

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 8
Halifax Regional Council
May 17, 2022

TO:	Mayor Savage Members	of Halifax Regional Council
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Original Signed

SUBMITTED BY:

Councillor Waye Mason, Chair, Transportation Standing Committee

DATE: May 2, 2022

SUBJECT: 2021/22 Q3 Halifax Transit KPI Report

INFORMATION REPORT

ORIGIN

April 28, 2022 meeting of Transportation Standing Committee, Item 12.1.1.

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

The Transportation Standing Committee received a staff information report dated March 21, 2022 and staff presentation to consider the 2021/22 Q3 Halifax Transit KPI Report.

For further information refer to the attached staff report dated March 21, 2022.

DISCUSSION

The Transportation Standing Committee considered the staff report dated March 21, 2022 and staff presentation and approved a motion to forward the report to Halifax Regional Council for information.

FINANCIAL IMPLICATIONS

Financial implications are outlined in the attached staff report dated March 21, 2022.

RISK CONSIDERATION

Not applicable.

COMMUNITY ENGAGEMENT

Meetings of the Transportation Standing Committee are open to public attendance and members of the public are invited to address the Standing Committee for up to five (5) minutes during the Public Participation portion of the meeting. Meetings are live webcast on Halifax.ca. The agenda, reports, video, and minutes of the Standing Committee are posted on Halifax.ca.

For further information on Community Engagement refer to the attached staff report dated March 21, 2022.

ENVIRONMENTAL IMPLICATIONS

Not applicable.

ALTERNATIVES

Transportation Standing Committee did not provide alternatives.

Alternatives are outlined in the attached staff report dated March 21, 2022.

ATTACHMENTS

Attachment 1 – Staff information report dated March 21, 2022.

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.

Report Prepared by: Catie Campbell, Legislative Assistant, Municipal Clerk's Office 782.641.0796.



P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 12.1.1 Transportation Standing Committee April 28, 2022

TO:	Chair and Members	of Transportation	Standing Committee

SUBMITTED BY:

Jacques Dubé, Chief Administrative Officer

DATE: March 21, 2022

SUBJECT: 2021/22 Q3 Halifax Transit KPI Report

INFORMATION REPORT

ORIGIN

July 3, 2013 Transportation Standing Committee motion (item 7.1.1):

MOVED by Councillor Mason, seconded by Councillor Watts

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

MOTION PUT AND PASSED.

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, overloads, on-time performance, loss of service, customer service, service levels, and Access-A-Bus service details.

DISCUSSION

Halifax Transit is committed to advancing the following Regional Council's priority outcomes:

- a) Safe & Accessible Integrated Mobility Network
- b) Connected & Healthy Long-Range Mobility Planning
- c) Net-Zero Emissions

To assist in achieving these priority outcomes, multi year initiatives were identified in the 2021/22 Halifax Transit Business Plan. Updates on relevant projects and programs that support these goals are outlined in this report. Attachment A includes a detailed description of the deliverables identified in the business plan to support these priority outcomes.

a) Safe & Accessible Integrated Mobility Network

Safe & Accessible Integrated Mobility Network	
Business Plan Deliverables	Status
Review of Access-A-Bus Eligibility Criteria	In Progress
Installation of Mobile Data Terminals on Access-A-Bus Vehicles	In Progress
Accessible Bus Stop Inventory & Assessment	Complete
Anti-racism and Passenger Conduct Campaign	Complete
On Demand Private Accessible Transportation	In Progress

Q3 Highlights

The implementation of phase 2 of the paratransit project, the installation of mobile data terminals (MDTs) on each Access-A-Bus vehicle, has begun. Vehicle surveys have been completed and preparations for the back-end system installation are underway. Vehicle installations will begin in mid-2022.

The Transit Code Anti-Racism campaign continued to be in market, including interior and exterior bus ads, transit shelter ads, paid Social Media campaigns, and a full bus wrap. The Transit Code anti-littering campaign was deployed in November 2021. Prohibited Conduct signs were completed and have been installed at all transit terminals and. The next campaign for this ongoing program will launch in spring 2022 regarding anti-sexual harassment.

Regional Council approved a vendor for the provision of Private On-demand Accessible Transportation on March 1st. This is set to launch in the coming weeks.

There are approximately over 900 approved participants in the 2021/22 Low Income Transit Pass Program, with significant capacity to accommodate additional applicants. Approximately 53% of the monthly passes were sold to program participants.

b) Connected & Healthy Long-Range Mobility Planning

Connected & Healthy Long-Range Mobility Planning	
Business Plan Deliverables	Status
Implementation of Moving Forward Together Plan Transit Network Changes	Complete
Transit Priority Measures - Bayers Road	Complete
West Bedford Park & Ride	In Progress
Rapid Transit Strategy - Pursue Funding & Prepare Functional Designs for Bus Rapid Transit	In Progress
Rapid Transit Strategy - Complete Technical Studies & Design for Ferry Service	In Progress
Woodside Ferry Terminal Renovation - Phase 2 Construction	In Progress

Q3 Highlights

Phase 1 of Halifax Transit's Mill Cove Ferry Service continued in Q3. The Phase 1 studies were under an aggressive schedule with the target deadline of March 31, 2022; however, staff and the project team determined more time was required to undertake a more thorough market analysis, which is central to many of the Phase 1 studies. Thus, an extension was submitted to provide the necessary time to complete these studies. The studies are now anticipated to be completed in late spring or early summer 2022.

The West Bedford Park & Ride became operational on November 22, 2021. While the facility can now be used by buses and passengers, some elements of the design which have long lead times, and those which are impacted by inclement weather, are still underway. These elements include the second half of the parking area, bicycle infrastructure, electronic message boards, landscaping features, and heated bus shelters. These final elements are expected to be installed and functioning by 2022/23 Q1. Standard bus shelters have been installed in the interim for passenger comfort until heated shelters can be installed.

Phase 2 construction at the Woodside Ferry Terminal began in October 2020 and is ongoing. The terminal's stairs and escalators were opened to the public in Q4. The construction schedule has been extended again slightly with substantial completion now anticipated in April 2022.

c) Net-Zero Emissions

Net-Zero Emissions	
Business Plan Deliverables	Status
Develop & Issue a Request for Proposals for the Procurement of Battery Electric Buses	In Progress
Begin Assessment for the Elimination of Internal Combustion Engine Vehicles	In Progress

Q3 Highlights

Federal and Provincial funding was secured for a project to purchase 60 new battery electric buses (BEB) and to support an expansion to the Ragged Lake Transit Centre to accommodate these buses, as well as charging infrastructure and deep energy retrofits.

Ragged Lake Transit Centre building expansion design consulting services have been awarded to AECOM Canada on February 8, 2022 in the amount of \$1,098,198.07. The RFP for Battery Electric Buses/Chargers closed in January and is currently under review with procurement. It is due to be awarded by the end of April upon Council approval.

Q3 Performance Measures Highlights

Attachment B, *Halifax Transit 2021/22 Q3 Performance Measures Report*, covering October, November and December includes additional performance measures and detailed route level statistics.

- Overall boardings increased 25.6% this quarter from last year, while revenue increased 35.1%.
- Average daily boardings in Q3 were 64,420 (weekday), 41,764 (Saturday) and 28,853 (Sundays).
- System wide on-time performance was 81%, 7% lower than Q3 last year.
- The Departures Line received over 2,100 passenger calls on a typical weekday this guarter.
- Access-A-Bus operated 30% more trips this quarter when compared to Q3 last year.
- This quarter 84% of customer feedback was resolved within service standards.
- The Mean Distance Between Failures (MDBF) for conventional service was 10,948 km, a 30% increase from Q3 last year.
- The Mean Distance Between Service Calls (MDBS) for conventional service was 6,132 kms, an increase of 37% from Q3 last year.
- The MDBS for Access-A-Bus was 39,300 kms, a 42% decrease from Q3 last year

- The maximum daily number of buses that could not complete their scheduled service due to a mechanical defect was 14, while the daily average was 4.9.
- Maintenance cost was \$1.48/km, 25 cents higher than the budgeted cost of \$1.23/km.

FINANCIAL IMPLICATIONS

No financial implications.

COMMUNITY ENGAGEMENT

No community engagement was required.

ATTACHMENTS

Attachment A: Halifax Transit 2021/22 Q3 Business Plan Deliverables
Attachment B: Halifax Transit 2021/22 Q3 Performance Measures Report

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.

