

Attachment B: 2022/23 Halifax Transit Q2 Performance Measures Report

2022/23 – Q2

Performance Measures Report

HALIFAX
TRANSIT

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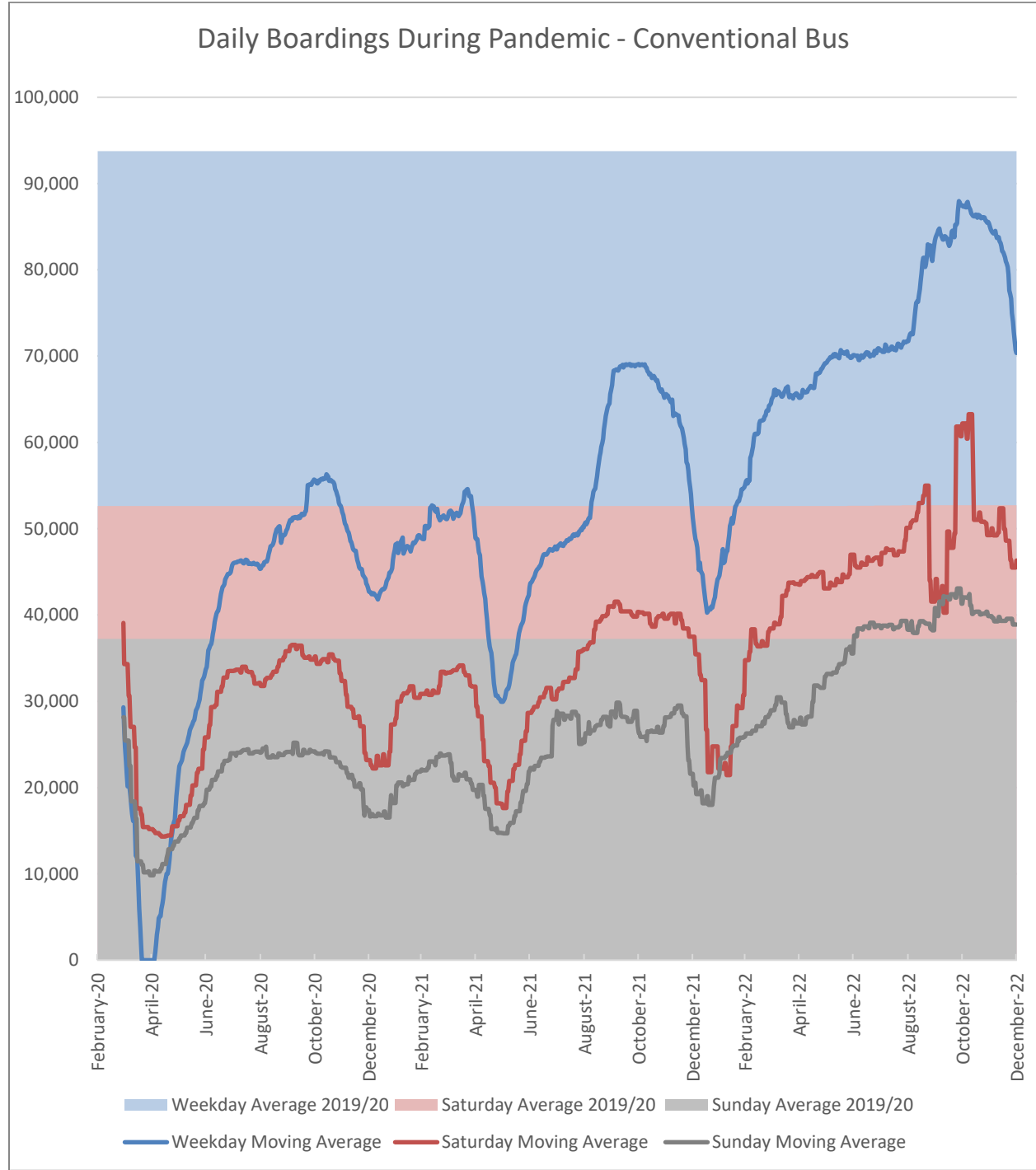
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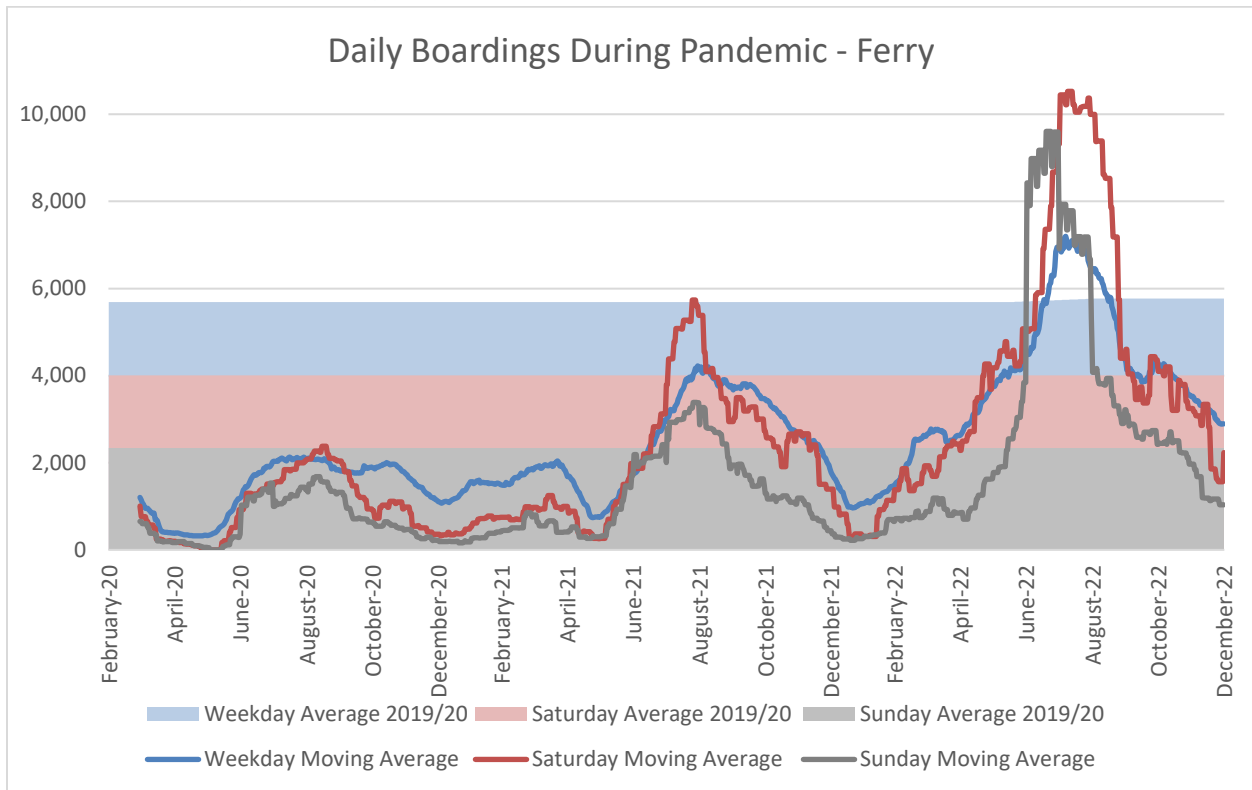
COVID-19 Pandemic Data Impacts

Ridership levels have continued to rebound from the impacts of the COVID-19 pandemic. The following graphs show the 30 day moving averages for boardings on the different service types, compared with the average daily boarding figures from before Covid impacts in 2019/20. The decline near the end of these charts is related to typical seasonal reductions in usage over the Holidays.

