobility, high ridership opportunity, and future sustainability, Halifax Transit is undertaking a multi-year initiative that includes a holistic and comprehensive review of the transit system and implementation of approved recommendations."***

Q3 Highlights – A number of service changes were introduced as part of the *Moving Forward Together Plan* in November 2017, including the introduction of the new Route 9 Herring Cove, the first branching route in the Halifax Transit network. This represents the first major service change associated with the roll out of the *Moving Forward Together Plan* and saw the redesign of several longstanding transit routes including the former Routes 20 Herring Cove and 9 Barrington.

On December 5th, 2017, the *Integrated Mobility Plan* (IMP) was approved unanimously by Regional Council. Halifax Transit continues to work with Transportation & Public Works as well as Planning & Development to implement directives described in the plan, including the design and implementation of transit priority corridors, and analysis of the potential for Commuter Rail on the Bedford Highway corridor.

Work on the Mumford Terminal Opportunities Assessment and the Transit Priority Measures Corridor Studies is on track for completion by spring 2018, and public engagement on the Bus Rapid Transit study took place in early February 2018.

Interconnected and Strategic Growth	
Business Plan Deliverable	**Status**
Moving Forward Together Plan Year 2 Implementation	Completed
Transit Facility Implementation Plan	Pending
Mumford Terminal Site Study	In Progress
Wrights Cove Terminal (Design)	In Progress
Bus Rapid Transit Study	In Progress
Transit Priority Measures Corridor Study	In Progress
Transit Priority Measures Implementation	In Progress

A Well-maintained Transportation Network

Multi Year Initiative – *"Transit Asset & Infrastructure Renewal - Halifax Transit will continue to promote transit as a key component of an integrated transportation system – as a competitor to the single occupant vehicle. To create an enhanced and more accessible experience for its customers, Halifax Transit will continue investment in the renewal of on-street infrastructure including construction of stop locations as well as replacement of Conventional, MetroX and Access-A-Bus vehicles and ferries."*

Q3 Highlights – Highfield Terminal received two heated shelters in December as part of a pilot project. These shelters are fully accessible and are equipped with doors to help retain the heat generated by the overhead heaters. These shelters provide improved amenities to approximately 1300 daily passengers and thus far have been very well received.

Design work on the second phase of work at Halifax Ferry Terminal was completed and the work tendered. Progress continued on the manufacture and delivery of the latest replacement ferry vessels, "Vincent Coleman" and "Rita Joe". The Vincent Coleman sailed to Halifax in late January, and became the newest member of the fleet in late February. The dedication ceremony was held March 14. Work has been initiated to refresh the Alderney Ferry Terminal pontoon and the Halifax Ferry Terminal pontoon.

Two new queue jump lanes on Windmill Road were also completed, providing an additional 575m of transit priority lanes along this busy corridor.

A Well Maintained Transportation Network	
Business Plan Deliverable	**Status**
Replace Alderney Ferry Terminal Pontoon	In Progress
Ferry Replacement	In Progress
Halifax Ferry Terminal Renovation	Phase 2 in Progress, Phase 1 Complete
Woodside Ferry Terminal Renovation	Pending
Ferry Terminal Generators	Postponed
Alternative Fuel Recommendation Report	In Progress

Q3 Service Adjustments

Effective November 27, 2017, several changes to the transit network were introduced. These include:

- Introduction of the new route 9 Herring Cove, with two branches: 9A Greystone & 9B Herring Cove, replacing Route 19 Greystone & Route 20 Herring Cove;
- Introduction of the new Route 29 Barrington, replacing the former Route 9 Barrington;
- Discontinuation of Route 6 Stonehaven;
- Route 22 service removed from Halifax Exhibition Centre; and
- Route 370 Porters Lake Pilot Project ended, removing service from Micmac Terminal.

Changes to the Alderney Ferry Schedule took place in February, 2018.

- The Alderney Ferry increased mid-day service to every 15 minutes; and
- Every half hour in the evenings after 8pm.

Performance Measures

Please see Attachment B, *Halifax Transit 2017/18 Q3 Performance Report* for performance measures and detailed route level statistics. Comparisons to previous years will begin once comparable historical data becomes available, to show relative increase/decrease. There may be a gap in some cases for several quarters.

Q3 Highlights:

- System wide On-Time Performance in the third quarter was 75%.
- Boardings by route are reported for weekdays, Saturdays, and Sundays. The average daily passenger counts this quarter were 94,077, 51,612 and 32,691 respectively.
- Departure Line call volumes reported over 7300 passengers called the departure line on a typical weekday in third quarter.
- Overall ridership increased 0.29% this quarter over last year, while revenue decreased 0.08%.
- Trips provided by Access-A-Bus increased 1.9% while the number of waitlisted clients increased 46%, due to fewer bus operators being available to assign to shifts. 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.
- This quarter 93% of customer feedback was resolved within service standards.
- The average fuel cost this quarter was 73 cents/litre, 8 cents/litre higher than the budgeted cost.
- Mean distance between vehicle failures in Q3 was 3,242 km, an improvement of 6% year to date.
- The maximum daily defects in Q3 was 45, while the average was 20 daily defects.
- Maintenance cost per kilometer was $1.21/km, two cents higher than the budget cost of $1.19/km.

Several performance measures and statistics were included beginning in Q1 2017, including on-time performance, representing the percentage of observed time-point arrivals that are between one minute early and three minutes late. Further investigation is underway reviewing the potential to report the degree of lateness across the network of routes. The Performance Measures Report will continue to evolve as new data becomes available and reporting processes are finalized.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

COMMUNITY ENGAGEMENT

No community engagement took place as part of this report.

ATTACHMENTS

Attachment A: Halifax Transit 2017/18 Business Plan Deliverables
Attachment B: Halifax Transit 2017/18 Q3 Performance Measures Report

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A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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Colin Redding, Transit Planning Technician, 902.490.6632

Halifax Transit 2017/18 Business Plan Deliverables		
Deliverable	**Description**	**Status**
Access-A-Bus Review Implementation	Demand for the Halifax Transit Access-A-Bus service has increased significantly in recent years. In an effort to leverage the potential of existing resources and processes before increasing fleet size or staff, Halifax Transit will implement the findings of the 2016/17 comprehensive review of all facets of the service, including, redesign of internal processes, scheduling software, eligibility criteria and associated application administration, service coverage, customer interfaces, staff and client training, and other available sources of support.	Staff are finalizing the RFP for a consultant to assist in re-examining the eligibility criteria for AAB as well as opportunities to review best practices of converting ambulatory passengers from AAB to conventional. The consultant will assist staff in developing travel training opportunities as well as other effective transportation delivery methods. An update on implementation strategy is anticipated following the study completion, by end of April.
Accessible-transit Vehicle Procurement Plan	To improve reliability, reduce maintenance costs and provide expanded service, Halifax Transit will develop a new specification and tender document for procurement of accessible transit vehicles. The procurement of vehicles will be based on a revised AAB Service Plan to be brought to Regional Council in 17/18; procurement will follow in 18/19.	Tender is closed and evaluations complete. An award report is currently underway for review by Finance, anticipated in April.
Bus Surveillance System Upgrade	The general objective of the Bus Surveillance System Upgrade Project is to procure, implement and establish support of a hybrid CCTV surveillance system that will improve the surveillance capabilities for each bus in the Halifax Transit fleet with high definition digital cameras while leveraging the capabilities of the currently fitted analog camera suite. The project will also introduce WiFi uploading for greater efficiency and improve analysis capabilities.	Council approval to award the RFP to the winning bidder was obtained on November 28, 2017. Legal Services have completed the contracts and Master Services Agreements, and expected to be signed by end of March 2018, Privacy Impact Assessment in progress and installation planning in progress. Completion anticipated summer, 2018.
Bus Stop Accessibility & Improvement	To improve accessibility, as well as the customer experience, Halifax Transit will be installing accessible landing pads at a number of bus stops, replacing older bus shelters, installing benches at bus stops, and conducting a pilot project to evaluate the success of a heated shelter.	Concrete work for bus stop landing pads and shelter pads is complete. Four shelters arrived late and were installed in February. All other planned shelter installations were completed in Q3, including two heated shelters for Highfield Terminal. TPW continues to install the new bus stop benches.
AVL+	Finalize the implementation of the Computer Aided Dispatch/Automated Vehicle Location system to provide improved service reliability and real time information to the travelling public.	All project activities have been completed

	Additional functionality will be applied to the base CAD/AVL system to add value. Customers will be able to confirm the location of a bus using real-time data supplied to various 3rd-party web and mobile application providers. Automated stop announcements and destination sign integration will improve the quality of the service provided.	
Fare Management	To increase revenues, increase operator safety, and provide timely data for management decisions, Halifax Transit will begin implementation of a fare management solution. Validating fareboxes and back office software will be installed; future features may include easy, electronic fare payment, automated transfers, smart fare technology, electronic web purchasing, fare vending machines and re-loadable smart cards.	The project team and business subject matter experts have started worked with the selected vendor, Trapeze, to lay the foundation for systems configuration design.
Fixed Route Planning, Scheduling and Operations	The primary objective of the Fixed Route Planning, Scheduling, and Operations project is to implement a Planning, Scheduling, and Operations software solution that enables Halifax Transit to operate more efficiently. The existing solution is not capable of supporting the streamlined existing or new business processes required by Halifax Transit.	The project team and business subject matter experts have started worked with the selected vendor, Trapeze, to lay the foundation for systems configuration design.
Halifax Transit Technology Program - Implementation, Transition, & Support	The Halifax Transit Technical Services team will assist in the planning and implementation of the various projects associated with the Halifax Transit Technology Program. As the project deliverables associated with the Halifax Transit Technology Program are completed, ongoing support and maintenance will be transitioned from the project team to the Halifax Transit Technical Services team.	The program team continues to provide assistance to delivery of three concurrent projects: • Fixed Route Planning, Scheduling and Operations • Fare Management • Paratransit
Moving Forward Together Plan Year 2 Implementation	To improve the efficiency and effectiveness of the transit network, Halifax Transit will proceed with network design changes, including removal of service, introduction of new service, and changes to existing routes, as part of the implementation of the Moving Forward Together Plan.	November 2017 changes were successfully implemented. Work underway on service changes anticipated for August 2018, pending the approval of the 2018/19 Annual Service Plan.
Transit Facility Implementation Plan	To provide predictability and transparency, a master planning exercise will take place to provide guidance as to where future investment in transit facilities, including terminals and Park & Rides, is required.	Work is underway on the tender to develop the Transit Facility Implementation Plan, including the completion of condition assessments for Halifax Transit assets.
Mumford Terminal Site Study	The existing Mumford Terminal is overcapacity and in need of replacement to improve the operation of the facility, the customer experience, and to allow for future service expansion. A study will be undertaken to determine the best location for a new terminal.	Staff continue to work with the consultant on refining the list of candidate sites. It is anticipated that this project will be completed in spring 2018.

Wrights Cove Terminal	To enable implementation of the Moving Forward Together Plan and improve the connectivity of the Halifax Transit network, Halifax Transit will continue preparations for the Wright's Cove Terminal in cooperation with Operations Support.	Functional design was completed in summer 2017. Work is underway to tender design.
Bus Rapid Transit Study	To build upon the outcomes of the Integrated Mobility Plan, and improve the reliability and attractiveness of transit service, a study will be conducted to analyze the opportunities and feasibility of implementing bus rapid transit in Halifax.	Public engagement on this project took place in February 2018, and it is anticipated that this project will be completed in spring 2018.
Transit Priority Measures Corridor Study	The Moving Forward Together Plan identified the need for transit priority measures on both Gottingen Street and Bayers Road to have an immediate and positive impact on the reliability of the transit network. A study will be conducted to analyze and design appropriate measures for these two corridors.	Recommended functional designs for both the Bayers Road and Gottingen Street were brought forward to Transportation Standing Committee February 2018. Public engagement on the functional design options for the Robie Street and Young Street Transit Priority Corridors took place in February 2018.
Transit Priority Measures Implementation	To improve the reliability of the transit network, and reduce the impact of traffic congestion on transit service, Halifax Transit will implement approximately eight to ten transit priority measures, in conjunction with Road Operations & Construction and Traffic Management.	Work on the two Windmill Road queue jump lanes are complete. A new transit signal priority signal was introduced at the intersection of Spring Garden Road and Summer Street.
Replace Alderney Ferry Terminal Pontoon	The Alderney Ferry Terminal pontoon is nearing the end of its useful life. The steel hull pontoon is costly to maintain and deckhouses on these pontoons are restricted in the space available to accommodate overhead doors suitable for an industrial setting in sometimes harsh environmental conditions. Using Public Transit Infrastructure Fund funding, the Alderney pontoon will be replaced with a unit that incorporates materials and a deckhouse structure that is more suitable for the operating environment and will result in a significant reduction in operating costs.	An assessment of the condition of the Alderney Ferry pontoon took place in fall 2017 and it was determined that the condition of the pontoon was quite good and does not require replacement at this time. As a result, at the December 12, 2017 meeting of Regional Council, staff were directed to amend the scope of this project to reflect the refurbishment of the Alderney Ferry Terminal pontoon and the Halifax Ferry Terminal pontoon. Staff anticipate tendering the refurbishment of the pontoons in spring 2018.
Ferry Replacement	To support sustainable ferry operations into the future by implementing the Ferry Replacement project with the construction, fit out and certification of two replacement ferries, with a funding contribution from the federal government's Public Transit Infrastructure Fund.	The Vincent Coleman was delivered in January 2018 and began service late February. The dedication ceremony took place March 14. The Rita Joe is under construction and will be delivered in fall 2018.