Report Prepared by: Colin Redding, Transit Planning Technician, Halifax Transit, 902.490.6632

David Massey, Transit Planning Technician, Halifax Transit, 902.719.7217

	Halifax Transit 2021/22 Business P	lan & Director Deliverables
Deliverable	Description	Status
Review of Access-A-Bus Eligibility Criteria	To ensure service offerings are focused on client's abilities, the Access-A-Bus (AAB) client eligibility criteria will be reviewed and better matched to functional abilities, aligning the availability of AAB services to those who require it. This alignment is anticipated to create capacity for those who cannot use the services of the now fully accessible conventional fleet.	In Progress. Access-A-Bus registration criteria is being reviewed, with a revised target for recommendations by end of Q4 2022/23
Installation of Mobile Data Terminals on Access-A-Bus Vehicles	To improve service delivery through the introduction of new technology, Mobile Data Computers will be installed on all Access-A-Bus Vehicles. The implementation of the new technology will include physical hardware installation, compatibility software integration, current-state process documentation, process updating, testing, user-training and adoption.	In Progress. The implementation of phase 2 of the paratransit project, the installation of mobile data terminals (MDTs) on each Access-A-Bus vehicle, has begun. Vehicle surveys have been completed and preparations for the back-end system installation are underway.
Accessible Bus Stop Inventory & Assessment	Halifax Transit will engage a consultant to assist with preparing a full inventory of all remaining non-accessible bus stops, along with proposed improvements and costs with upgrading all stops.	Complete. All site visits have been completed and all bus stops have been inventoried and assessed. The final upgrade costing, strategies and recommendations were completed in Q4.
Anti-racism and Passenger Conduct Campaign	Halifax Transit will launch an external (public) campaign to address public conduct, with a focus on anti-racism, to promote diversity and inclusion, and support respectful passenger conduct on transit.	Complete. The Transit Code Anti-Racism campaign was in market, including interior and exterior bus ads, transit shelter ads, paid Social Media campaigns, and a full bus wrap. The Transit Code anti-littering campaign was deployed in November 2021. Prohibited Conduct signs were installed at all transit terminals and facilities in January and February 2022. The next campaign for this ongoing program is in development and will launch in early 2022.
On-demand Private Accessible Transportation	To complement existing taxi service in Halifax, Halifax Transit will procure a vendor to provide private, accessible, ondemand transportation services.	In Progress. Regional Council approved a vendor for the provision of Private On-demand Accessible Transportation on March 1st. The target is to launch service by the end of the current fiscal year, however, this will depend on the lead time

		required by the vendor to procure and/or adapt vehicles, if necessary.
Implementation of Moving Forward Together Plan Transit Network Changes	The next large route network change is targeted to take place in November 2021, resulting in changes to more than a third of transit routes.	Complete. The service changes were successfully implemented on November 22, 2021. This latest round of service changes introduced 26 additional routes from the MFTP, bringing the total plan completion to 85%.
Transit Priority Measures - Bayers Road	Halifax Transit will continue to pursue the implementation of transit priority measures on major strategic multimodal corridors. Specifically, construction will continue Bayers Road, with inbound and outbound lanes from Connaught Avenue to Coleman Court being completed in 2021/22.	Complete (Phase 1). Construction of Phase 1 was completed in full in November 2021.
West Bedford Park & Ride	This new Park & Ride facility, including a four bay bus platform with heated shelters, will be constructed in 2021, targeting a November 2021 opening date.	In Progress. The West Bedford Park & Ride became operational on November 22, 2021. Due to long lead times and weather constraints some elements of the design could not be completed in 2021/22; however, the final elements are expected to installed and in Q1 2022/23 and a grand opening has been scheduled for mid May 2022.
Rapid Transit Strategy - Pursue Funding & Prepare Functional Designs for Bus Rapid Transit	The Rapid Transit Strategy, approved in 2020, describes a network of four bus rapid transit (BRT) lines that cover approximately 50km, connecting peninsular Halifax and Downtown Dartmouth with developing suburbs on both sides of the harbour. In 2021/22, Halifax Transit will continue to pursue potential funding opportunities to advance the BRT project and will work with other business units on functional designs in key corridors to further refine transit priority information and costs.	In Progress. Staff continue to engage in discussions with potential funding partners. Work continues on the Portland Street/Cole Harbour Functional Plan which will explore a corridor-wide redesign to support future BRT service.
Rapid Transit Strategy - Complete Technical Studies & Design for Ferry Service	The Rapid Transit Strategy, approved in 2020, proposes three new ferry routes from three new terminals: Mill Cove, Larry Uteck, and Shannon Park. In 2021/22, Halifax Transit will complete a number of technical studies and design work to	In Progress. Phase 1 of Halifax Transit's Mill Cove Ferry Service continued in Q3. These studies were under an aggressive schedule with the target deadline of March 31, 2022; however, staff and the project team determined more time was required to undertake a more thorough market analysis, which is central to many of the Phase 1 studies. Thus, an extension was submitted

	inform future implementation of the Mill Cove ferry service.	to provide the necessary time to complete these studies. The studies are now anticipated to be completed in late spring or early summer 2022.
Woodside Ferry Terminal Renovation – Phase 2 Construction	The Woodside Ferry Terminal requires significant rehabilitation to all aspects of the building, including envelope, mechanical and electrical systems, and customer waiting areas. Construction will continue throughout 2021/22	In Progress. Phase 2 construction at the Woodside Ferry Terminal began in October 2020 and is ongoing. The construction schedule has slipped again slightly with been impacted by supply chain issues and vendor scheduling constraints. Thus, substantial completion is now anticipated in April 2022 and a grand opening has been scheduled for May 2022.
Develop and Issue a Request for Proposals for the Procurement of Battery Electric Buses	To begin decarbonizing public transit, Halifax Transit will issue a Request for Proposals (RFP) for the procurement of battery electric buses (BEBs).	In Progress. Ragged Lake Transit Centre building expansion design consulting services have been awarded to AECOM Canada on February 8, 2022 in the amount of \$1,098,198.07. In Progress: The RFP for Battery Electric Buses/Chargers closed in January and is currently under review with procurement. It is due to be awarded by the end of April upon Council approval.
Begin Assessment for the Elimination of Internal Combustion Engine Vehicles	To determine sustainable alternatives for the future, Halifax Transit will begin to assess the elimination of internal combustion engine vehicles	In Progress: Halifax Transit is researching the available products in the market and contacting OEMs and subject matter experts to better understand adoption and operational requirements. Halifax Transit will consider the appropriate charging points and other tools needed to operate the battery electric vehicles while planning for modifying or constructing new transit centers in the future. Halifax Transit is collecting information to prepare a request for proposal covering the feasibility study for on-site hydrogen production to operate a small number of Hydrogen Fuel Buses as a pilot.

2021/22 – Q3 Performance Measures Report HALIFAX TRANSIT

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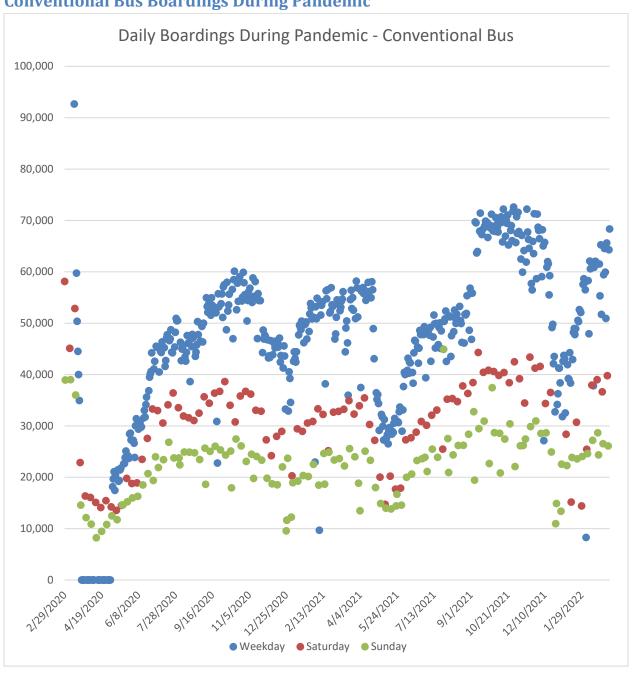
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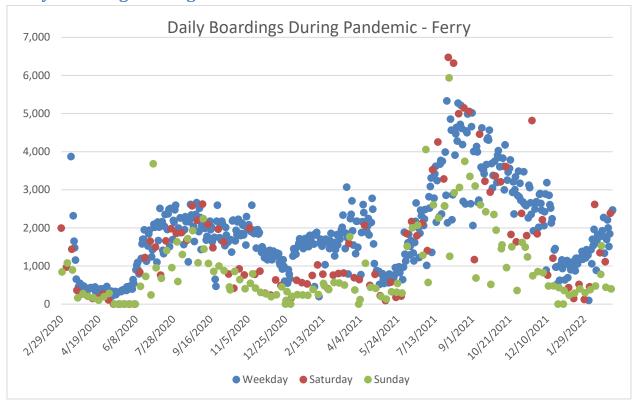
COVID-19 Pandemic Data Impacts