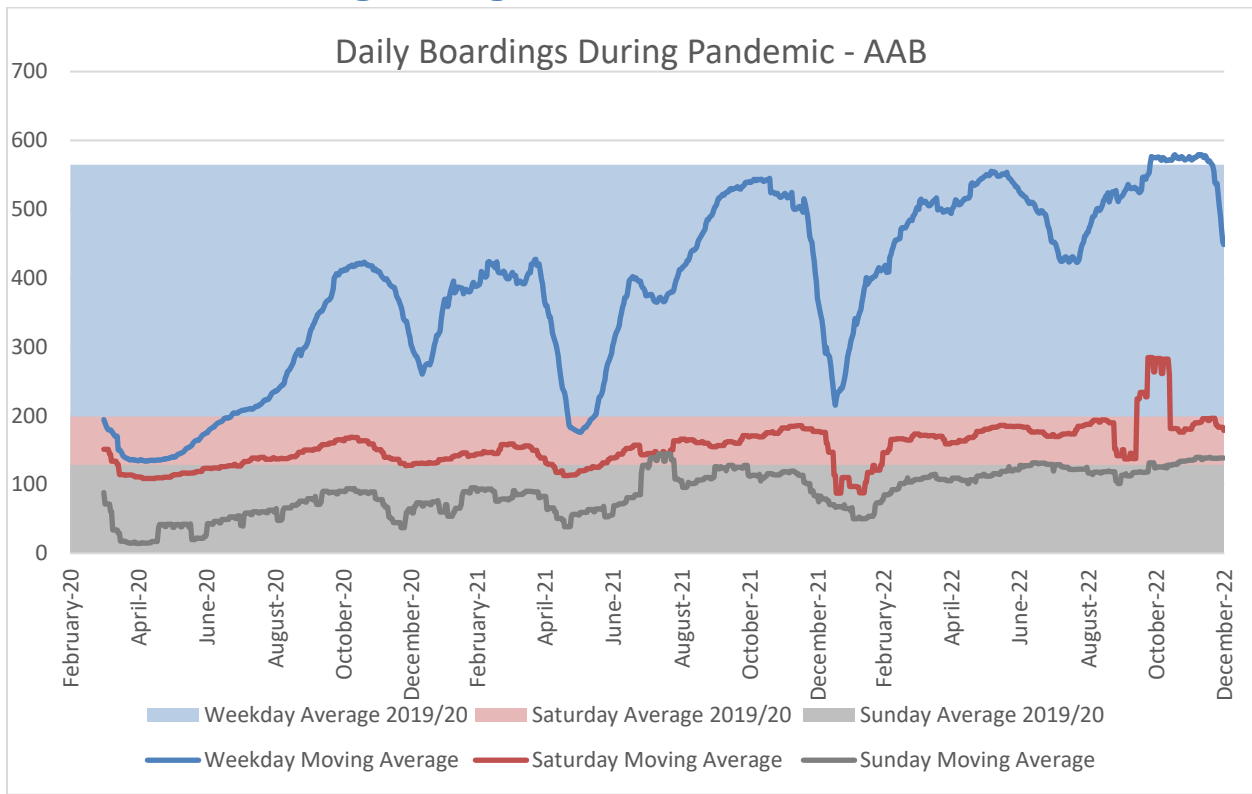
Conventional Bus Boardings During Pandemic