Halifax Ferry Terminal Renovation	To improve the customer experience at the Halifax Ferry Terminal, the recapitalization work will continue, and will include elements such as the security kiosk and washroom renovations.	Phase 1 renovations are complete. Phase 2 renovations began January 11, 2018.
Woodside Ferry Terminal Renovation	The Woodside Ferry Terminal requires significant rehabilitation to all aspects of the building, including envelope, mechanical and electrical systems, and customer waiting areas. In addition, with the expansion of the Halifax Transit ferry fleet, additional berthing space is required. In 17/18, with assistance from Operations Support, will complete the detailed design work required to move forward with these improvements.	Work is underway to address immediate structural repairs. Detailed design work for the building as a whole has not yet commenced.
Ferry Terminal Generators	To ensure the reliability and consistency of service provision, generators will be installed at all three existing ferry terminals as a source of back-up power.	Through preliminary analysis and design work, it was determined that each of the generators will cost approximately $400,000 installed. As a result, only one generator could be installed with the funding available. A request to reduce the scope of this project to one generator for $400,000 was not approved under the PTIF program. This project has been postponed.
Alternative Fuel Recommendation Report	To reduce operating cost and carbon footprint; Halifax Transit will produce a report recommending the most appropriate mix of fuels to be used in Halifax Transit's fleet. This recommendation will guide Halifax Transit's procurement and replacement strategy for the next twenty-five years.	The final report of the Electric Bus Feasibility Study was received in December; a recommendation report was brought forward to Regional Council in early March 2018.

2017/2018 – Q3
Performance Measures Report

HALIFAX
TRANSIT

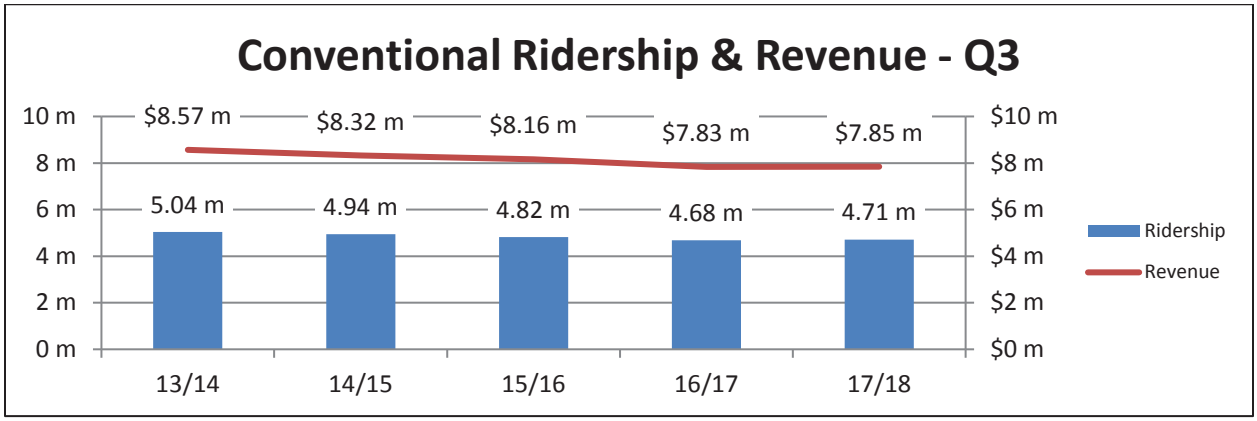
Contents

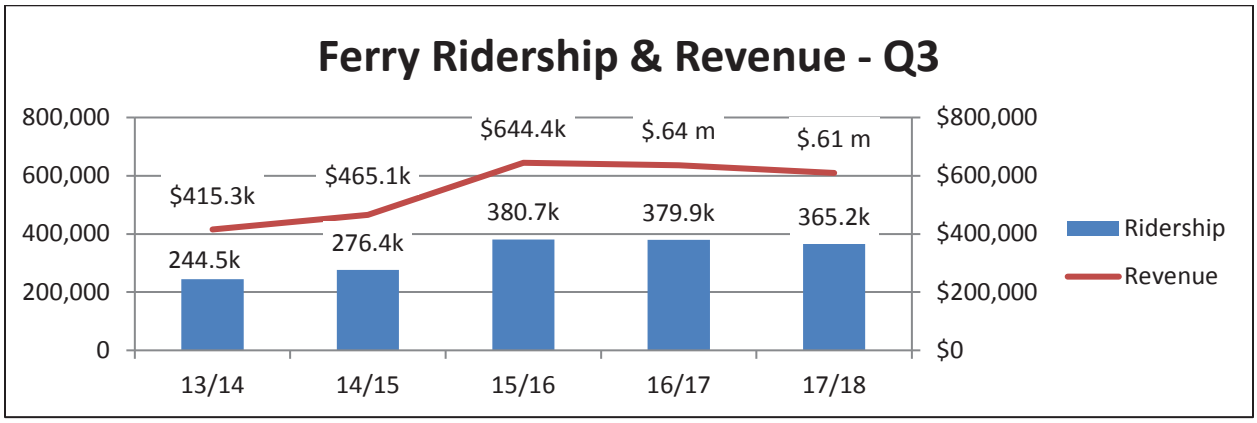
Ridership & Revenue

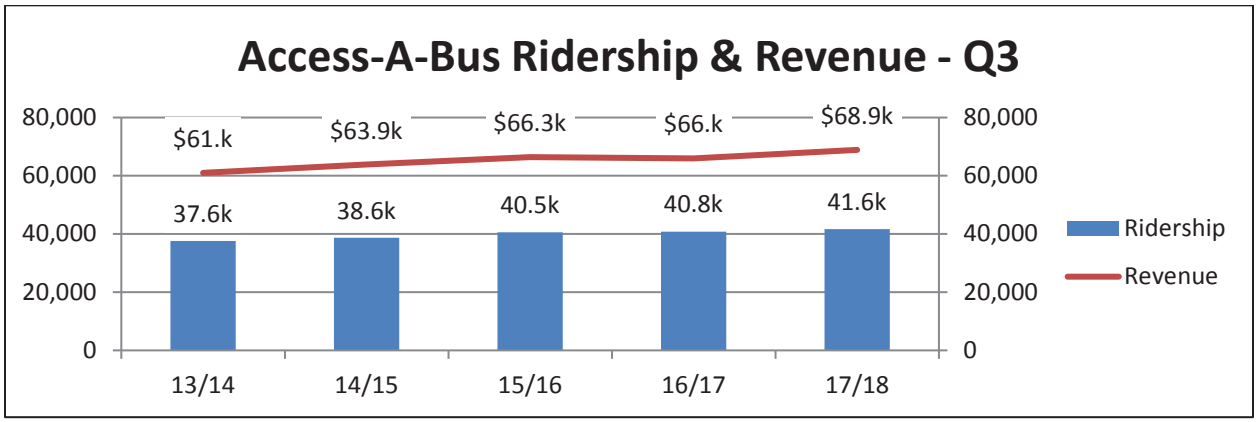
Revenue and ridership measures demonstrate how well transit services were used during the past quarter in comparison to the same period of the previous year. Ridership figures are calculated based on revenue generated by fare type.

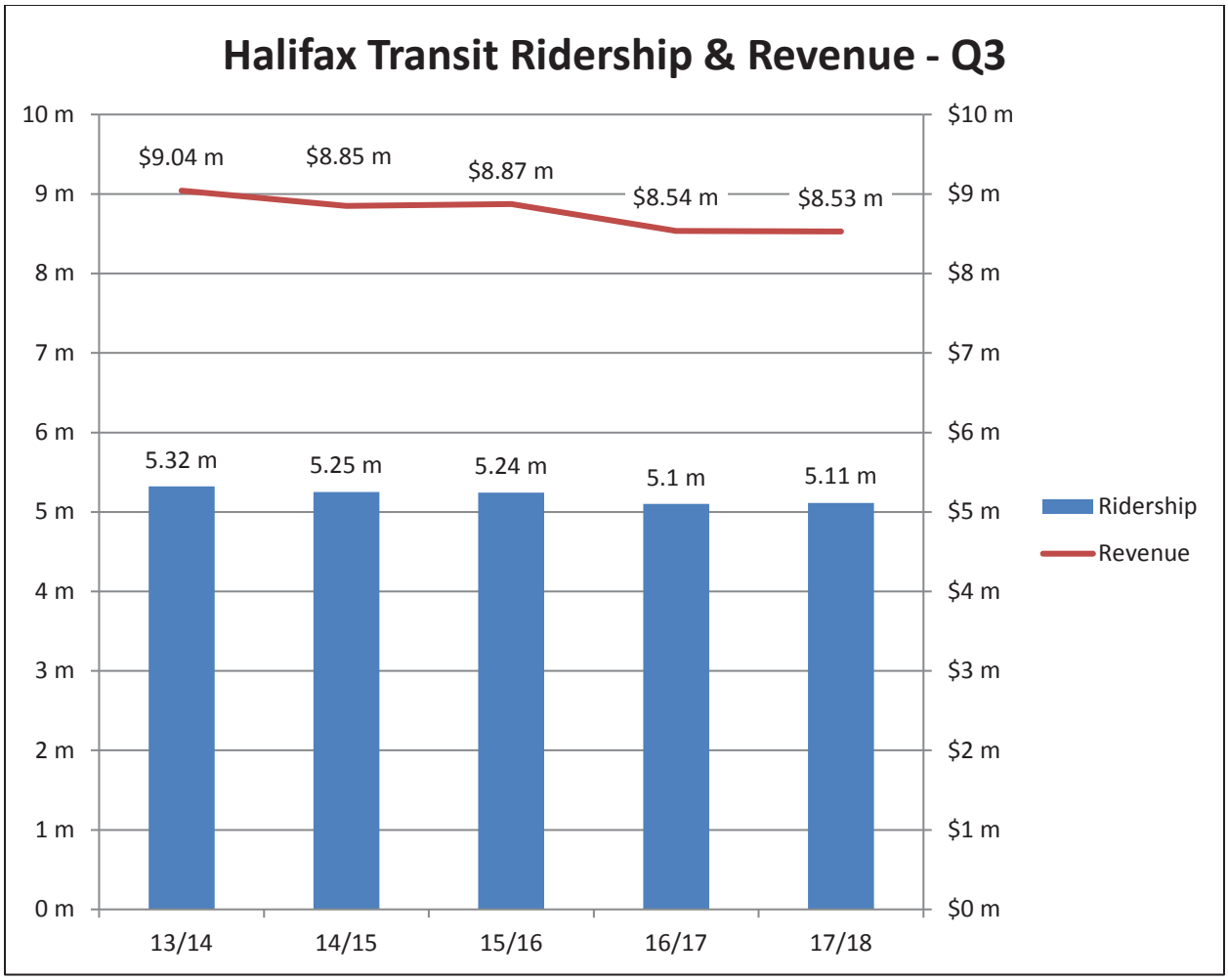
In the third quarter, Conventional ridership increased 0.61% from last year, Ferry ridership decreased 3.85% and Access-A-Bus ridership increased 2.13%. Overall, system wide ridership increased in the third quarter by 0.29% compared to last year. Revenue this quarter decreased 0.08% from last year, which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