The onset of the COVID-19 pandemic in early 2020 resulted in the need to rapidly implement emergency service adjustments to the weekday schedules. Fare collection ceased on March 18, 2020 and resumed August 1, 2020. Full service bus schedules resumed August 31, 2020. Ferry service increased September 8, 2020, and again October 26, 2020, with full ferry service resuming July 19, 2021, with the last trip of the day being reinstated. The most recent wave of the pandemic beginning December 2021 resulted in service loss due to illness and isolation requirements, as of this report much of this service has been reinstated however full service has yet to be restored.

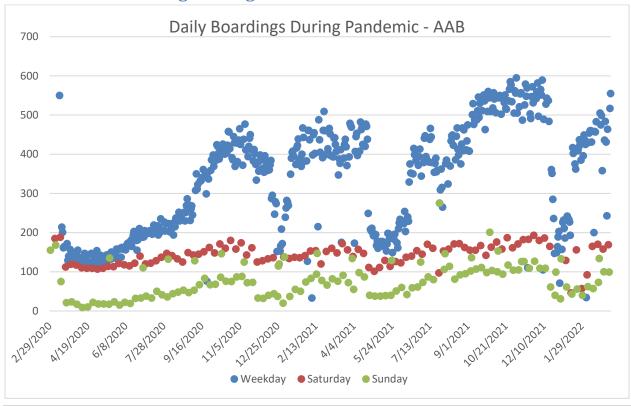
Conventional Bus Boardings During Pandemic



Ferry Boardings During Pandemic



Access-A-Bus Boardings During Pandemic

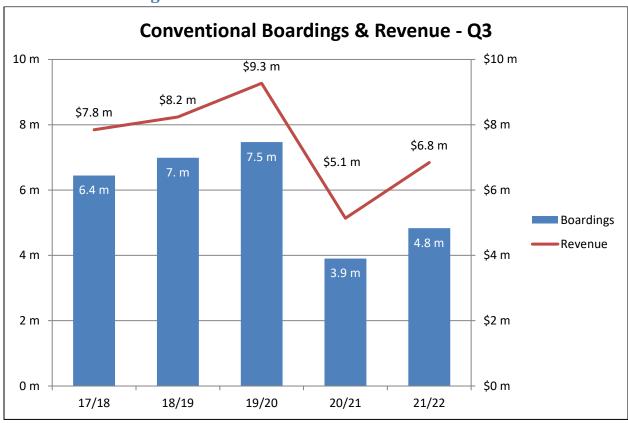


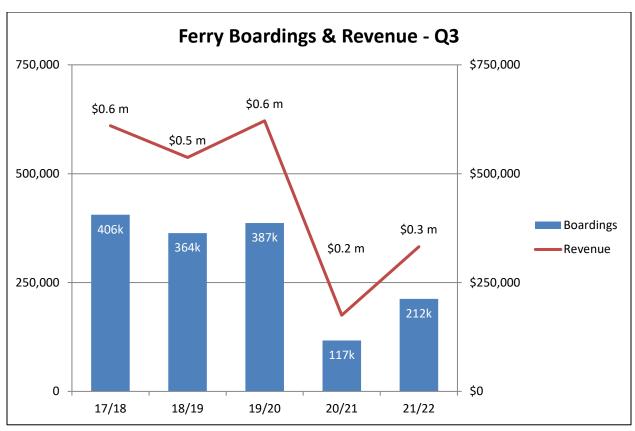
Boardings & Revenue

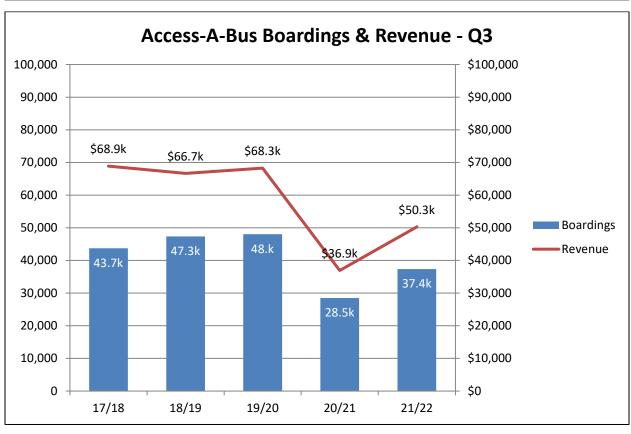
Revenue and boardings are reported to demonstrate how well transit services were used over the quarter, in comparison to the same quarter the previous year.

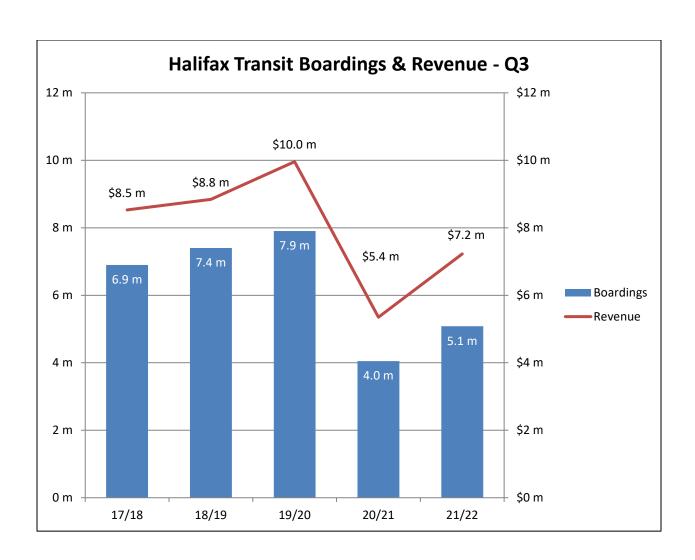
COVID-19 continued to have a significant impact during the third quarter of 2021/22. Conventional boardings increased 23.8% from this quarter last year, Ferry boardings increased 81.9% and Access-A-Bus boardings increased 31.1%. Overall, system wide boardings increased this quarter by 25.6% compared to last year, which is still 35.7% lower than third quarter 2019/20. Overall revenue this quarter increased 35.1% from last year, but remains 27.4% lower than third quarter 2019/20.