Ferry Boardings During Pandemic



Access-A-Bus Boardings During Pandemic

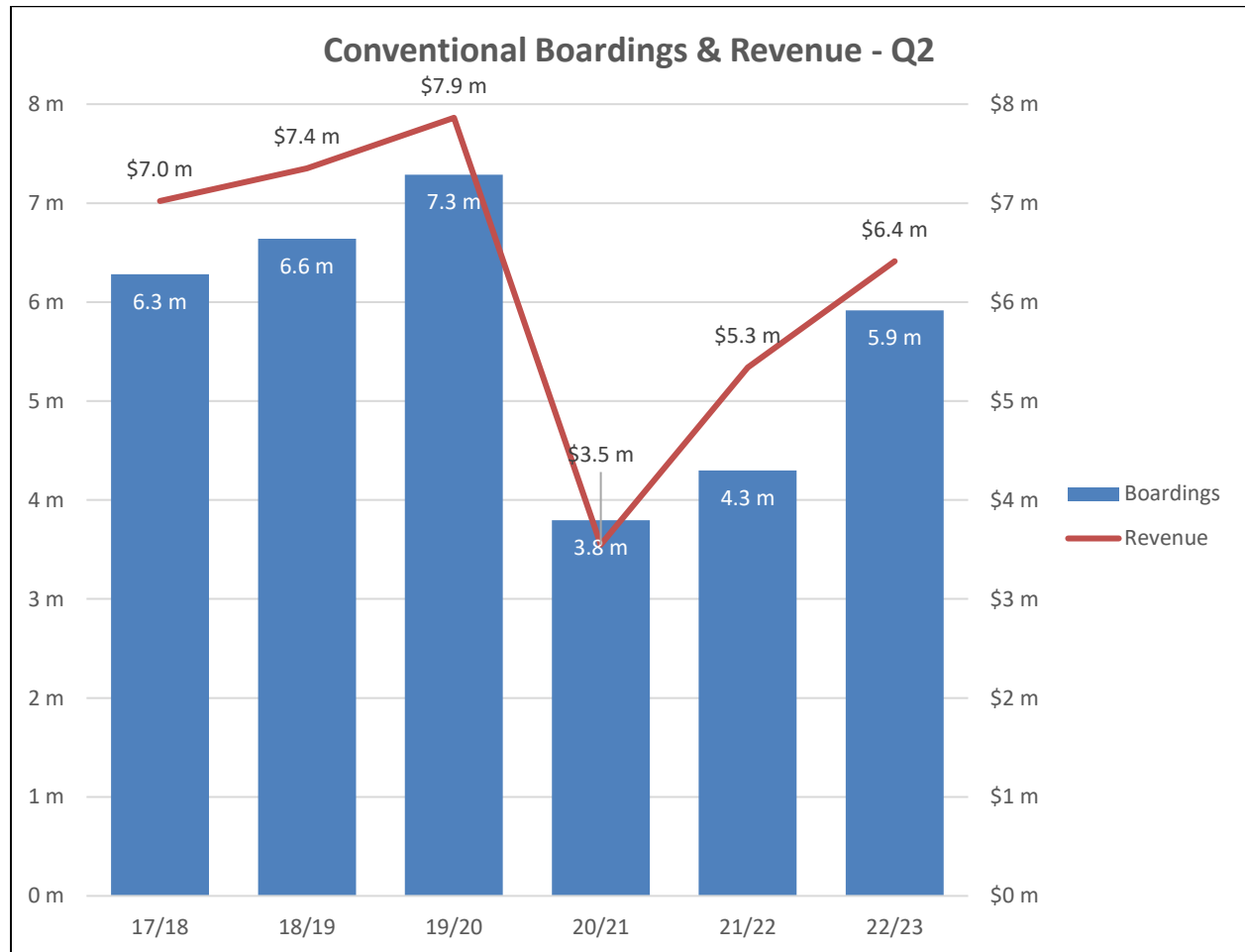


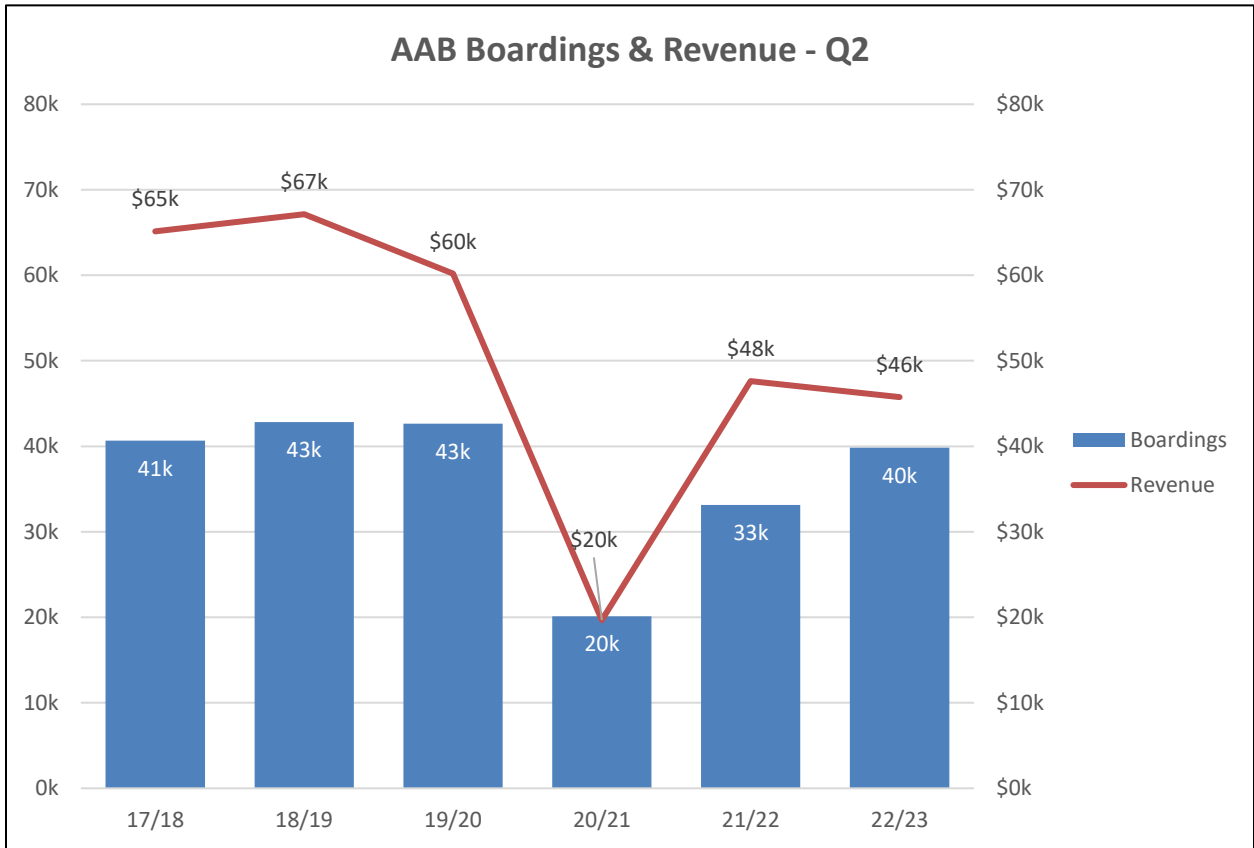
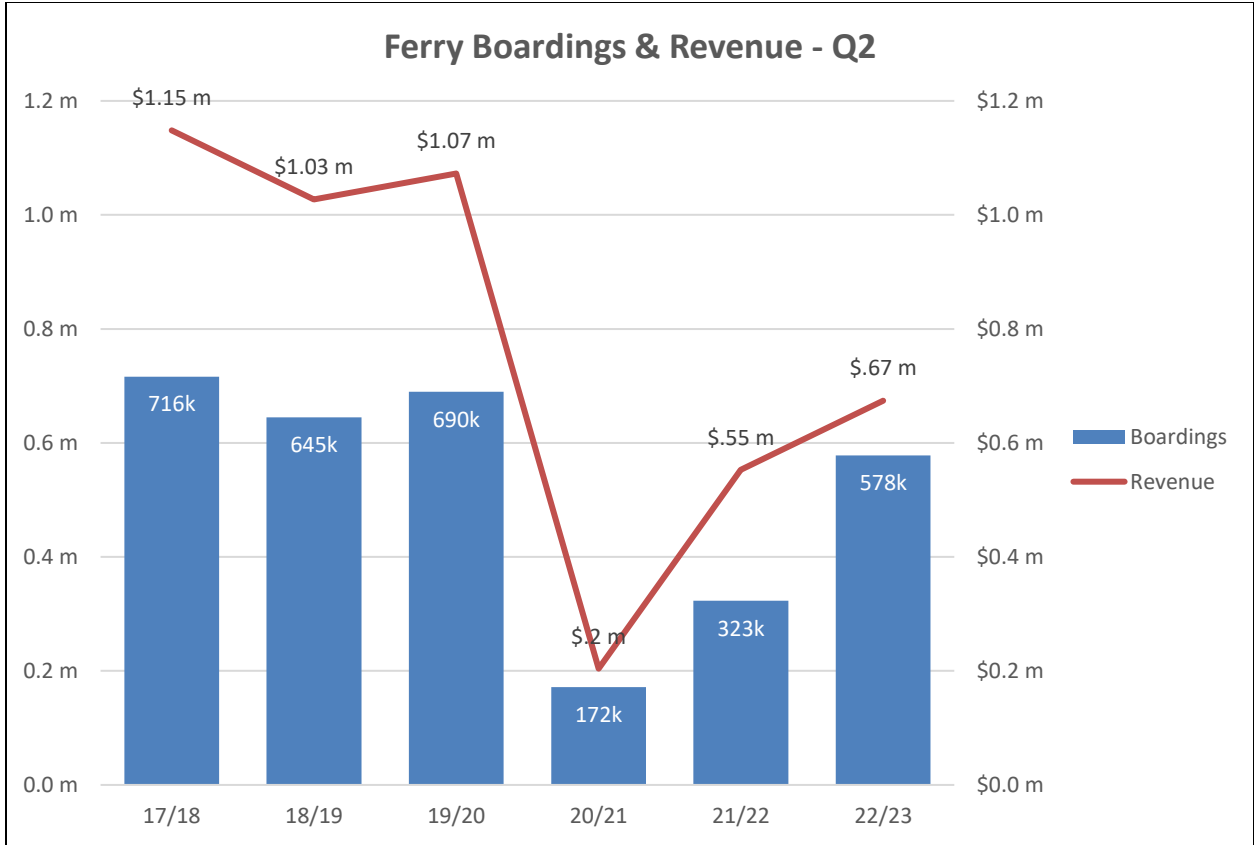
Boardings & Revenue

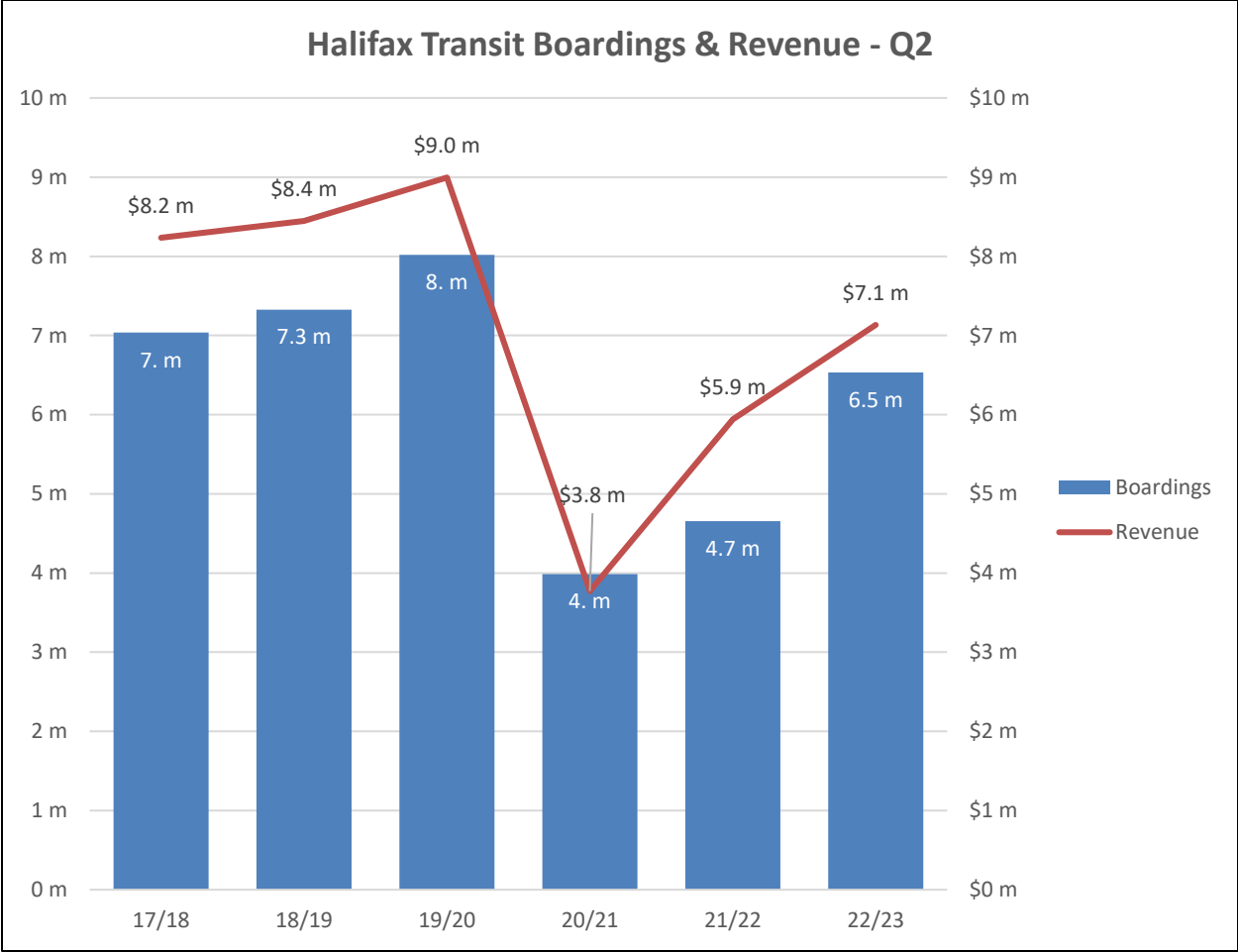
Revenue and boardings are reported to demonstrate how well transit services were used over the quarter, in comparison to the same quarter the previous year.