Historical Revenue & Ridership



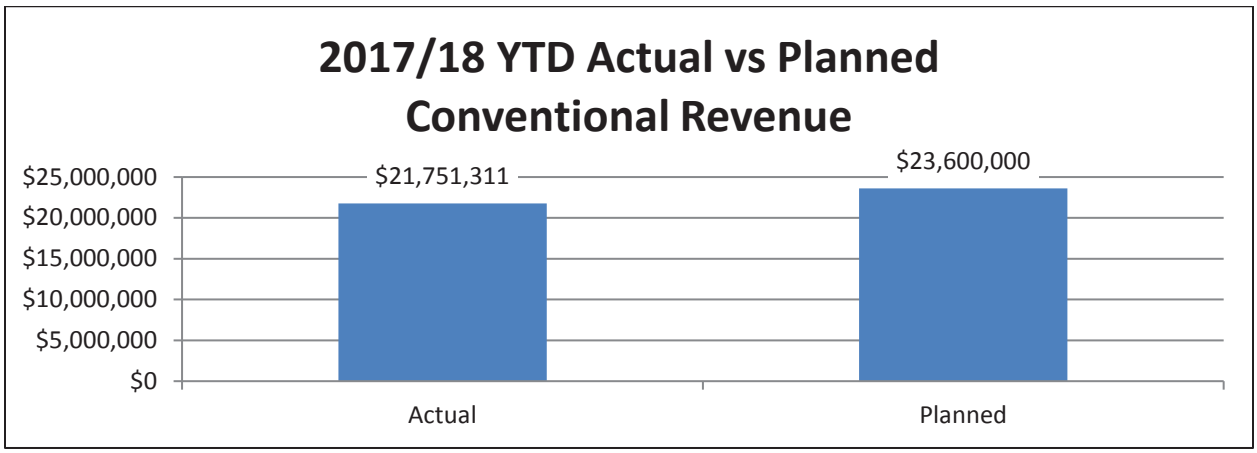


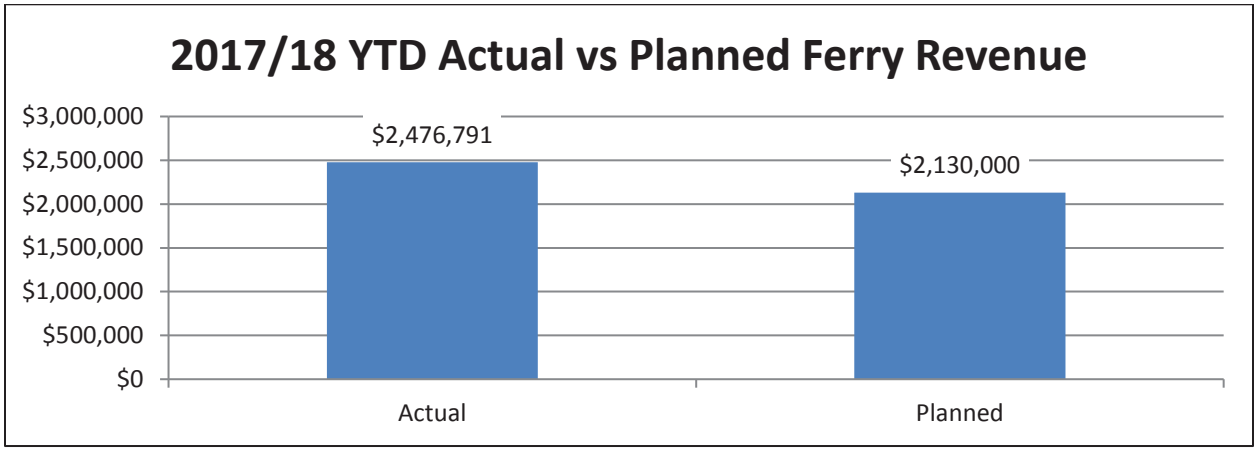


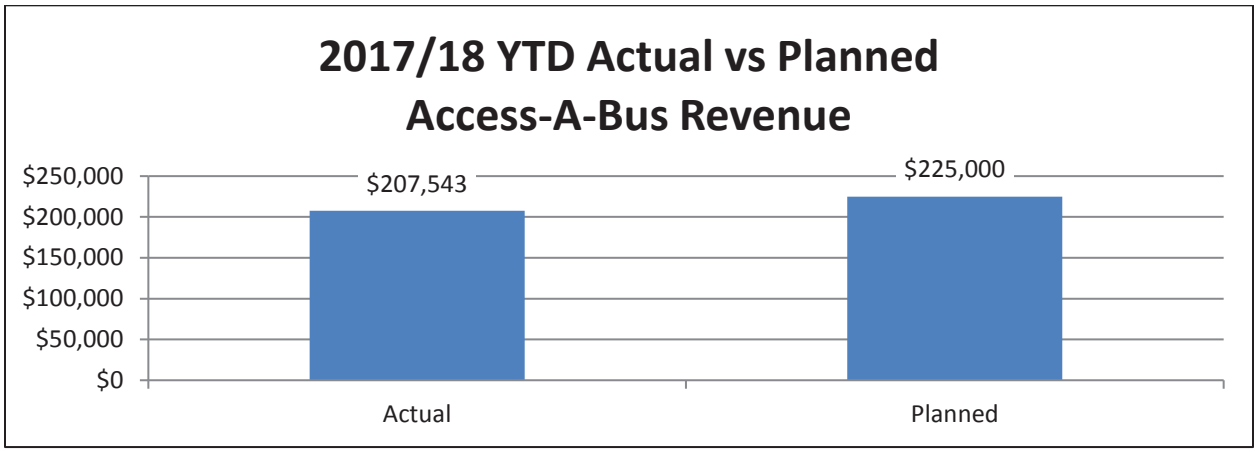

Halifax Transit Ridership & Revenue - Q3
10 m
9 m
8 m
7 m
6 m
5 m
4 m
3 m
2 m
1 m
0 m
$10 m
$9 m
$8 m
$7 m
$6 m
$5 m
$4 m
$3 m
$2 m
$1 m
$0 m
$9.04 m
$8.85 m
$8.87 m
$8.54 m
$8.53 m
5.32 m
5.25 m
5.24 m
5.1 m
5.11 m
13/14
14/15
15/16
16/17
17/18
Ridership
Revenue

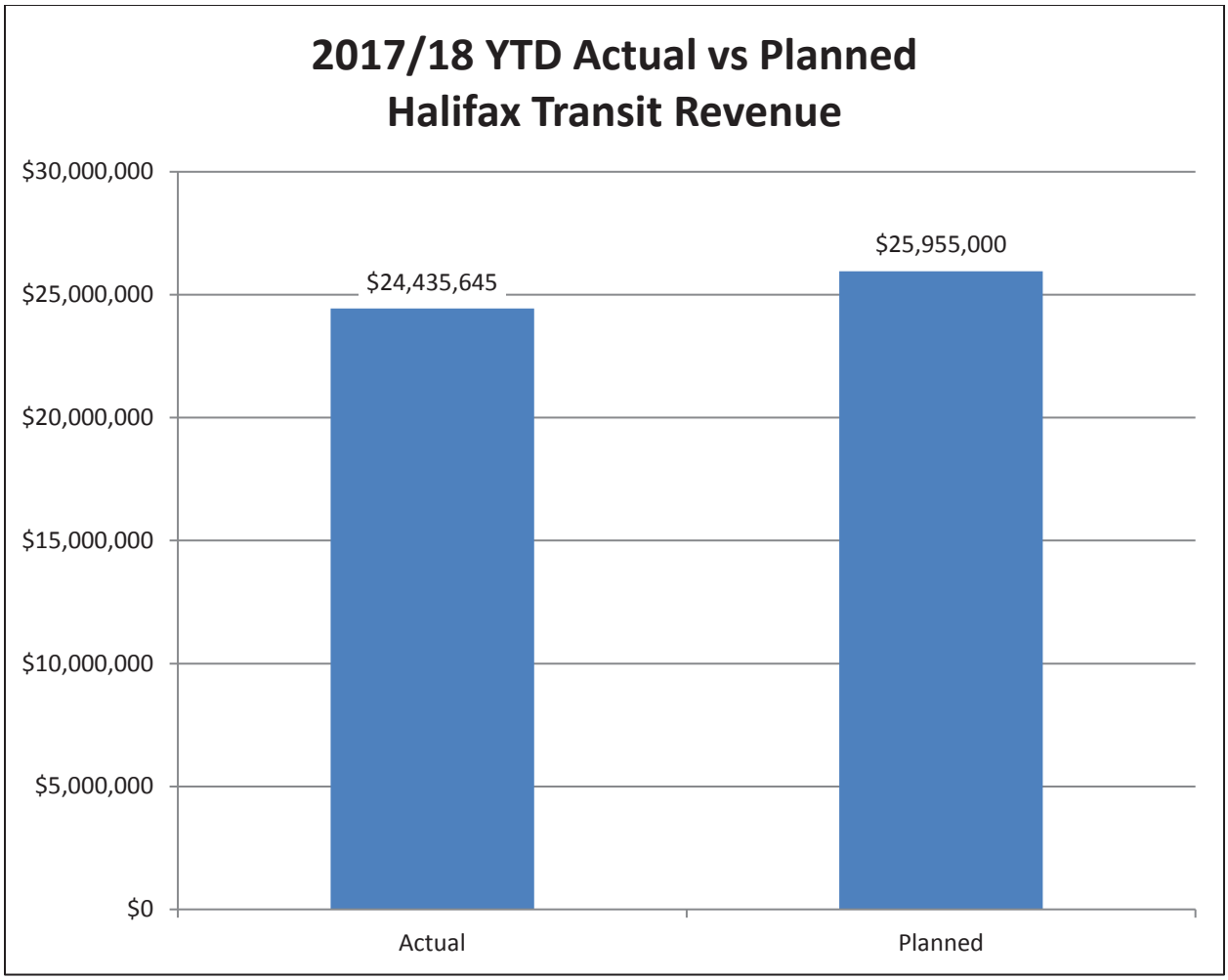
Revenue – Actual vs. Planned

The following charts provide an indication of how much revenue has been generated by each service type and by Halifax Transit 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
$30,000,000
$25,000,000
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$0
$24,435,645
$25,955,000
Actual
Planned

Mean Distance Between Failures

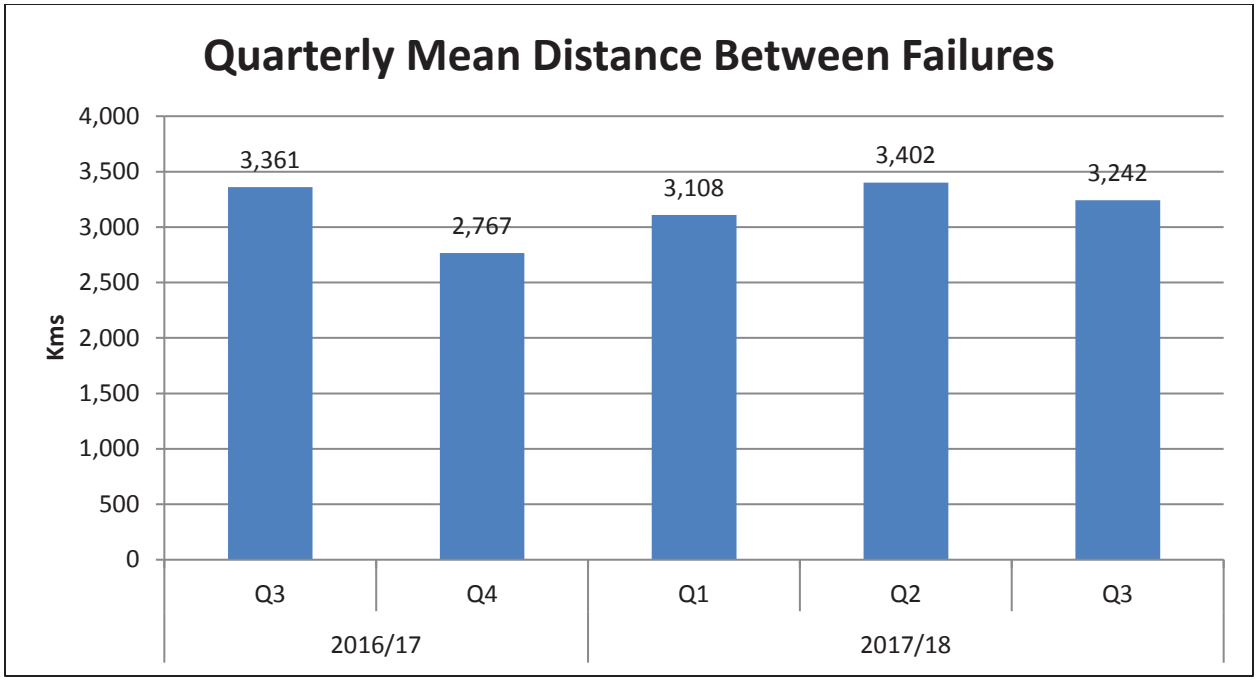
Halifax Transit's mean distance between failures (MDBF) indicates the number of service truck calls and the number of tows that have resulted from a vehicle breakdown. This metric is not comparable with jurisdictions like Toronto Transit Commission (TTC) and Calgary Transit; these properties do not consider 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.