Historical Boardings & Revenue



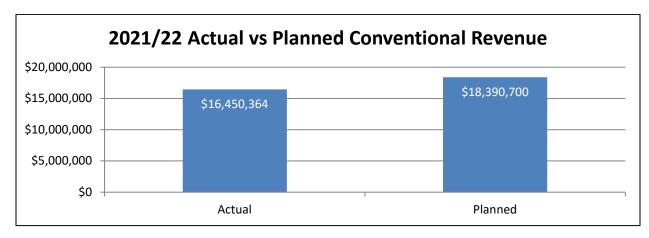


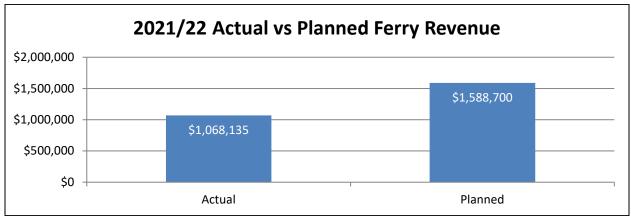


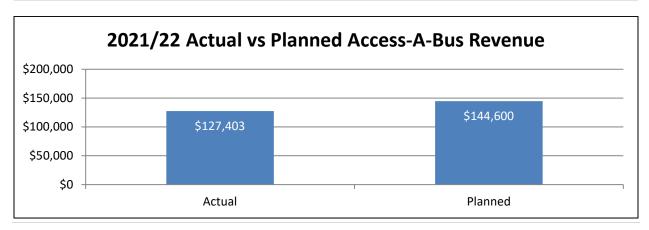


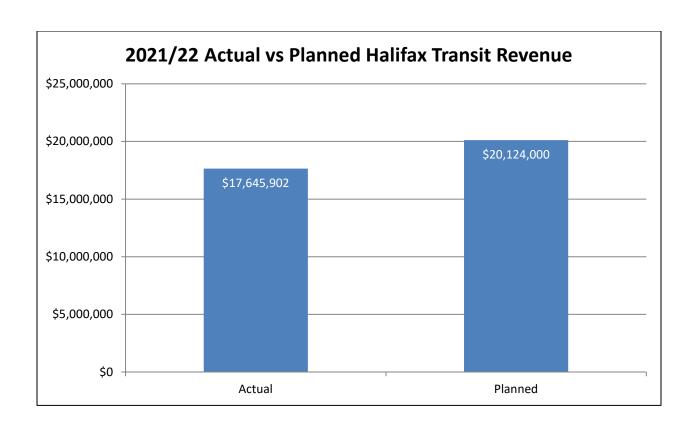
Revenue - Actual vs. Planned

The following charts provide an indication of how much revenue has been generated by each service type and by Halifax Transit in comparison to the planned budget revenue. As of the third quarter 2021/22 conventional revenue has increased 63.5% over last year and is 10.6% below the planned amount. Ferry revenue has increased 114.9% and is 32.8% below the planned amount. Access-A-Bus revenue this year increased 125.1% over last year and is 11.9% below the planned amount. Overall revenue this year has increased 66.3% over last year, but remains 12.3% below the planned amount. Revenue projections are made prior to the beginning of the fiscal year; prior to April 2021 COVID cases were relatively low in the province. Further waves of COVID cases in Spring/Summer 2021, and Winter 2021/22 have caused actual revenue to be lower than projected.





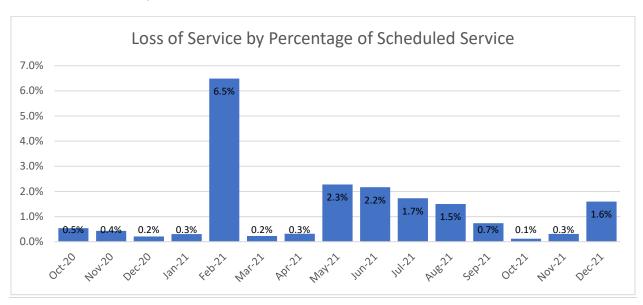




Loss of Service

Loss of service represents the total number of scheduled bus service hours that were not completed. If a trip was able to be filled or partially filled by a standby bus, that time would not be included in this figure.

In the third quarter, the total loss of service was 1,475 hours, which is 0.68% of the quarterly revenue hours. The table below shows the total loss of service for each month. The increase in lost service in December 2021 is attributable to the most recent wave of the pandemic, which resulted in staffing shortages due to illness and isolation requirements.

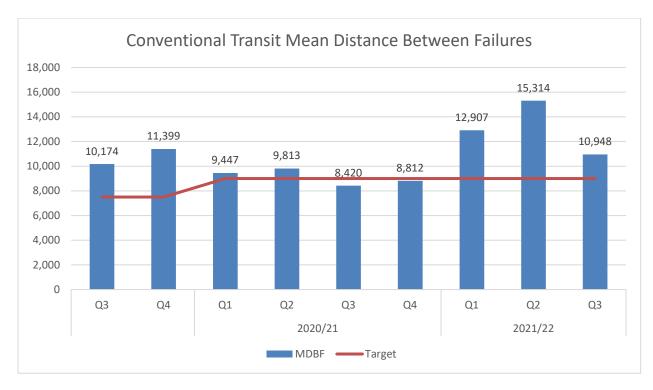


Mean Distance Between Failures

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. Due to the nature of the data sources, Halifax Transit is looking to improve the accuracy of this number by removing failures that were logged, but resulted in "no fault found". Currently, the reported number does include these items.

Transit Fleet has set a target of 9,000 kms for 2021/22. The target for this KPI shall be revisited on annual basis to promote continuous improvement, which may be achieved by implementation and support of quality and preventative maintenance initiatives.

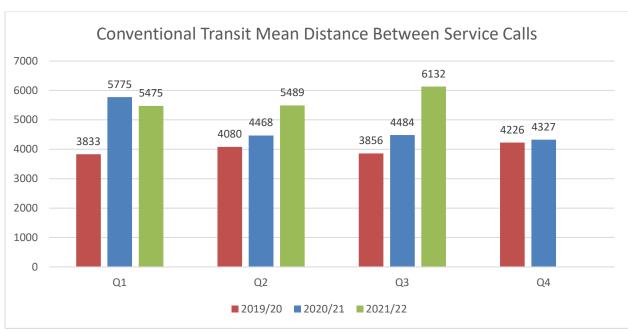
For the third quarter of 2021/22, the MDBF for conventional transit was 10,948 kms. This is a 30% increase from the third quarter of the previous year (2020/21). Transit Fleet will continue to monitor this KPI and has implemented new preventative maintenance measures to reduce aftertreatment and cooling system defects.

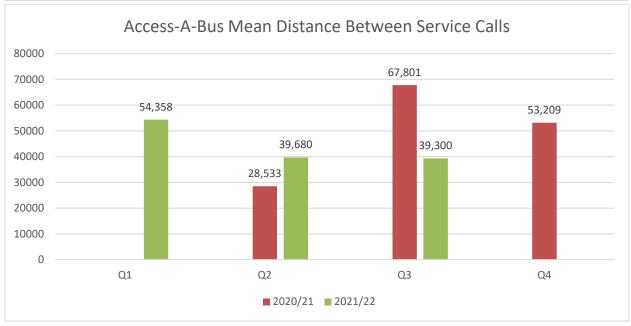


Mean Distance Between Service Calls

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. Transit Fleet is continuing to benchmark this metric in order to provide a target.

For the third quarter of 2021/22, the MDBS for conventional transit was 6,132 kms. In comparison to the third quarter of 2020/21 (4,484), this is an increase of 37%. The MDBS for Access-A-Bus service was 39,300 kms. Transit Fleet will continue to monitor this metric in order to reduce service calls.

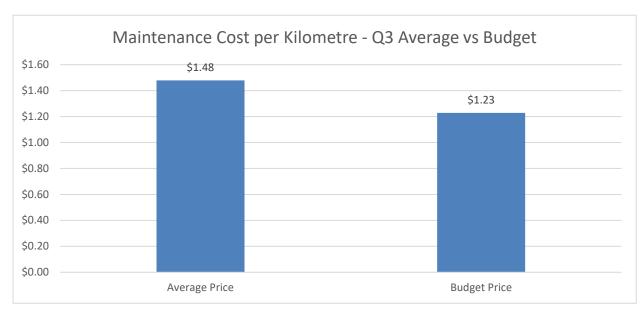


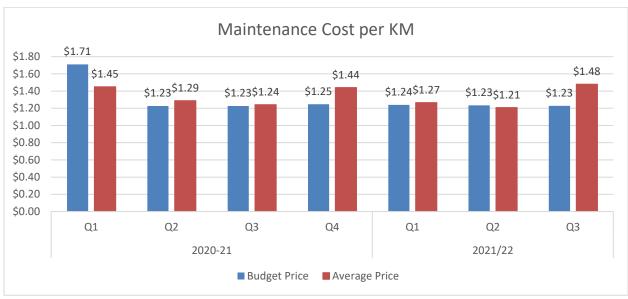


Bus Maintenance Cost - Quarter Average vs Budget

In the third quarter, bus maintenance costs were \$1.48/km, while the budgeted maintenance cost was \$1.23/km. Several factors lead to the \$/km increase:

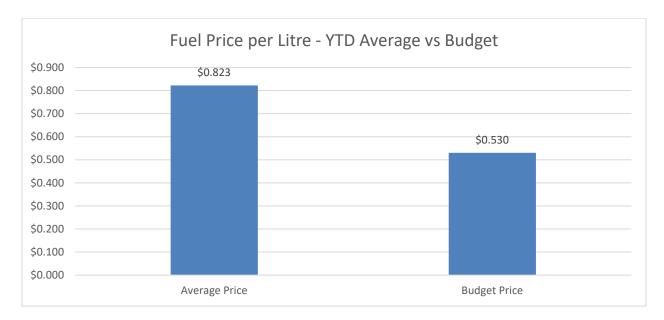
- An incorrect vacation accrual occurred in December 2021. This accrual is corrected in January 2022.
- Due to supply chain delays, our leased tire vendor was unable to supply tires. Transit Fleet purchased tires from another vendor to ensure service was maintained.
- An increased number of early transmission and engine failures led to an increase in commercial work.