Recovery from the COVID-19 pandemic continued through the second quarter this year. Conventional boardings increased 38% from this quarter last year, Ferry boardings increased 79% and Access-A-Bus boardings increased 20%. Overall, system wide boardings increased this quarter by 40% compared to last year, which is still 19% lower than second quarter 2019/20. Overall revenue this quarter increased 20% from last year, but remains 21% lower than second quarter 2019/20.

Historical Boardings & Revenue

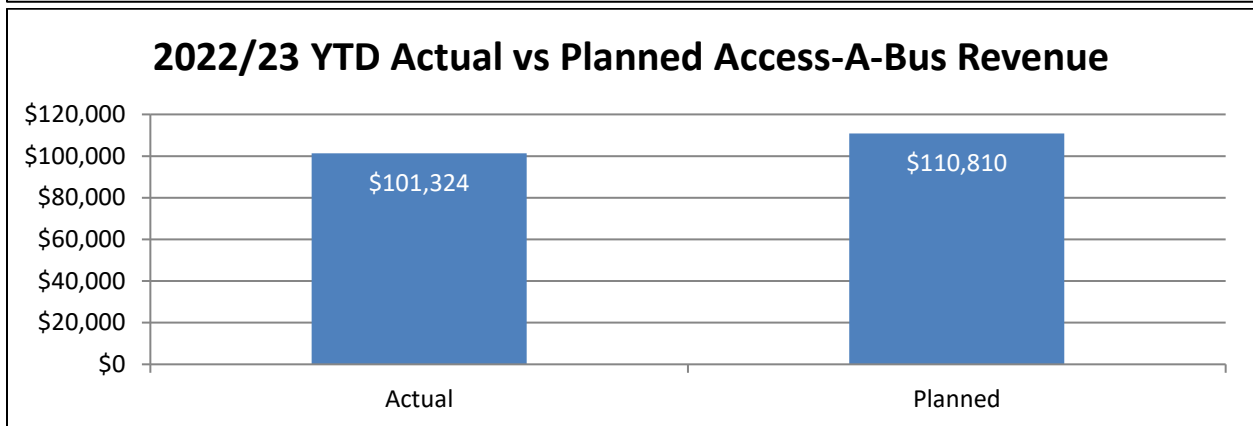
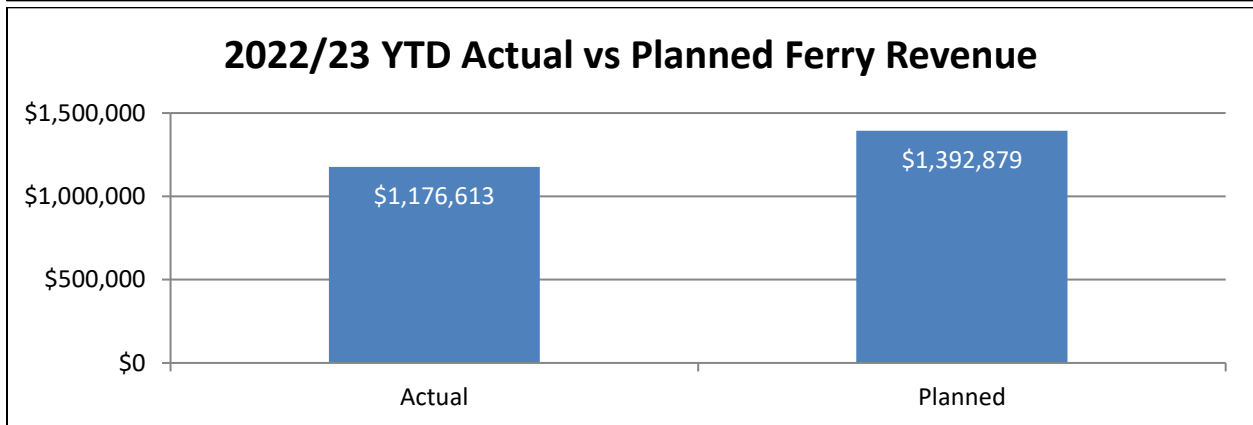
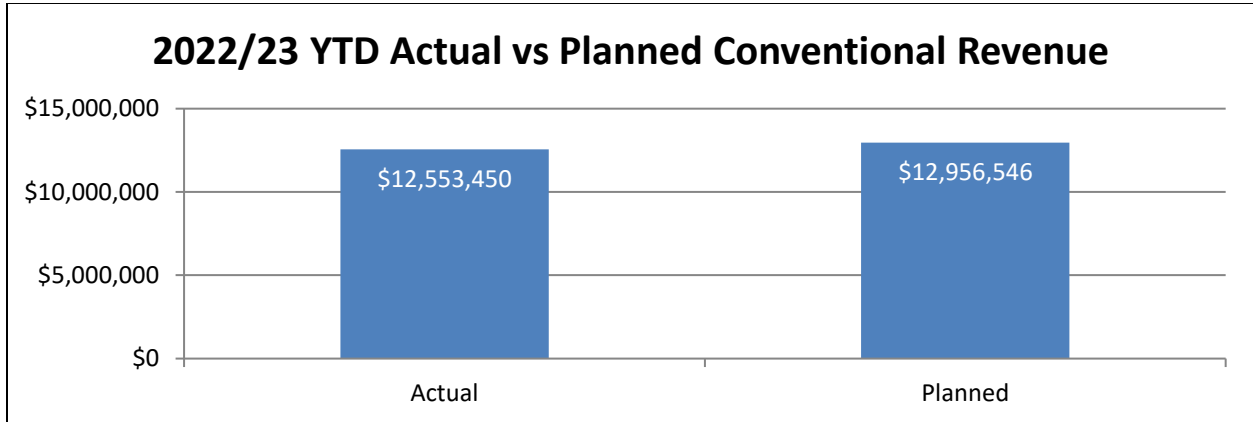