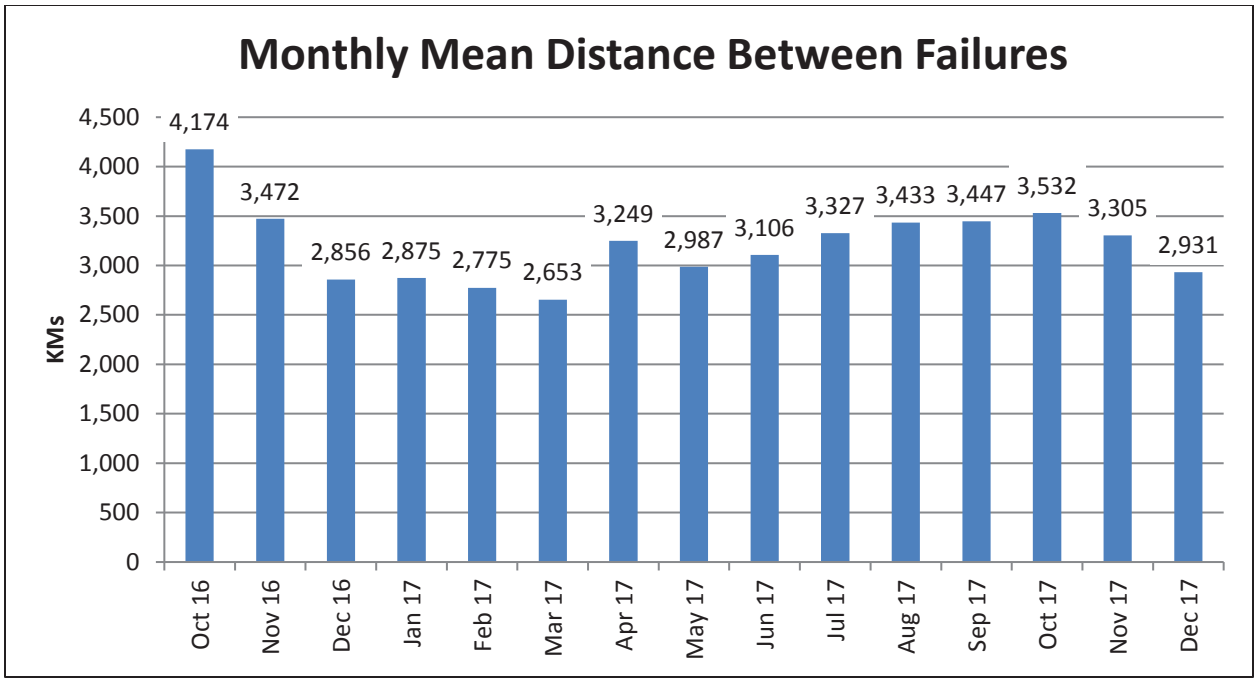
Halifax Transit implemented MDBF in 2014 before systems such as Fleet Focus and Trapeze AVL were implemented in 2015 and 2017; without these systems it was difficult to categorize the information based on a severity index. Halifax Transit has continued to report all service impacting factors because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

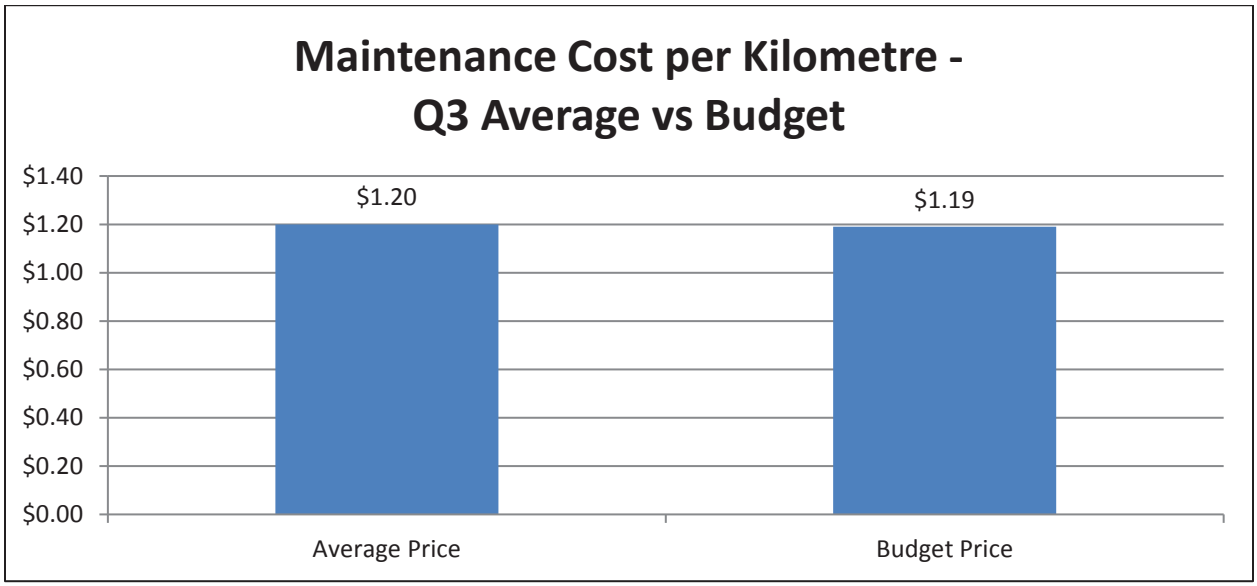
This quarter, MDBF was 3,242 kilometres per defect. In relation to prior quarters, the mean distance between failures is within the expected threshold, with no improvement over third quarter last year. However, comparing all three quarters for 2017/18 versus 2016/17, the mean distance between failures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





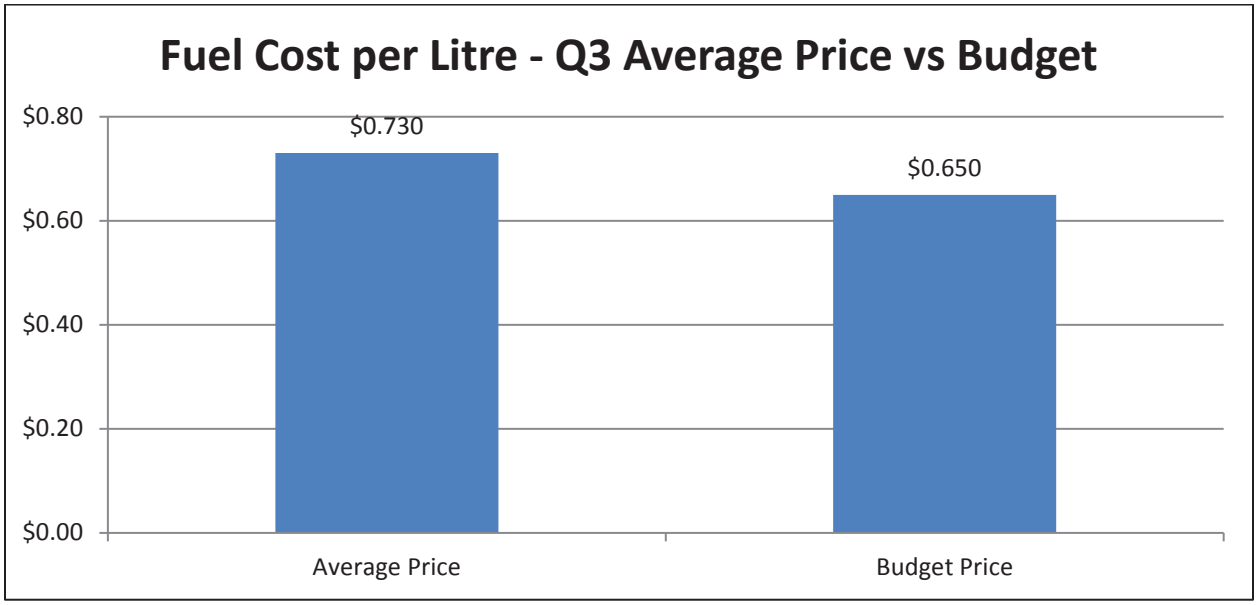
Bus Maintenance Cost – Quarter Average vs Budget

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

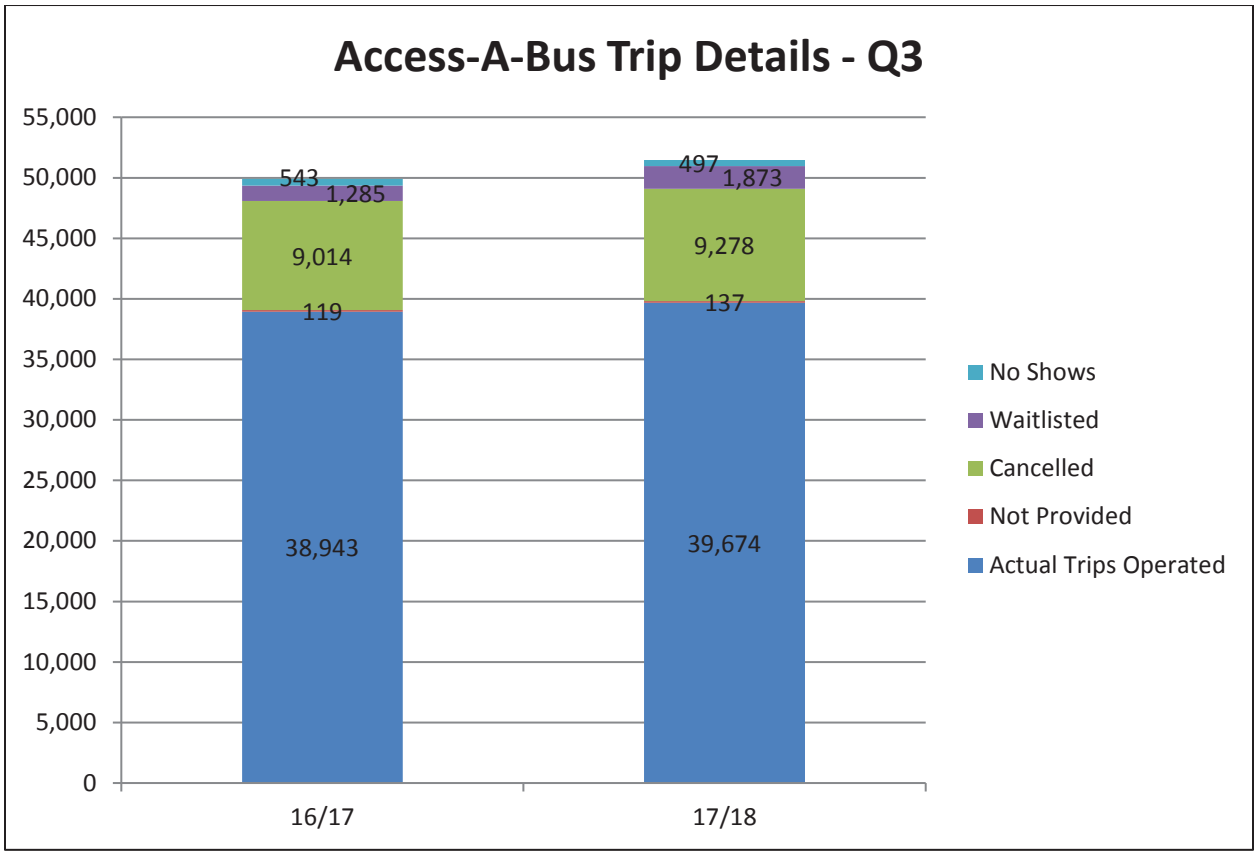
The budgeted fuel cost for 2017/18 was set at 65 cents/litre. Average fuel cost this quarter was 73 cents/litre, eight cents per litre higher than the budgeted cost.



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.