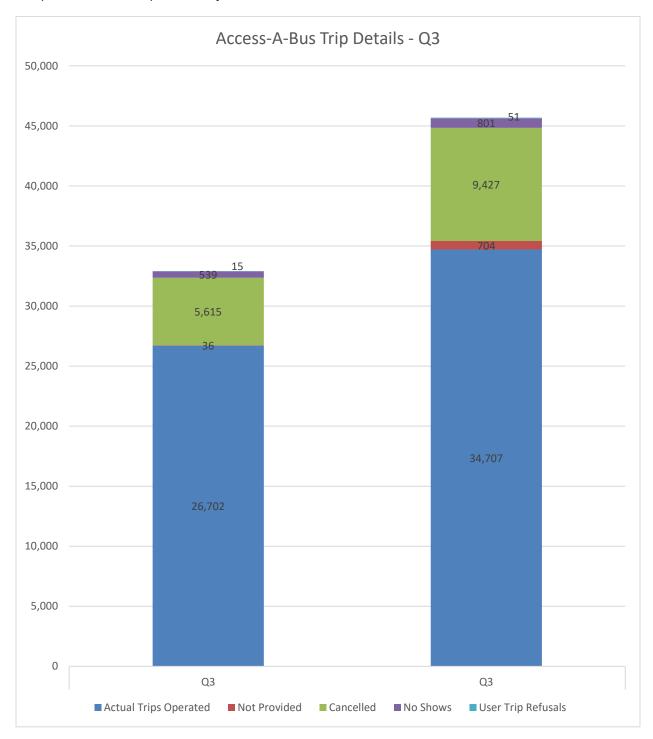
Fuel Price - Annual Average vs Budget

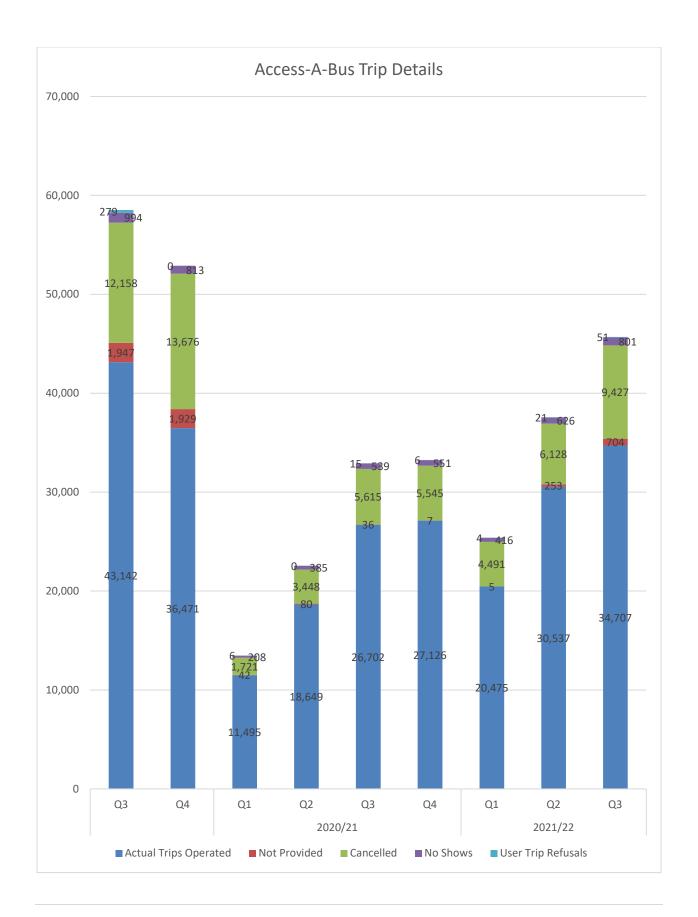
The budgeted fuel price for 2021/22 was set at 53 cents/litre. The average fuel price for 2021/22 as of the end of the third quarter of 2021/22 was 82 cents/litre, 39 cents higher than the budgeted price per litre.



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 2021/22 a total of 34,707 trips were operated, an increase of 30% compared to the third quarter last year.



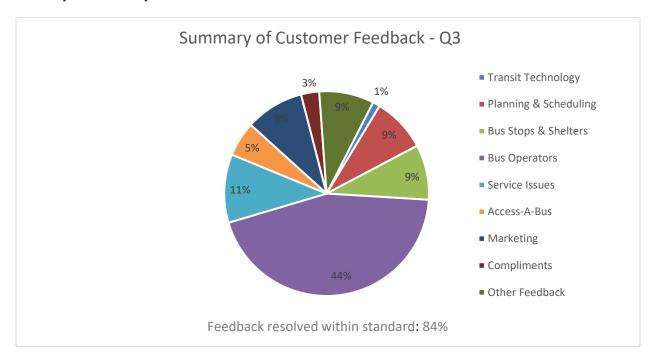


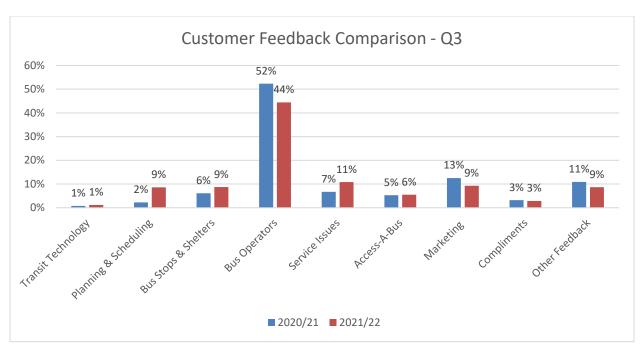
Customer Service - All Services

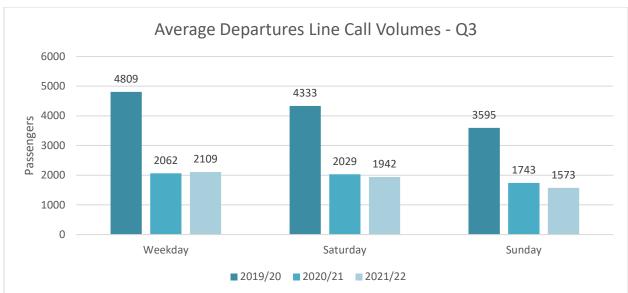
Customer service statistics are measured monthly using the Hansen Customer Relationship Management software along with Crystal Reports. Feedback is first categorized by subject matter and then divided into two categories: feedback resolved within service standard and feedback resolved outside service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

In the third quarter, 44% of feedback received was related to Bus Operators. The remaining 56% 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 guarter 84% of customer feedback was resolved within standard.

Call volumes to the Departures Line (902-480-8000) are displayed by day of the week. In the second quarter of 2021/22, average call volumes were slightly lower than this time last year for weekdays as well as for Saturdays and Sundays.







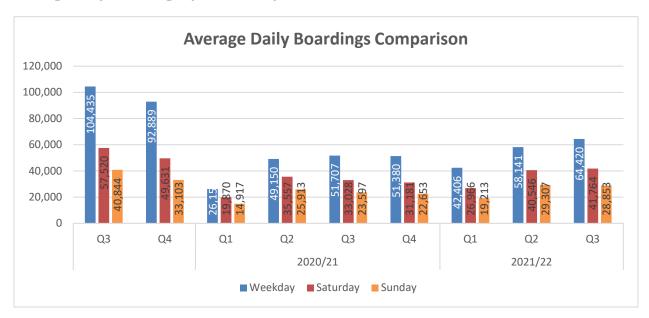
Service Utilization

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

Boardings

Average weekday boardings in the first quarter were $64,420 \pm 11,966$ (18.6% variance). Average Saturday boardings this quarter were $41,764 \pm 3,786$ (9.1% variance). Average Sunday boardings this quarter were $28,853 \pm 2,705$ (9.5% variance).