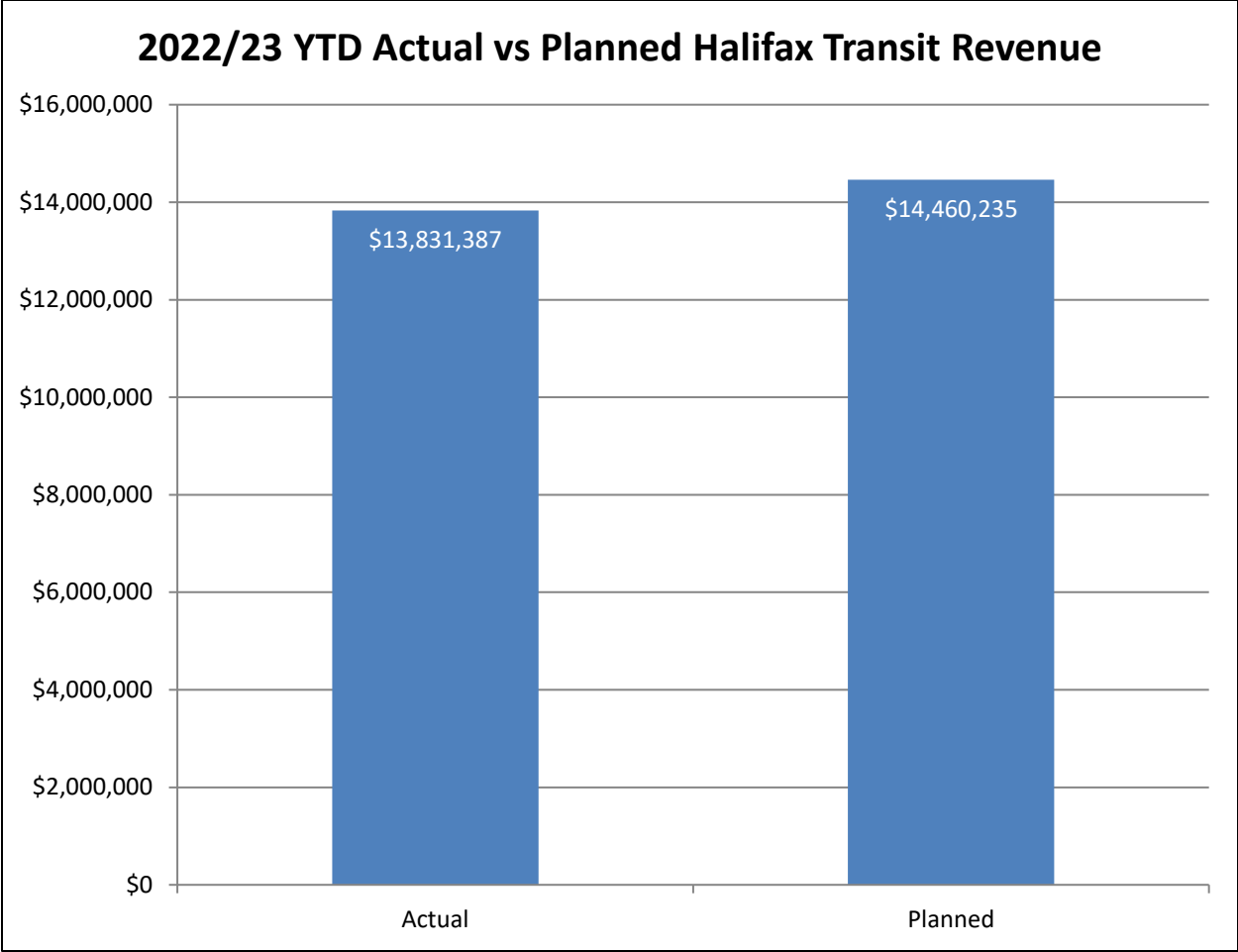




Revenue – Actual vs. Planned

The following charts provide an indication of how much revenue has been generated by each service type and by Halifax Transit overall in comparison to the planned budget revenue. As of the end of the second quarter conventional revenue has increased 31% over last year and is 3% below the planned amount. Ferry revenue has increased 60% and is 16% below the planned amount. Access-A-Bus revenue this year increased 31% over last year and is 9% below the planned amount. Overall revenue this year has increased 33% over last year, and is 4% below the planned amount.

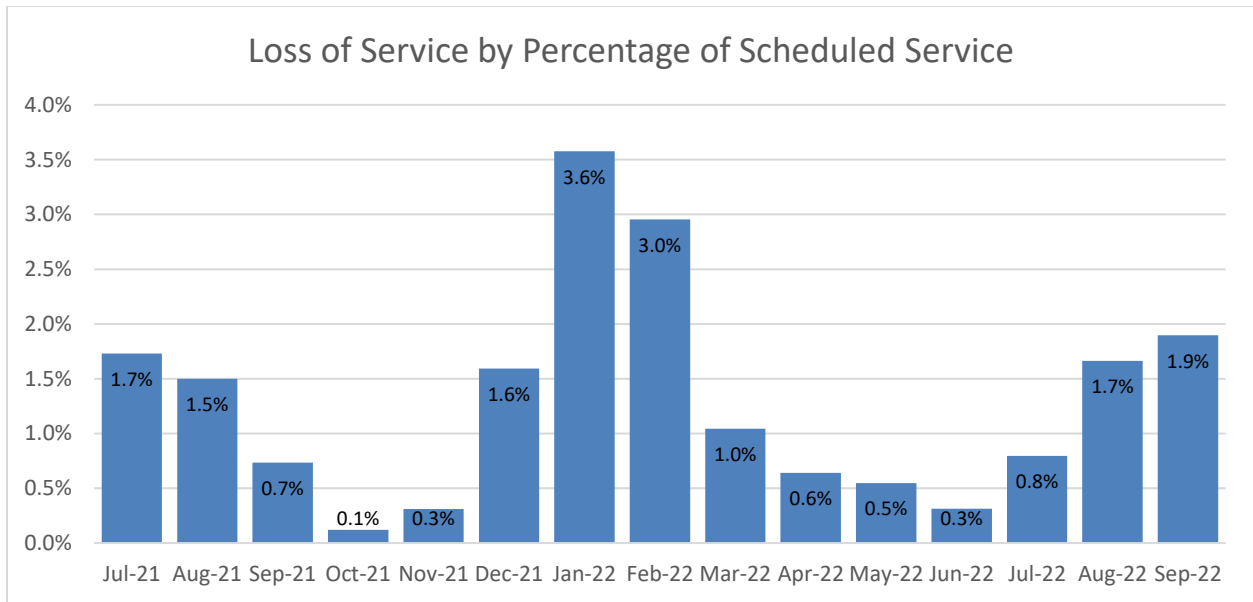




Loss of Service

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

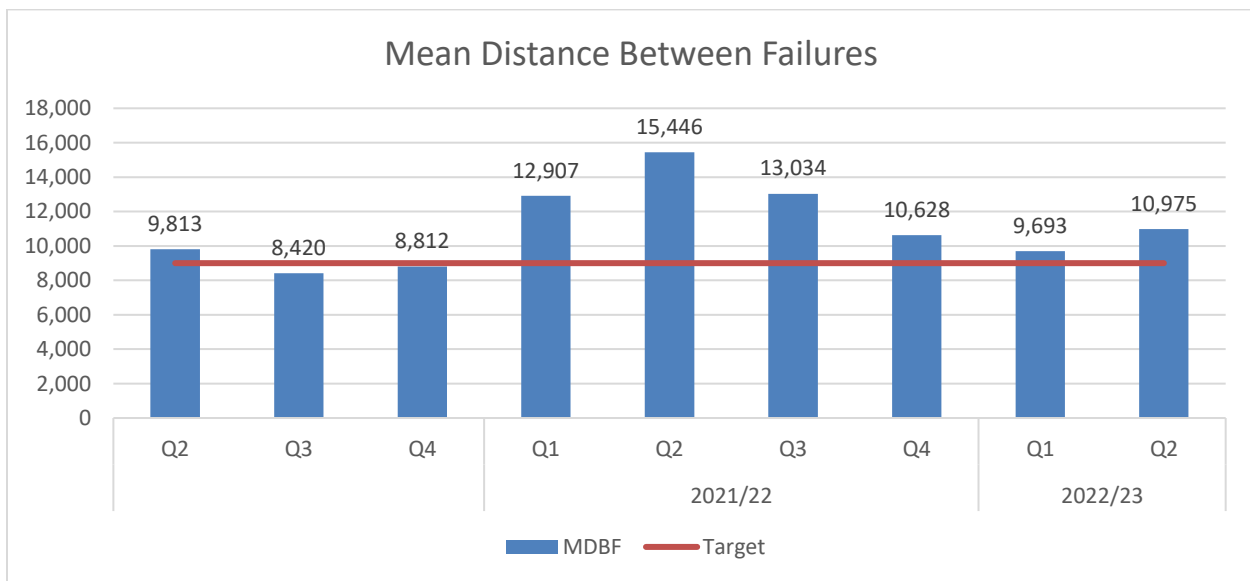
In the second quarter, the total loss of service was 3,030 hours, which is 1.4% of the quarterly revenue hours. The table below shows the total loss of service for each month. In recent months a number of trips (60-80) have been pre-emptively cancelled due to staffing challenges, this is represented in the August and September figures below.