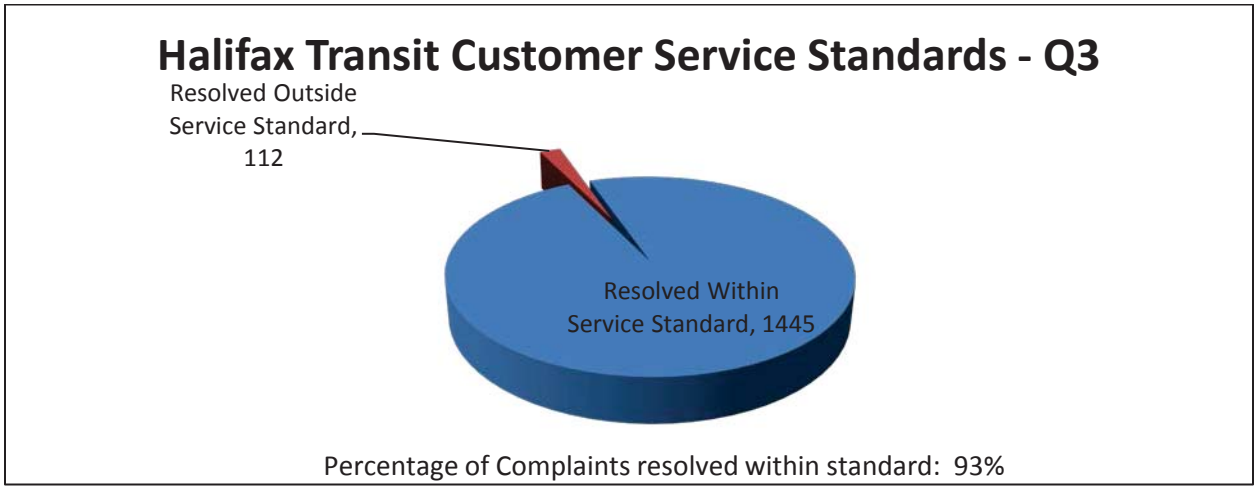


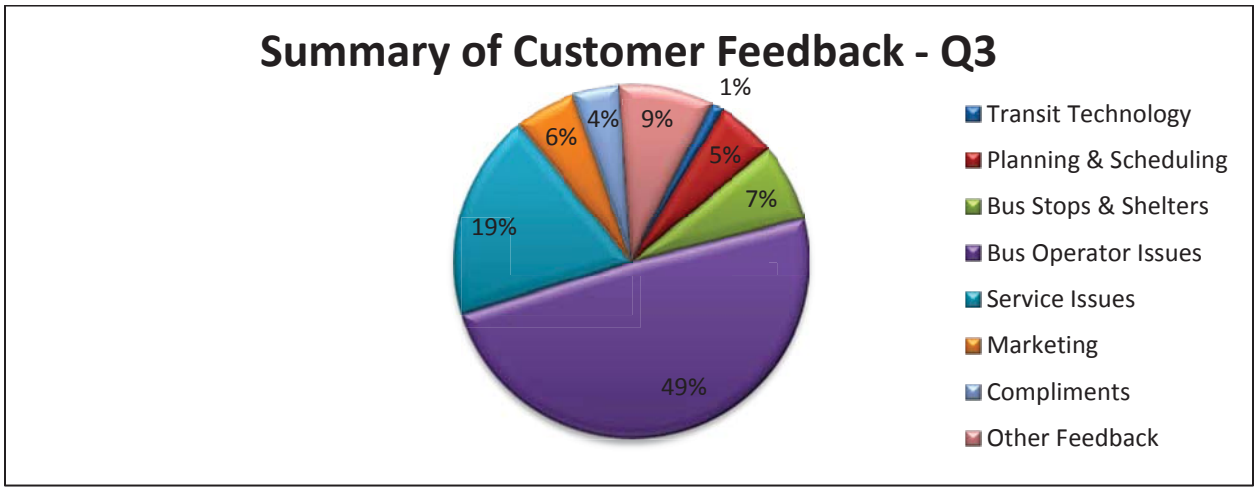
Customer Service – All Services

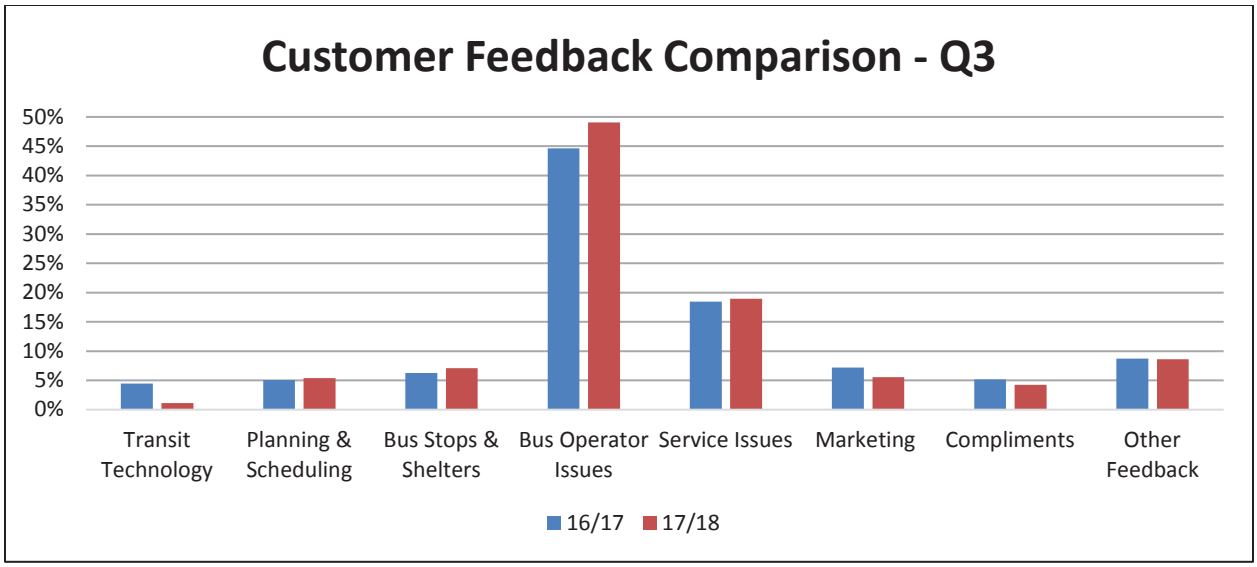
Customer service statistics are measured monthly using the Hansen Customer Relationship Management software along with Crystal Reports. Feedback is first categorized by subject matter and then divided into two categories: feedback resolved within service standard and feedback resolved outside service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

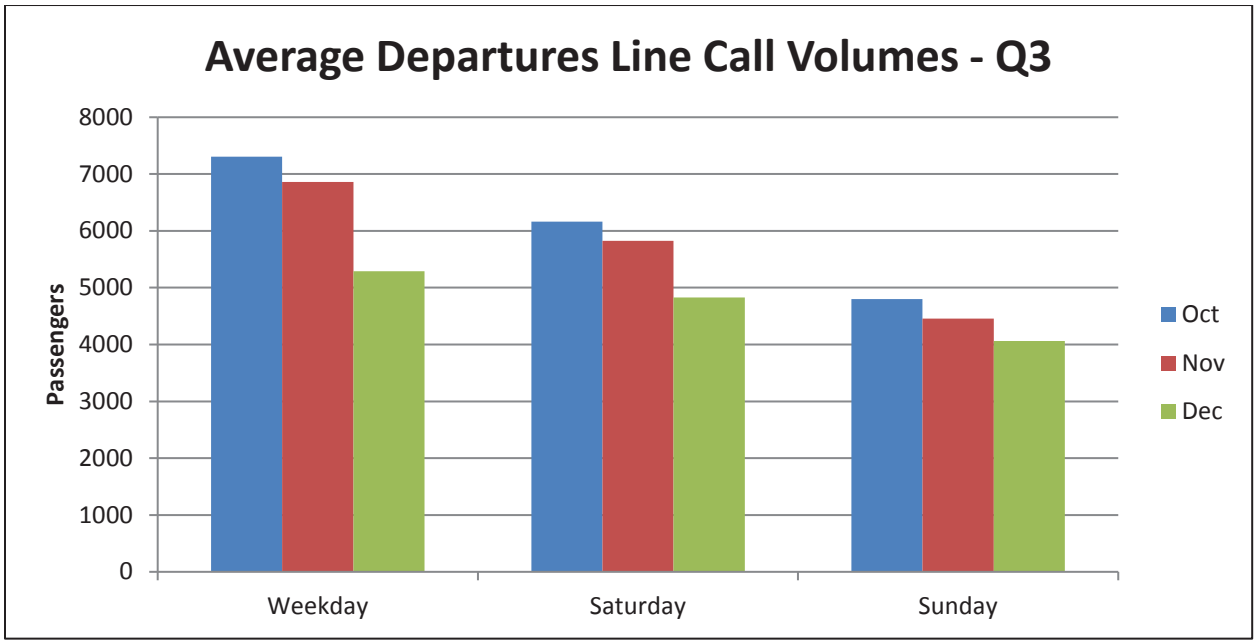
This quarter, 49% of feedback received was related to bus operators and 19% regarding service issues. The remaining 32% is comprised of feedback regarding planning and scheduling, bus stops and shelters, marketing, compliments and other miscellaneous comments. Halifax Transit aims to address 90% of feedback 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
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Transit Technology
Planning & Scheduling
Bus Stops & Shelters
Bus Operator Issues
Service Issues
Marketing
Compliments
Other Feedback
16/17
17/18


Average Departures Line Call Volumes - Q3
Passengers
8000
7000
6000
5000
4000
3000
2000
1000
0
Weekday
Saturday
Sunday
Oct
Nov
Dec

Boardings

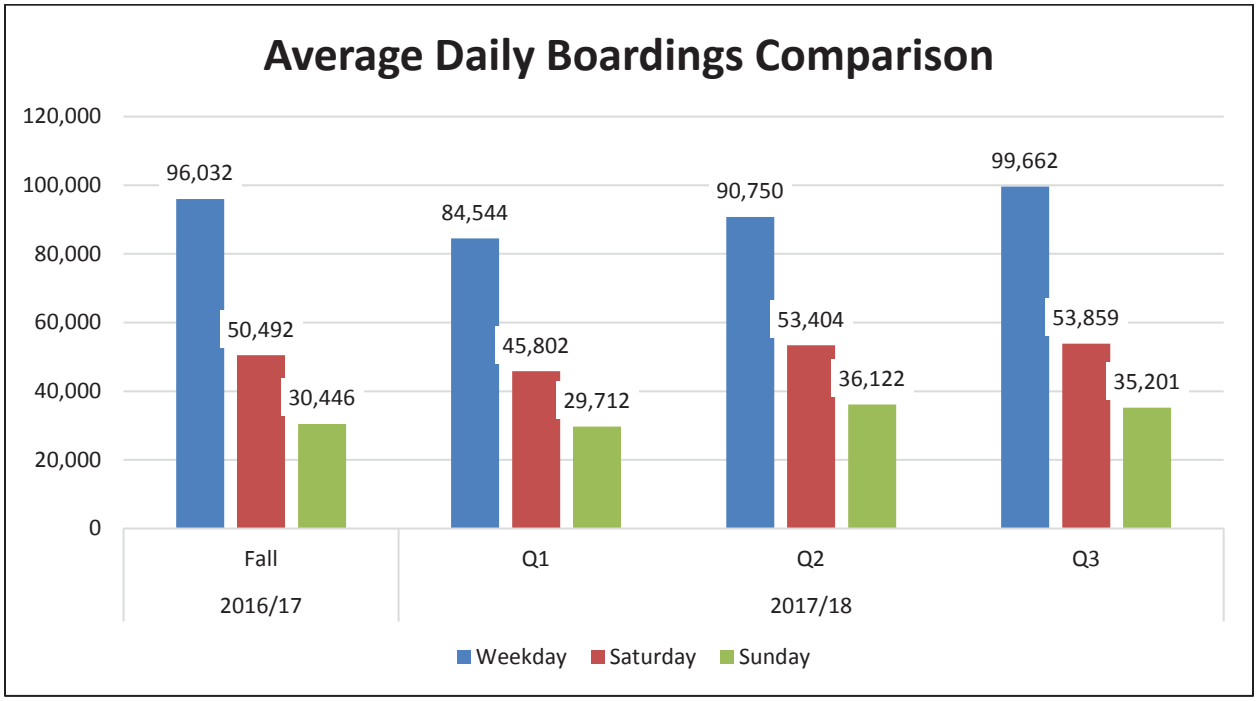
Automatic Passenger Counter (APC) data is now being been used to report bus ridership statistics. The APCs provide data within a 90% degree of accuracy. Boardings by Route demonstrate passenger usage during the past quarter. APC data has been collected since September 2016. Comparisons of quarterly ridership 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 94,077 ± 6,578 (7.0% variance). Average Saturday boardings this quarter were 51,612 ± 5,206 (10.1% variance). Average Sunday boardings this quarter were 32,691 ± 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