Average Daily Boardings by Service Day

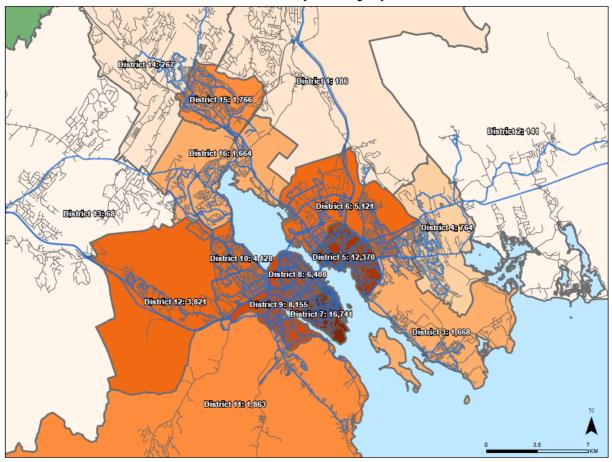


Boardings by District

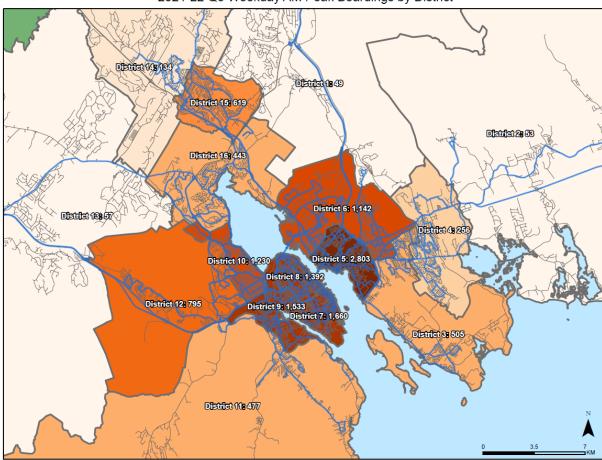
To assist in visualizing where ridership demands exist, boardings have been mapped by district. The all-day boardings map illustrates typical boardings over an entire service day, whereas the AM Peak Period map represents boardings during the morning peak period only and therefore generally illustrates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

Weekday Boardings by District - All Day

2021-22 Q3 Weekday Boardings by District



Weekday Boardings by District - AM Peak Period



2021-22 Q3 Weekday AM Peak Boardings by District

Passengers per Hour

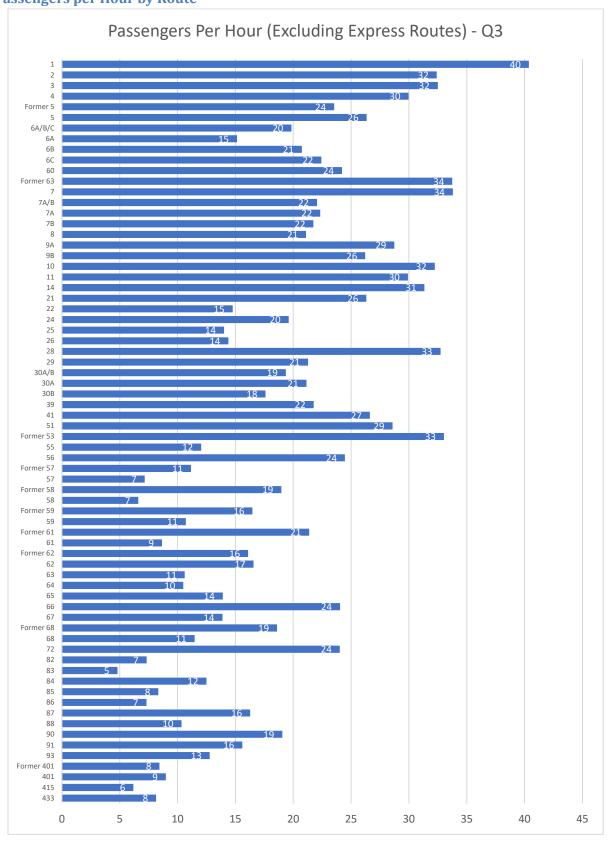
Passengers per hour measures the volume of passengers carried per service hour by route. Due to differences in service model/design, Express Routes are measured instead by passengers per trip. Ridership fluctuates significantly by season and therefore figures are compared to the same quarter in the previous 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 during the third quarter on November 22, 2021. The following data reflects both the former routes prior to that date, and the new routes following that date.

Boardings & Passengers per Hour

	Q3 Comparison - Average Daily Boardings by Route											
	Weekday					Saturday			Sunday			
Route	2020/21		202:	1/22	2020/21		2021/22		2020/21		202	1/22
	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr
1	4,600	29	6,305	40	4,267	38	5,025	44	2,598	31	3,130	37
2	2,856	26	3,511	32	2,622	26	3,287	33	1,596	23	1,879	27
3	4,388	29	4,881	32	2,355	27	2,673	32	2,321	25	2,641	28
4	2,299	18	3,852	30	1,123	23	1,704	34	928	20	1,384	30
5			2,436	26			1,981	29			1,025	25
6A/B/C			1,922	20			1,107	25			749	18
6A			400	15								
6B			726	21			535	25			374	18
6C			796	22			573	25			375	18
Former 60	1,509	20	1,849	24	1,127	28	1,305	32	714	25	919	33
Former 63	456	27	557	34								
7	2,578	22	3,866	34	1,875	20	2,553	27	982	18	1,395	26
7A/B			3,016	22			2,307	23			1,260	18
7A			1,610	22			1,198	24			656	19
7B			1,406	22			1,109	22			604	17
8	2,290	17	2,930	21	1,798	16	2,289	21	1,336	12	1,671	15
9A/B	4,273	26	4,734	28	2,265	31	2,675	37	1,768	25	1,960	27
9A	2,902	27	3,181	29	984	28	1,274	36	806	23	844	24
9B	1,371	24	1,553	26	1,281	34	1,402	37	962	26	1,116	30
10	2,304	21	3,447	32	1,807	25	2,386	33	1,126	23	1,435	29
11	54	22	68	30								
14	1,227	20	1,046	31	753	23	689	31	549	19	444	24
21	619	20	789	26	589	17	717	20	375	21	402	21
22	464	14	475	15	328	10	357	10	260	7	264	8
24			1,083	20			1,223	22			780	15
25	233	11	305	14	162	10	183	12	104	10	142	12
Former 5			87	24								
26			31	14								
28	1,083	29	1,250	33	985	22	1,120	26	468	23	553	27
29	1,587	17	1,954	21	1,094	17	1,311	21	749	12	904	15
30A/B	557	16	693	19	387	11	459	13	236	13	293	16
30A	318	18	376	21	208	12	218	13	107	12	135	14
30B	239	13	317	18	179	10	242	14	129	14	159	18
39	768	17	959	22	718	15	875	18	277	13	354	17
41	473	14	903	27	200	22	406	20	400	40	206	47
51	628	26	694	29	366	23	406	26	183	18	206	17

	Q3 Comparison - Average Daily Boardings by Route											
		Wee	kday			Satu	ırday			Sur	nday	
Route	2020)/21	202:	1/22	2020	0/21	202:	L/22	2020	0/21	2021	L/22
	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr
Former 53	738	29	843	33	497	33	529	34	203	25	233	28
53			369	23			222	21			102	13
54	495	23	571	22	350	22	375	22	161	16	191	16
55	205	9	261	12	133	9	199	13	99	6	118	8
56	766	24	802	24	863	24	931	27	496	15	567	18
Former 57	336	8	441	11	218	7	227	8	120	7	117	7
57			34	7								
Former 58	400	14	524	19	258	14	327	17	195	11	238	14
58			103	7			89	6			63	4
Former 59	1,110	14	1,278	16	492	21	568	24	334	14	359	15
59	1,110	14	109	11	492	21	109	14	334	14	53	8
Former 61	1,347	17	1,664	21	761	19	850	21	521	14	625	16
61			138	9			147	9			84	6
Former 62	437	14	510	16	311	14	340	16	139	9	160	10
62			389	17			230	13			183	12
63			244	11			133	9			84	6
64	355	9	416	10								
65	176	11	367	14	59	4	201	5	32	5	114	6
66	729	24	748	24	382	24	406	25	232	15	255	16
67			402	14			194	12			122	8
Former 68	770	16	893	19	468	15	526	18	330	11	334	11
68			185	11			204	13			89	6
72	877	19	1,107	24	709	16	931	21	367	14	406	15
82	126	6	143	7	99	6	106	7	75	5	76	5
83	65	5	61	5	51	5	65	7	37	3	37	3
84	574	10	679	12	234	7	297	9	175	6	205	7
85	96	7	113	8	58	6	75	9	43	5	49	7
86	85	6	104	7	76	5	92	6	65	5	58	4
87	813	15	900	16	513	10	638	12	283	11	322	11
88	142	10	147	10	114	7	112	7	72	5	61	4
90	794	11	1,309	19	631	10	962	15	299	9	460	13
91	444	12	544	16	235	10	300	14	193	7	264	10
93	103	10	133	13								
Former 401	93	7	112	8								
401			43	9			9	6			10	5
415	40	7	38	6								
433	38	7	48	8								
Alderney	865	31	1,469	51	818	63	2,389	133	427	37	996	62
Woodside	744	36	1,153	57								