Mean Distance Between Failures

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

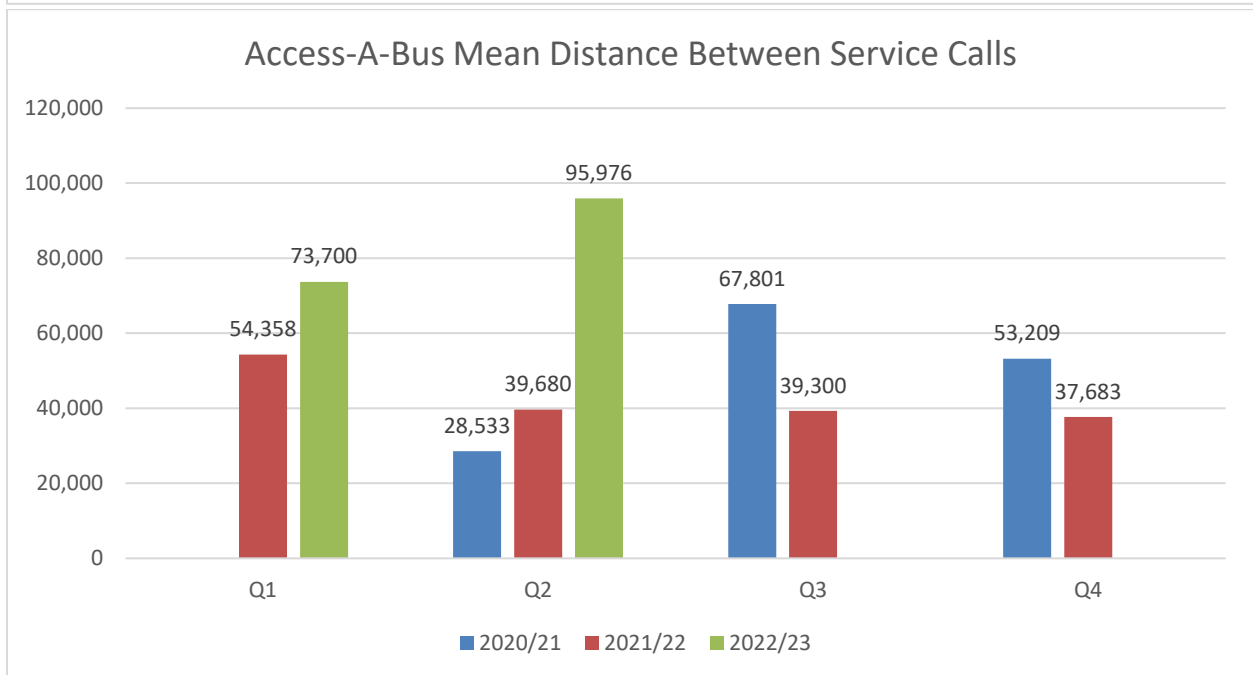
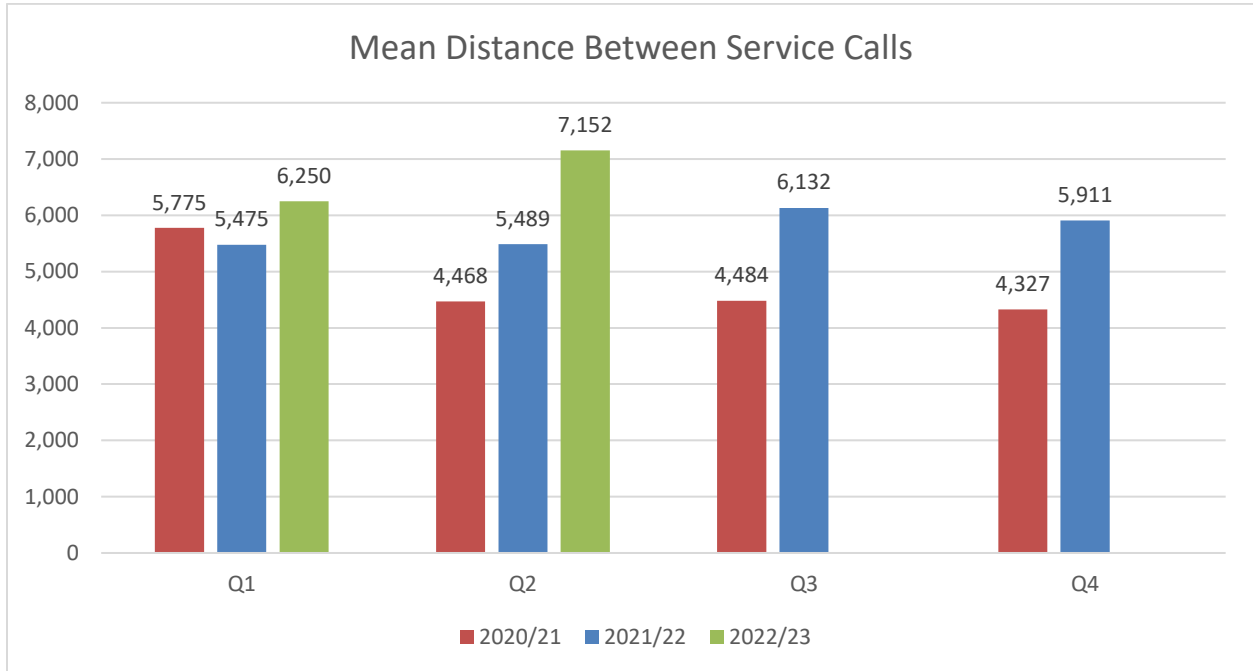
For the second quarter of 2022/23, the MDBF for conventional transit was 10,975 kms. This is a 29% decrease from the second quarter of the previous year. This decrease is more sizeable in part due to the comparison to a much higher than average MDBF in Q2 of the previous year. It is also attributable to an aging fleet, replacement vehicles currently on order are expected to reduce average fleet age and improve MDBF.



Mean Distance Between Service Calls

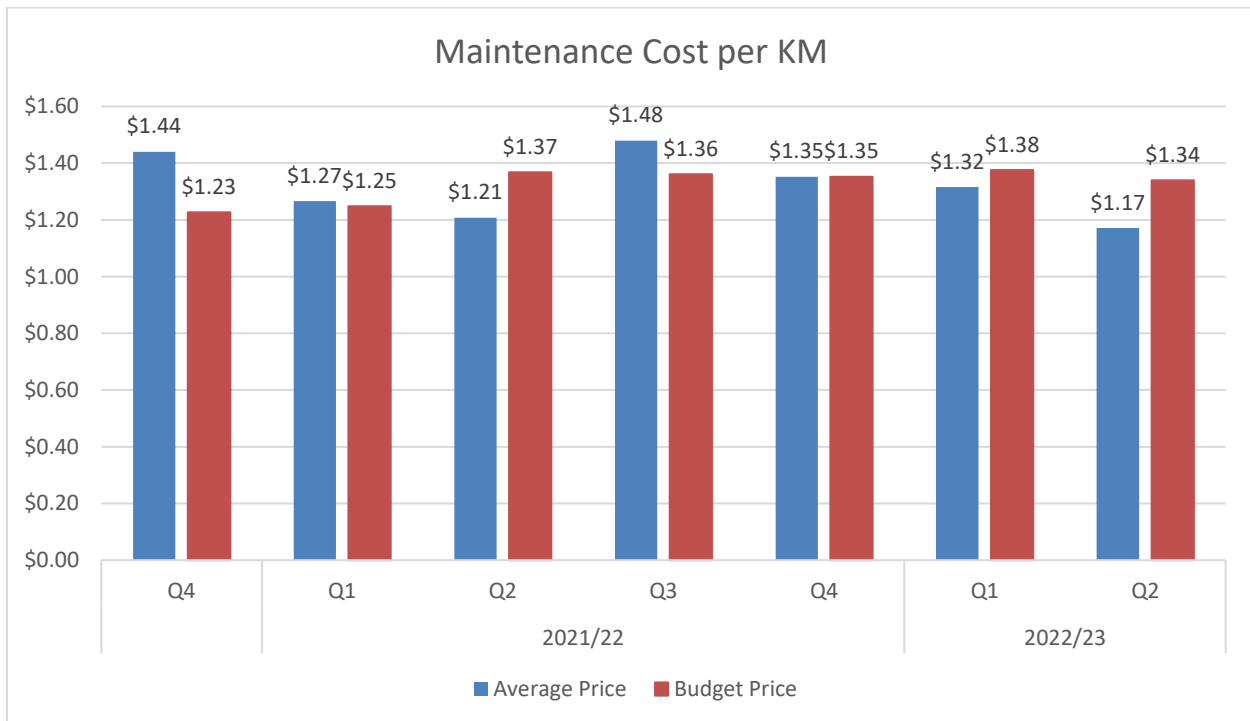
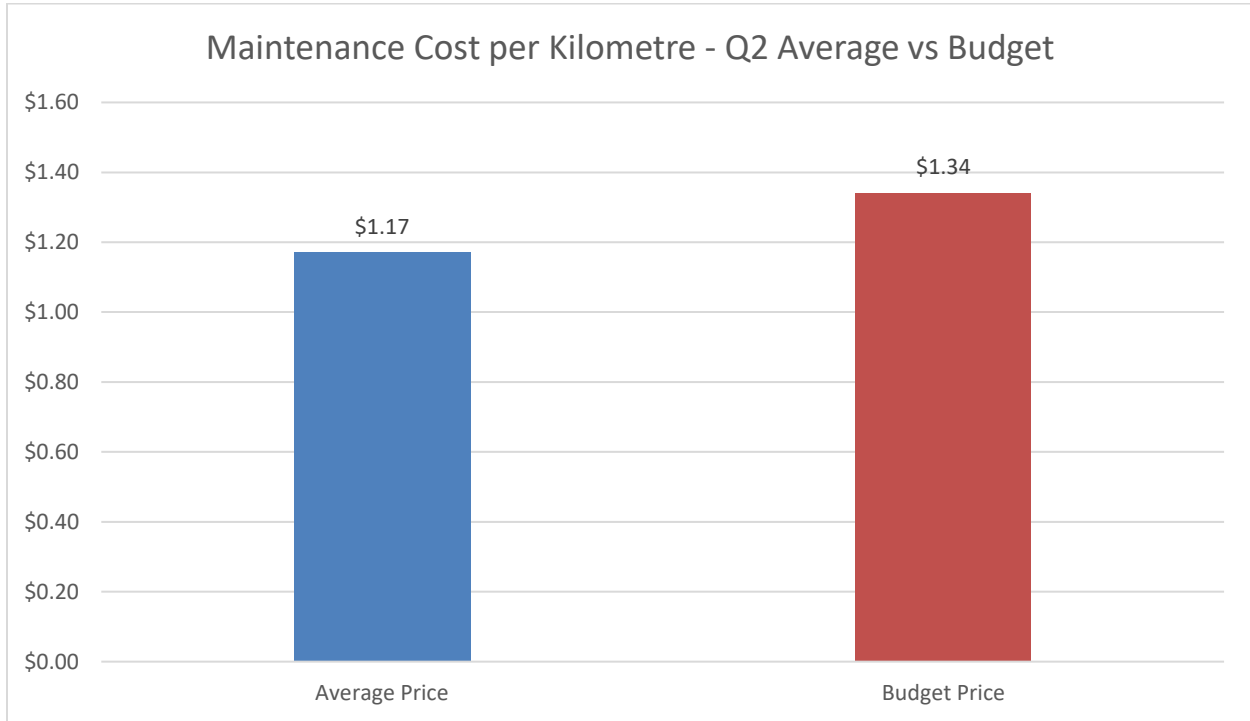
Mean Distance Between Service Calls (MDBS) reflects the average distance in kilometres covered between maintenance service calls. This metric includes all instances of service calls, including issues with secondary equipment, passenger-related events and damages to the bus resulting from minor accidents.