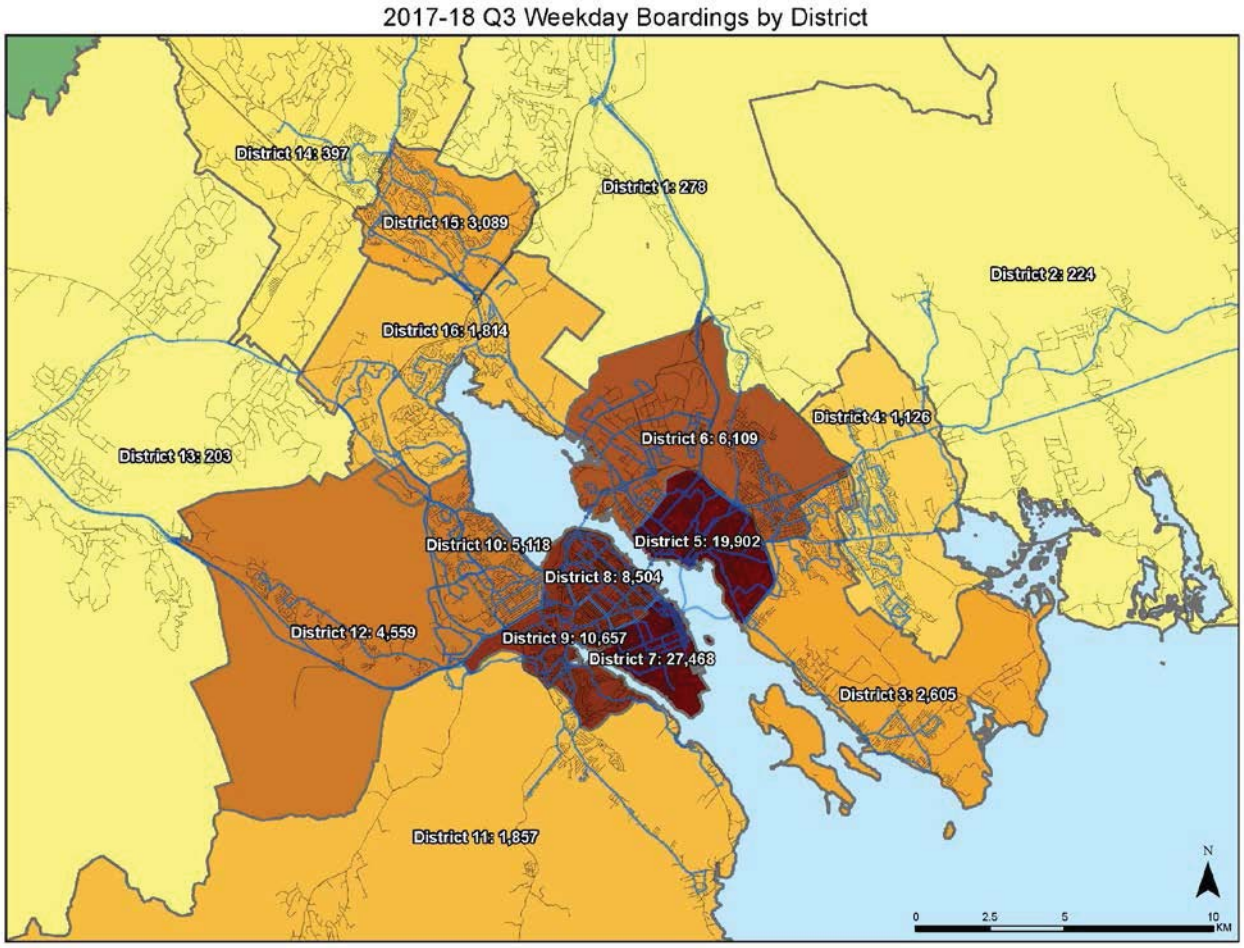
Q3 2017/18 Average Daily Peak Boardings by Route				
Route	Weekday		Saturday	Sunday
	Boardings	Peak Pass/Trip	Boardings	Boardings
31	290	32		
32	519	29		
33	176	41		
34	722	42		
35	279	31		
78	110	8		
79	124	10		
84	951	35		
85	132	33		
86	131	33		
159	797	19		
185	1,150	25		
194	314	14		
320	529	15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

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

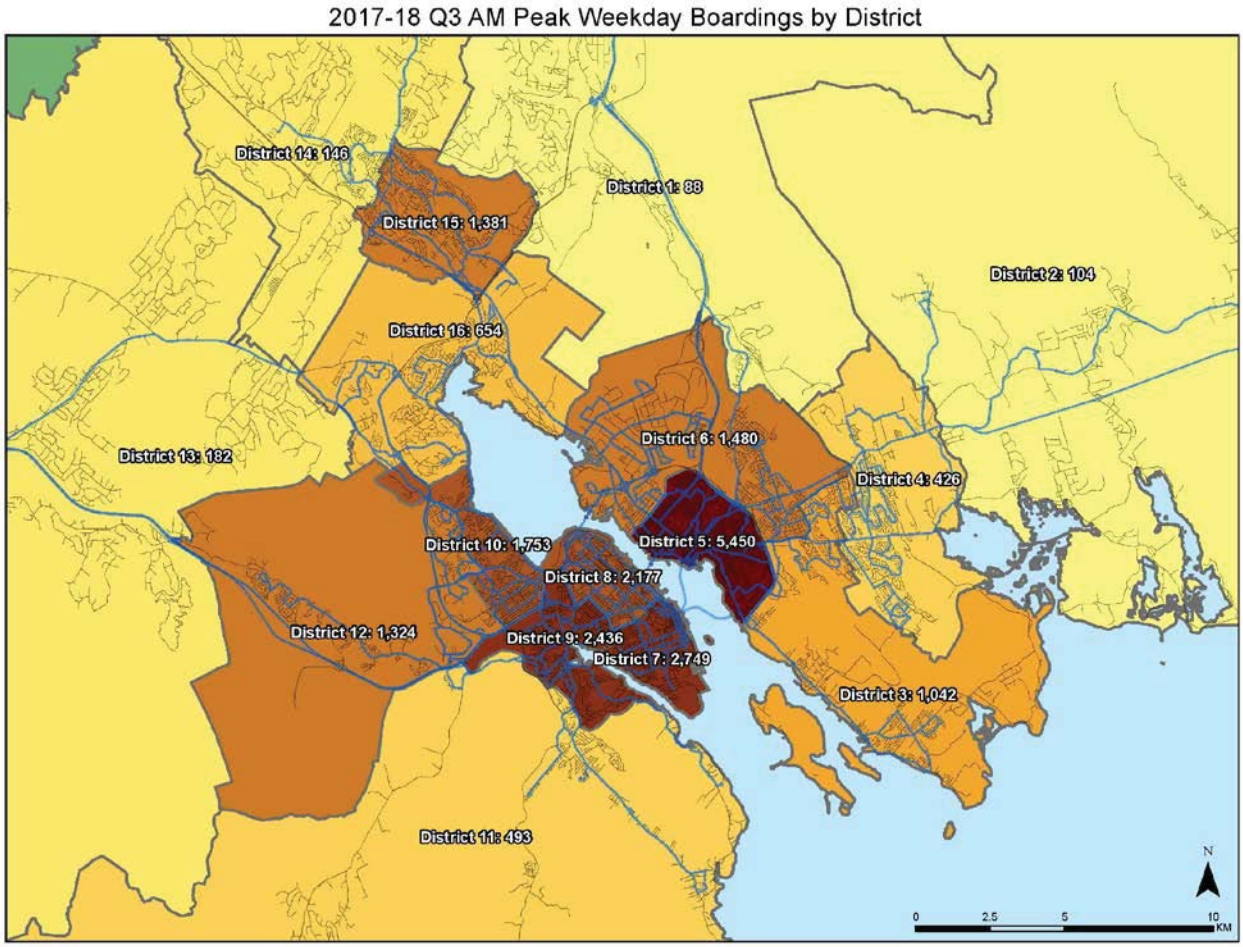
Boardings by District

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



Weekday Boardings by District – AM Peak Period



Passengers per Hour

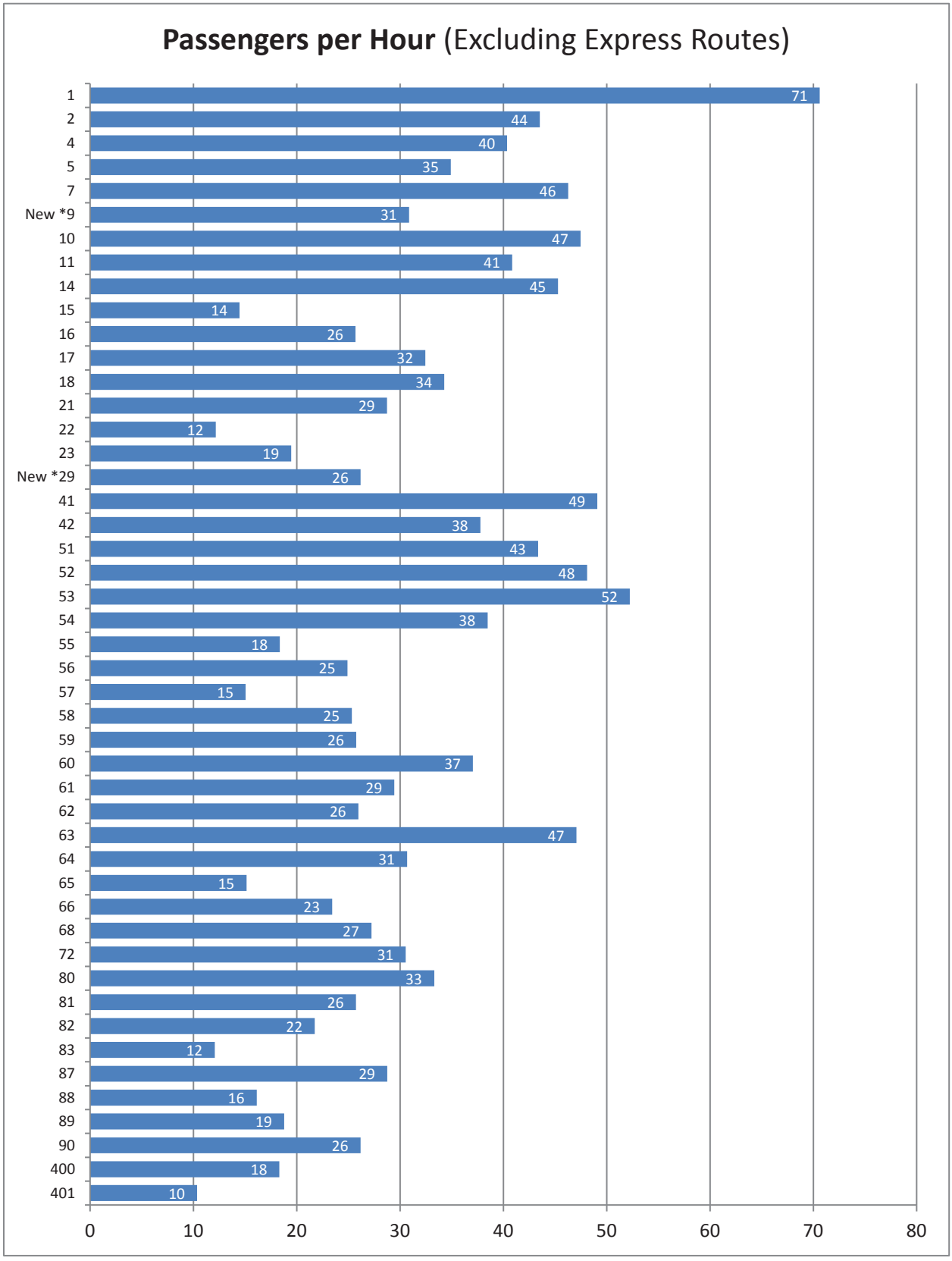
Passengers per hour measures the volume of passengers carried per service hour by route. Due to differences in service model/design, Express Routes are measured instead by passengers per trip. Ridership fluctuates significantly by season and therefore figures will be compared to the same quarter in the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