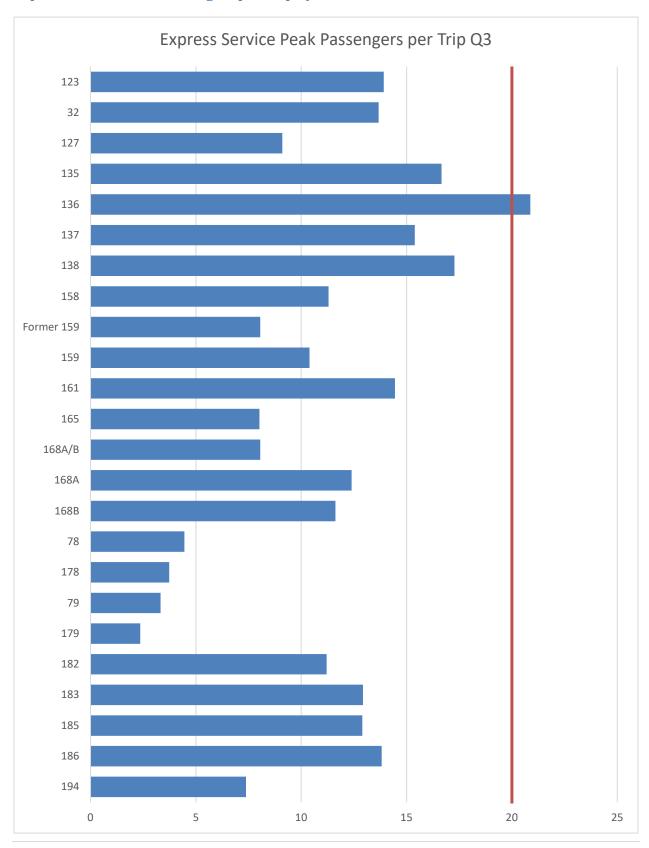
Passengers per Hour by Route



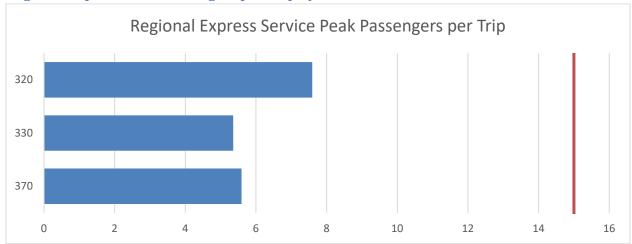
Express Service Peak Boardings and Passengers per Trip

Q3 Comparison - Average Daily Peak Boardings by Express Route				
	Weekday			
Route	2020/21		2021/22	
	Boardings	Pass/Trip	Boardings	Pass/Trip
32			246	14
123	141	10	181	14
127			164	9
135	192	14	233	17
136	239	15	334	21
137	135	11	185	15
138	167	12	225	17
158			90	11
Former 159	143	5	282	8
159			177	10
161			159	14
165			96	8
168A/B			336	8
168A			161	12
168B			140	12
78	36	2	53	4
178			30	4
79	40	3	40	3
179			19	2
182	235	8	280	11
183	134	10	168	13
185	289	11	323	13
186	130	11	152	14
194	49	6	87	7
196	29	7	53	13
320	67	5	99	8
330	83	4	128	5
370	69	4	67	6

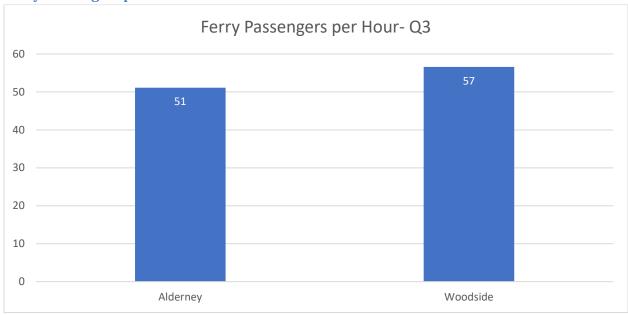
Express Service Peak Passengers per Trip by Route



Regional Express Peak Passengers per Trip by Route



Ferry Passengers per Hour

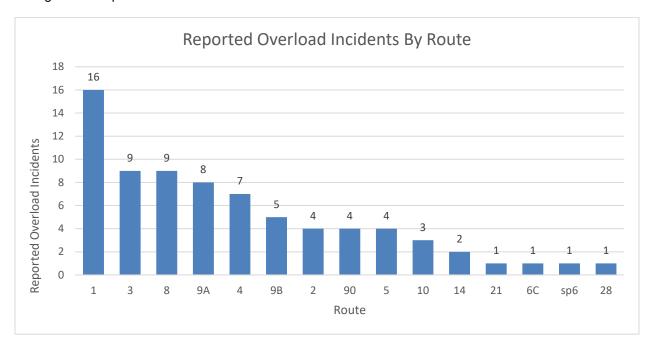


Passenger Overloads

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

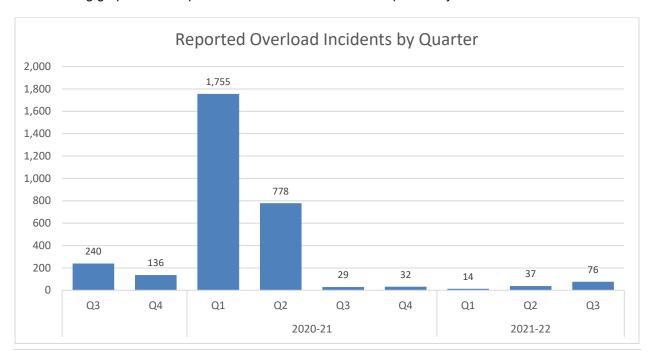
Passenger Overloads by Route

The following graph shows overloaded routes during the third quarter. 76 overload incidents were reported during the third quarter of 2021/22.



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.

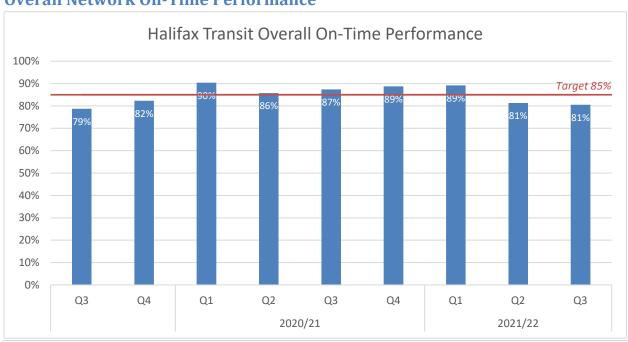
Halifax Transit has established a target for on-time performance of 85%, which is in line with Transit industry standards. While this target has been exceeded in recent periods throughout the pandemic, this is largely due to reduced traffic demands, these conditions have mostly subsided. During these 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.

Route 1 Spring Garden performed well below the target over this period, this is in part due to construction detours on Spring Garden Road throughout much of the third quarter which caused delays. This route is also one of the few remaining routes to be rescheduled/redesigned as part of the *Moving Forward Together Plan* and will have schedule adjustments in November 2022 which should improve on time performance.