For the second quarter of 2022/23, the MDBS for conventional transit was 7,152 kms. In comparison to the second quarter of 2021/22 (5,489), this is an increase of 30%. The MDBS for Access-A-Bus service was 93,976 kms, a 39% increase from the previous year.



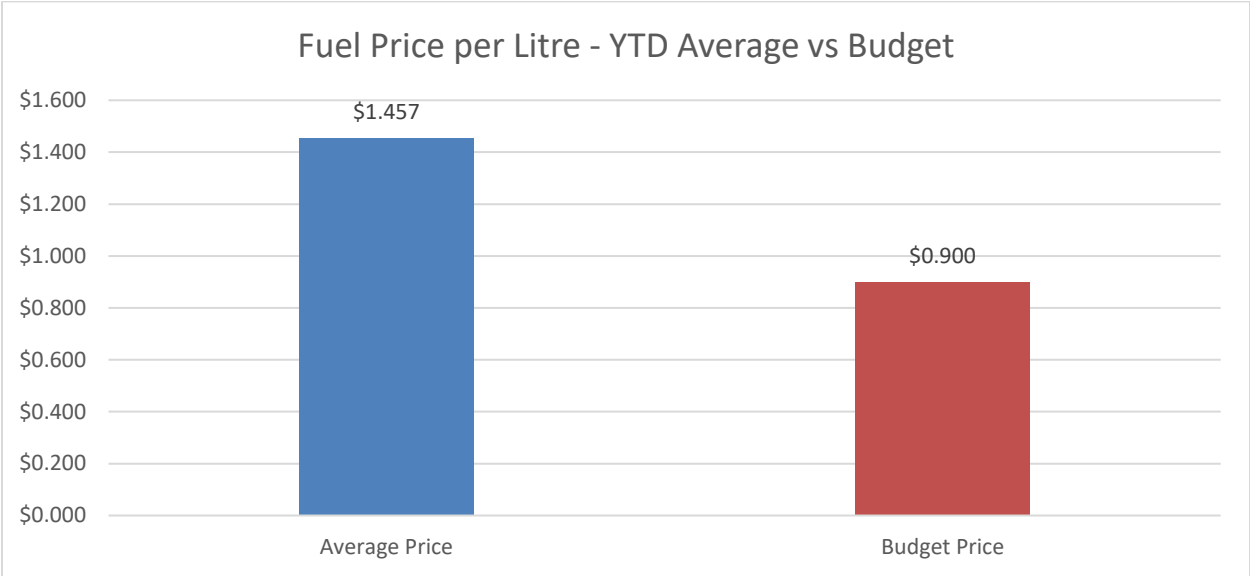
Bus Maintenance Cost – Quarter Average vs Budget

In the second quarter, bus maintenance costs were \$1.17/km, while the budgeted maintenance cost was \$1.34/km.



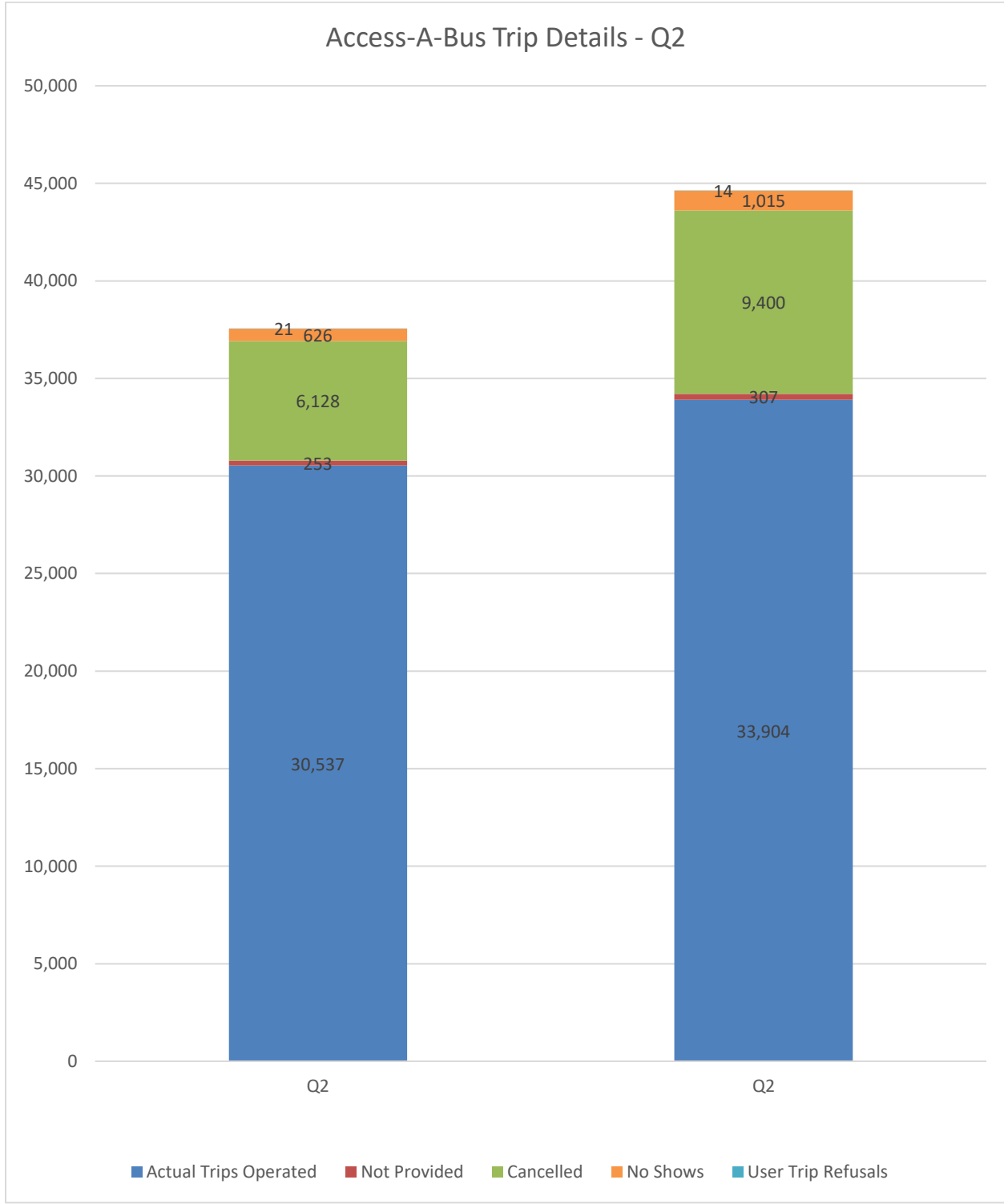
Diesel Fuel Price – Annual Average vs Budget

The budgeted diesel fuel price for 2022/23 was set at 90 cents/litre. The average diesel fuel price for 2022/23 as of the end the second quarter was \$1.457 per litre, 56 cents higher than the budgeted price per litre.