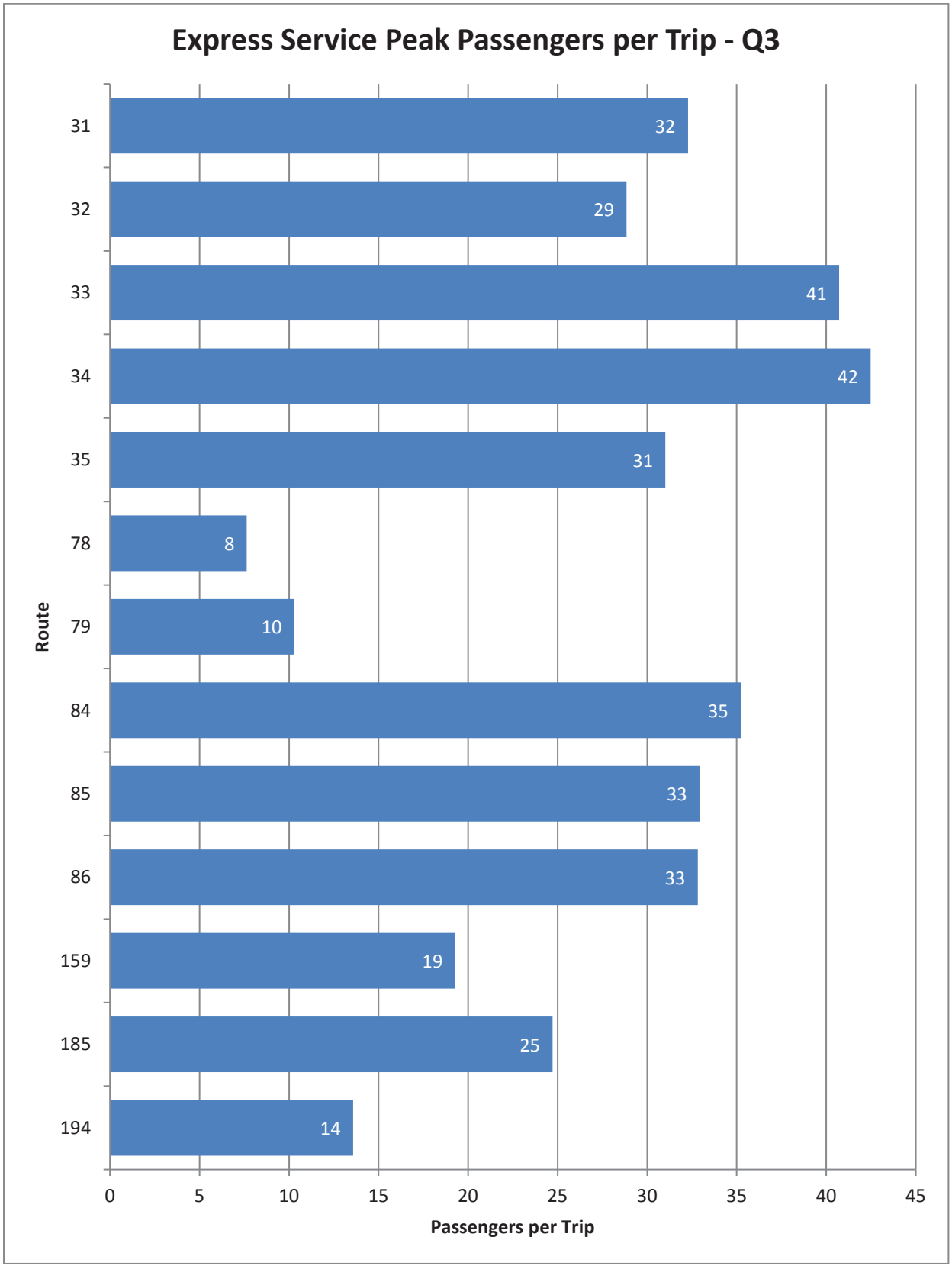
Route 6 Stonehaven and Route 9 Barrington were discontinued November 26, 2017 and did not run for the entire quarter. As such, passenger data for these routes is not comparable and has not been shown. On November 27, 2017, new Route 9 Herring Cove replaced service on the former Route 19 Greystone and 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.

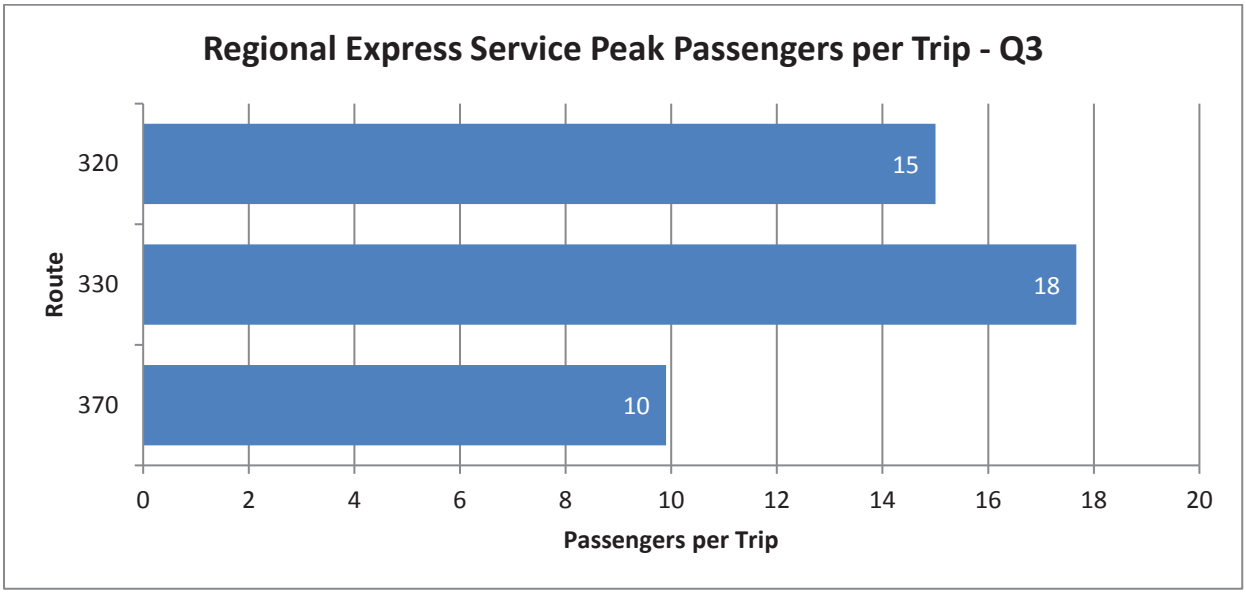
Passengers per Hour by Route



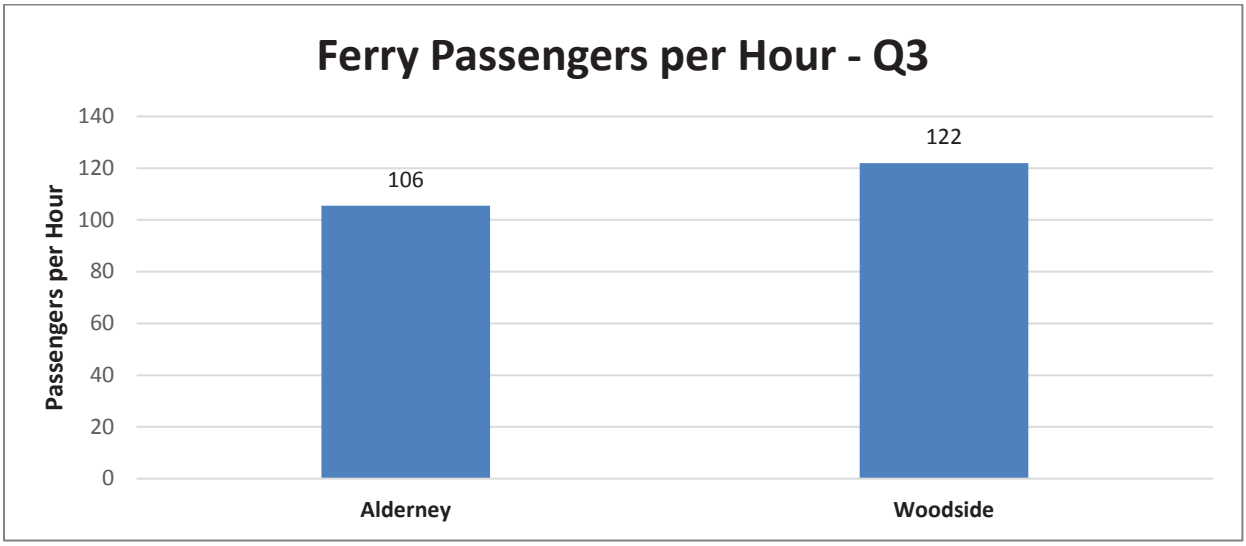
Express Service Peak Passengers per Trip



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.

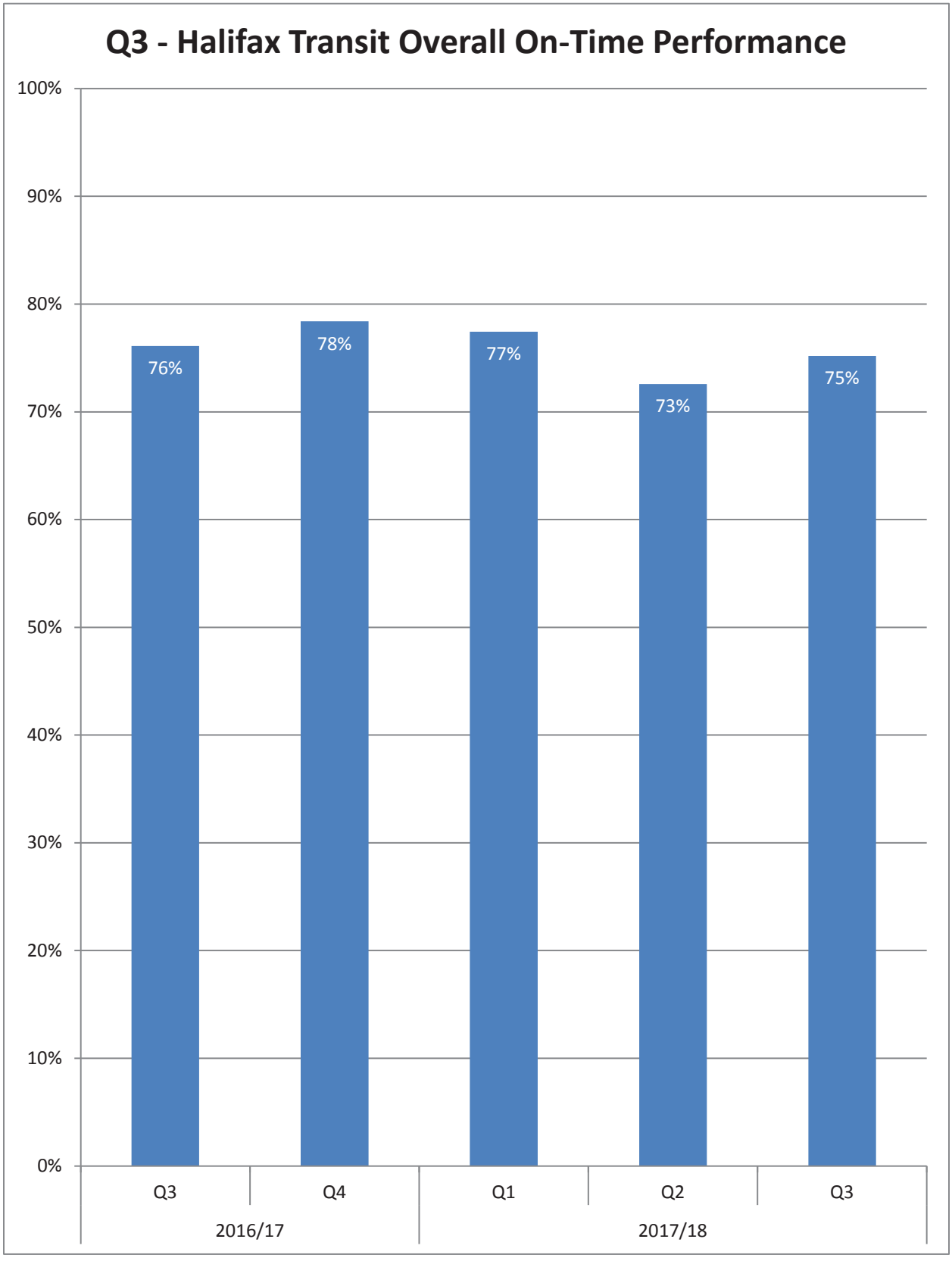
On-time performance continued to be impacted in the third quarter, by a number of construction projects still underway. Compared to third quarter last year, on-time performance decreased by 1%, which was anticipated due to the increased congestion resulting from these major construction projects. The 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.