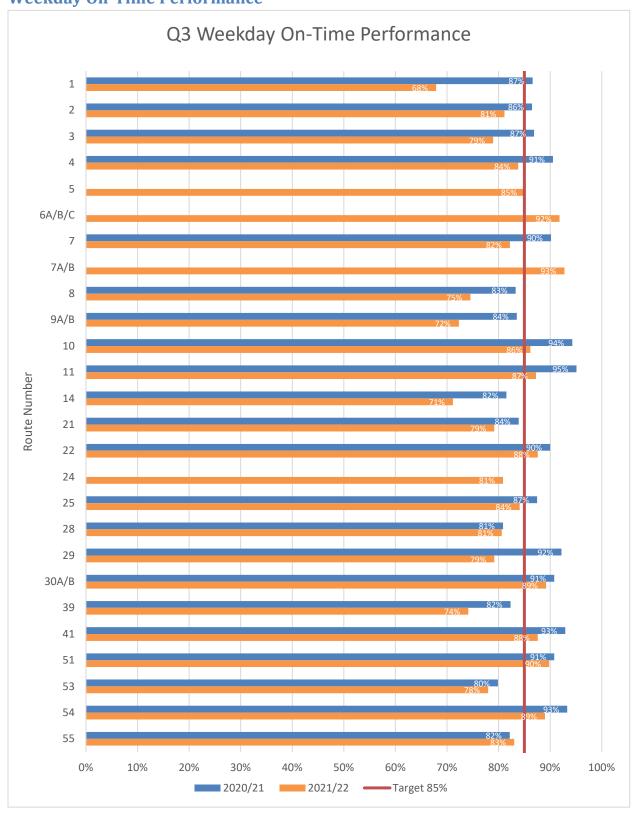
Route 433 Tantallon also performed well below the target over this period, this is in part due to construction of a new roundabout on Larry Uteck Blvd. This route also has some running time issues that will be corrected with future service changes.

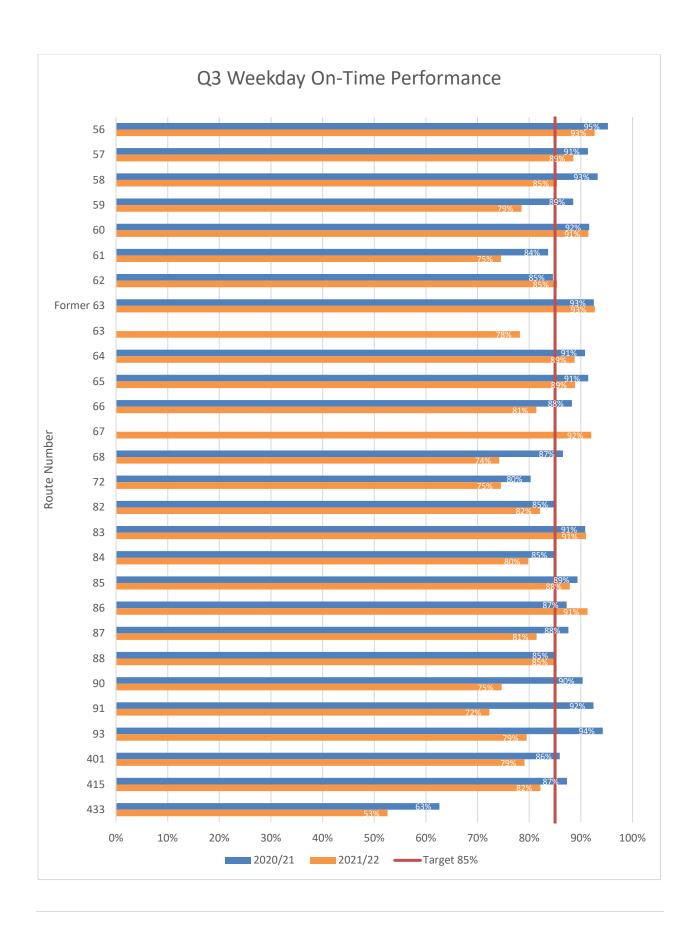
Several of the new express routes introduced or adjusted in November 2021 performed well below the target over this period. This data represents November 22nd through the end of December 2021 for these new routes. These routes have performed better so far in 2022 and will continue to be monitored and adjusted with future service changes if necessary.

Overall Network On-Time Performance

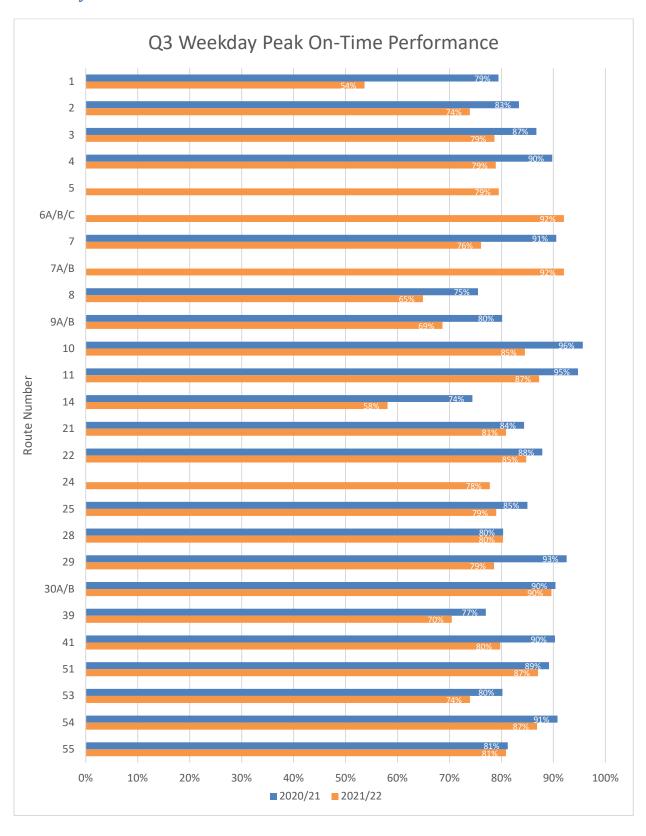


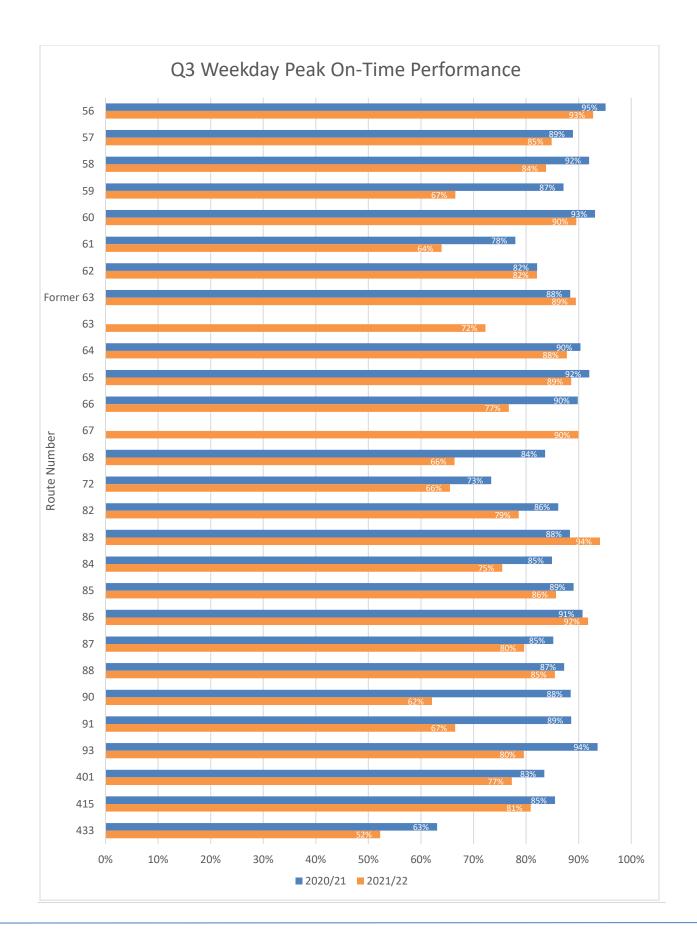
Weekday On-Time Performance





Weekday Peak Period On-Time Performance





Express Service On-Time Performance

On-time performance demonstrates the percentage of timepoint arrivals that are between one minute early and three minutes late. When route schedules are created, the variability of travel times between timepoints is taken into account. Generally, routes are scheduled at the higher end of observed travel times in order to be on time. This means that on some trips, buses will layover at timepoints to avoid departing early. Schedules for express routes were created based on shorter travel times to keep buses moving toward destinations and prevent them from laying over.

The graph below demonstrates on-time performance for express routes based on timepoints at the beginning and end of the routes, as well as any terminals and park and rides. This includes Scotia Square, Summer Street, and the future Wrights Cove Terminal location on Marketplace Drive, but does not include other on-street timepoints.