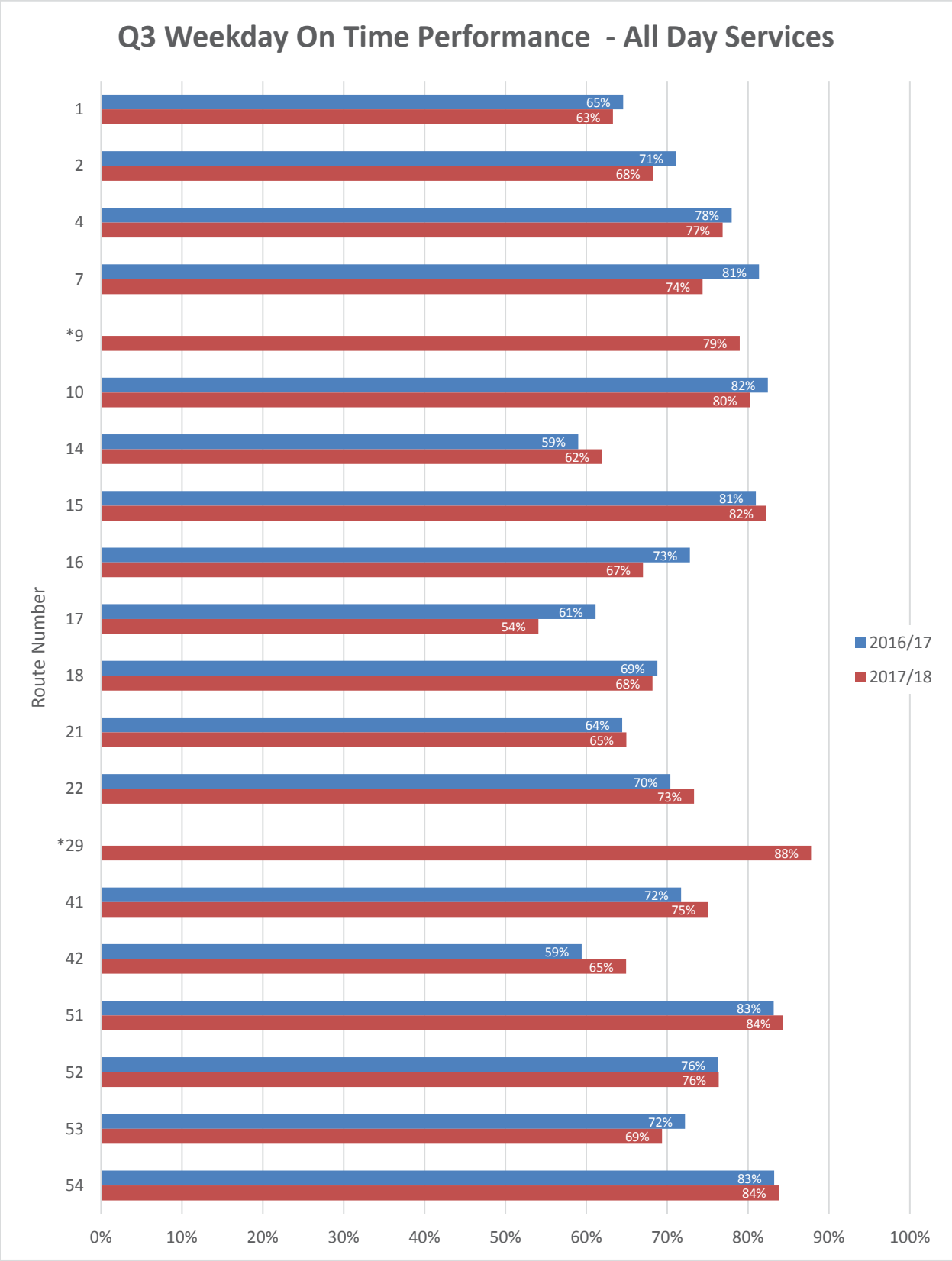
- The Leiblin Drive Wastewater Upgrade Project
    - Project completed November 24, 2017
    - Leiblin Drive was closed between Carnation Crescent and Guildwood Crescent.
    - Route 14 was detoured to service Leiblin Drive as far as the first turn onto Birchfield Crescent and return.

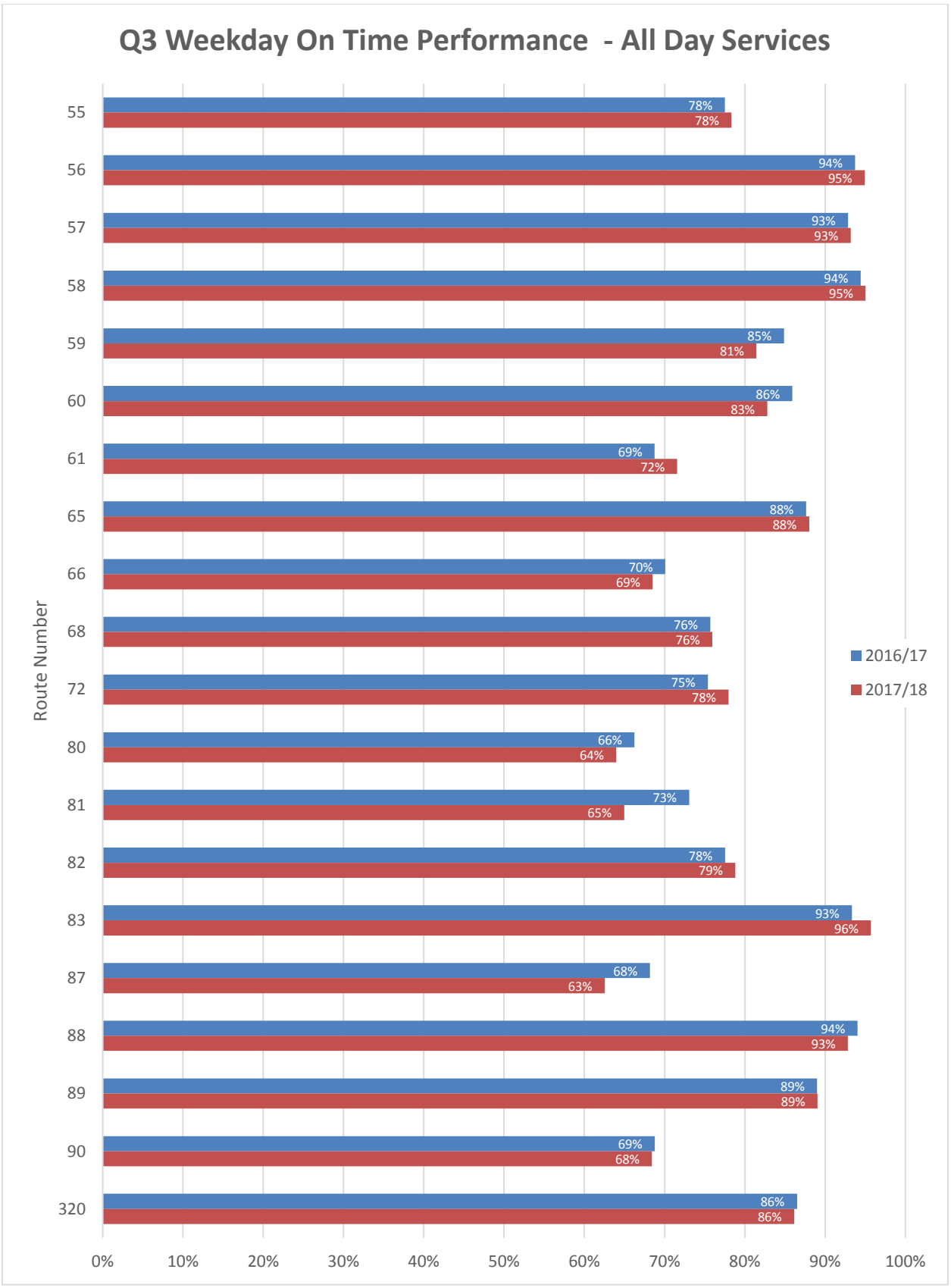
Route 6 Stonehaven and Route 9 Barrington were discontinued November 26, 2017 and did not run for the entire quarter. As such, on-time performance data for these routes is not comparable and has not been shown. On November 27, 2017, new Route 9 Herring Cove replaced service on the former Route 19 Greystone 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.

Overall Network On-Time Performance



Weekday On-Time Performance – All Day Services




Q3 Weekday On Time Performance - All Day Services
Route Number
55
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72
80
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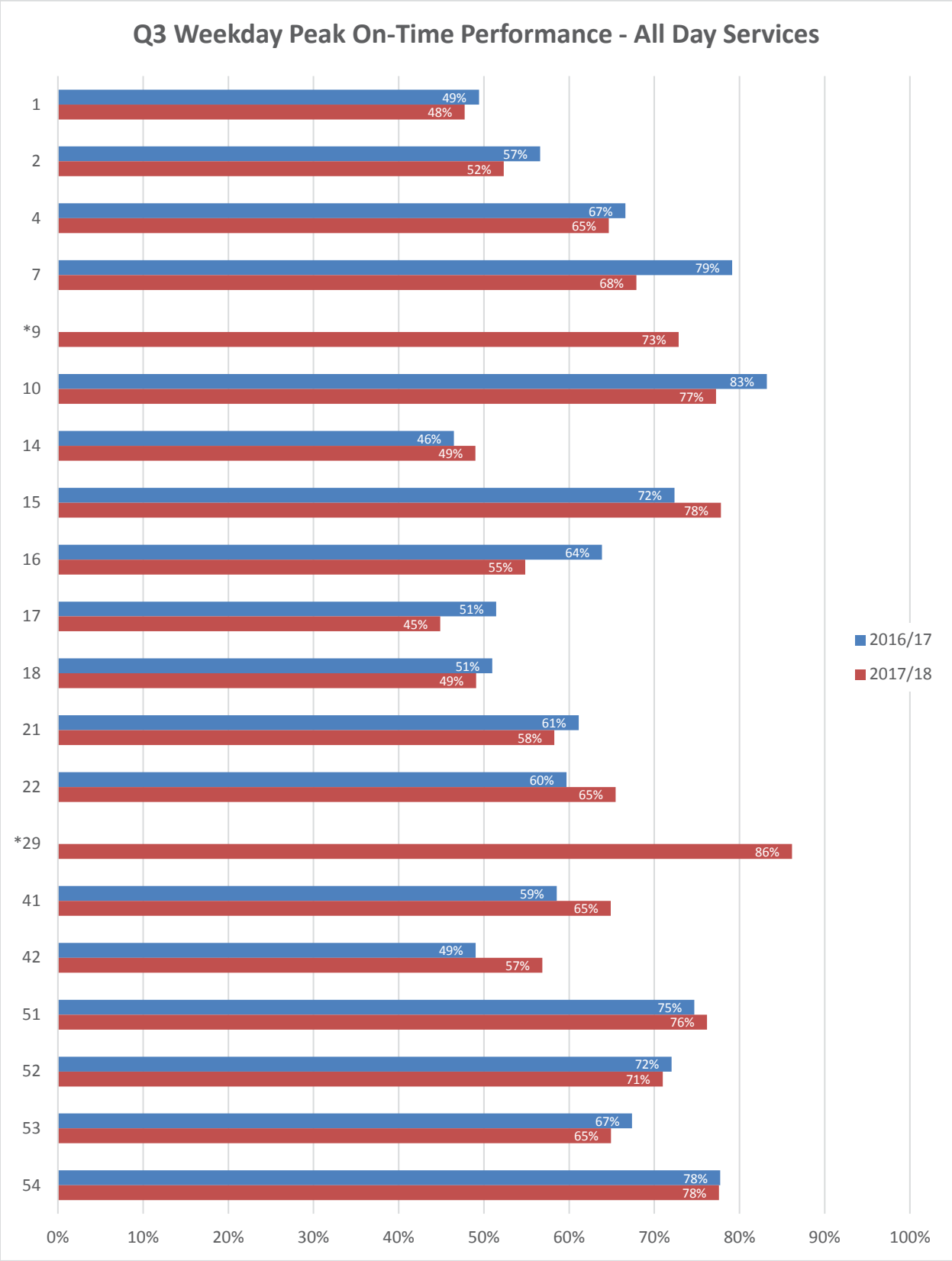
82
83
87
88
89
90
320
78%
78%
94%
95%
93%
93%
94%
95%
85%
81%
86%
83%
69%
72%
88%
88%
70%
69%
76%
76%
75%
78%
66%
64%
73%
65%
78%
79%
93%
96%
68%
63%
94%
93%
89%
89%
69%
68%
86%
86%
2016/17
2017/18
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Weekday Peak Period On-Time Performance – All Day Services




Q3 Weekday Peak On-Time Performance - All Day Services
55
56
57
58
59
60
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66
68
72
80
81
82
83
87
88
89
90
320
75%
79%
94%
95%
94%
93%
94%
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79%
71%
82%
80%
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92%
89%
87%
59%
56%
85%
80%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
2016/17
2017/18

Weekday Peak Period On-Time Performance – Peak Only Services