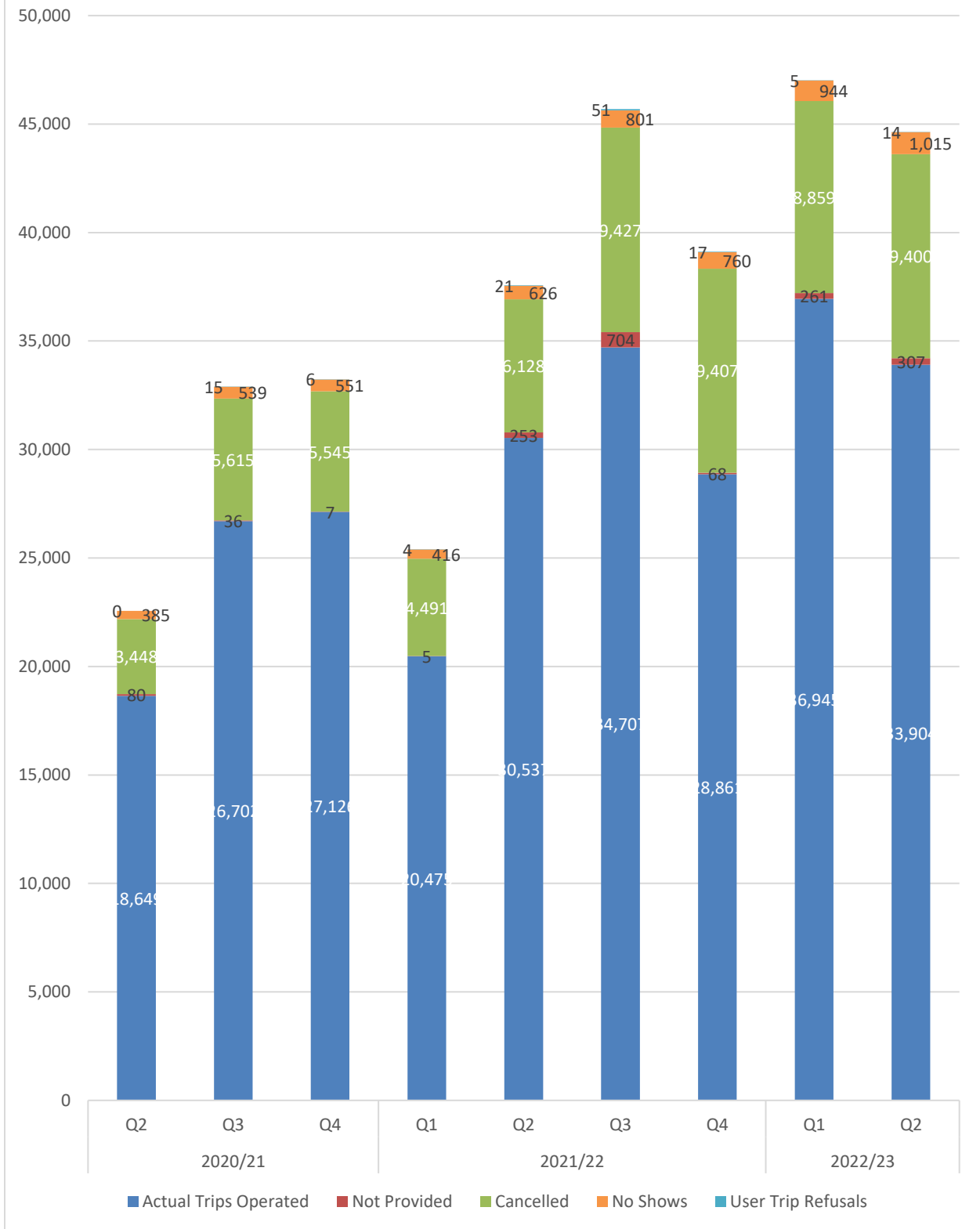


Access-A-Bus Trip Details

Access-A-Bus trip details are tracked monthly to provide an indication of efficiency in Access-A-Bus usage and booking. In the second quarter of 2022/23 a total of 33,904 trips were operated, an increase of 11% compared to the second quarter last year.



Access-A-Bus Trip Details

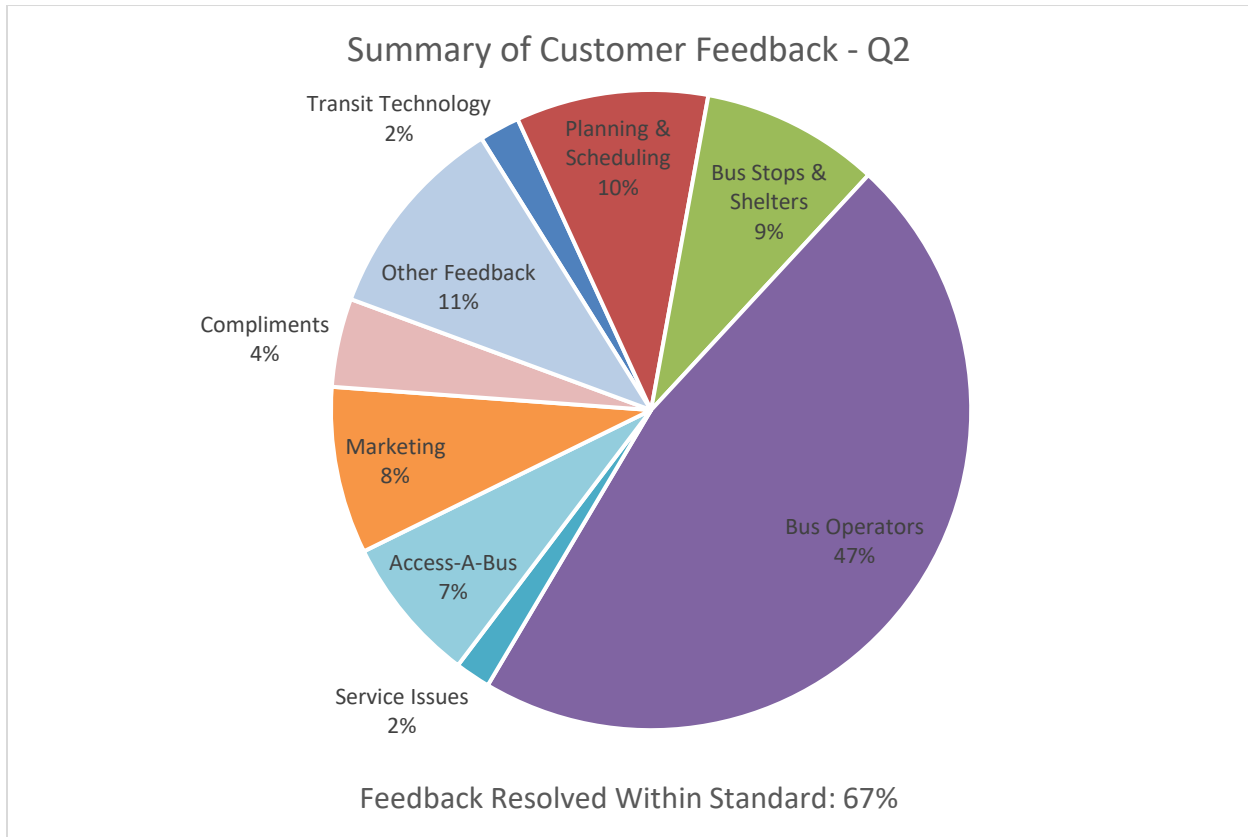


Customer Service – All Services

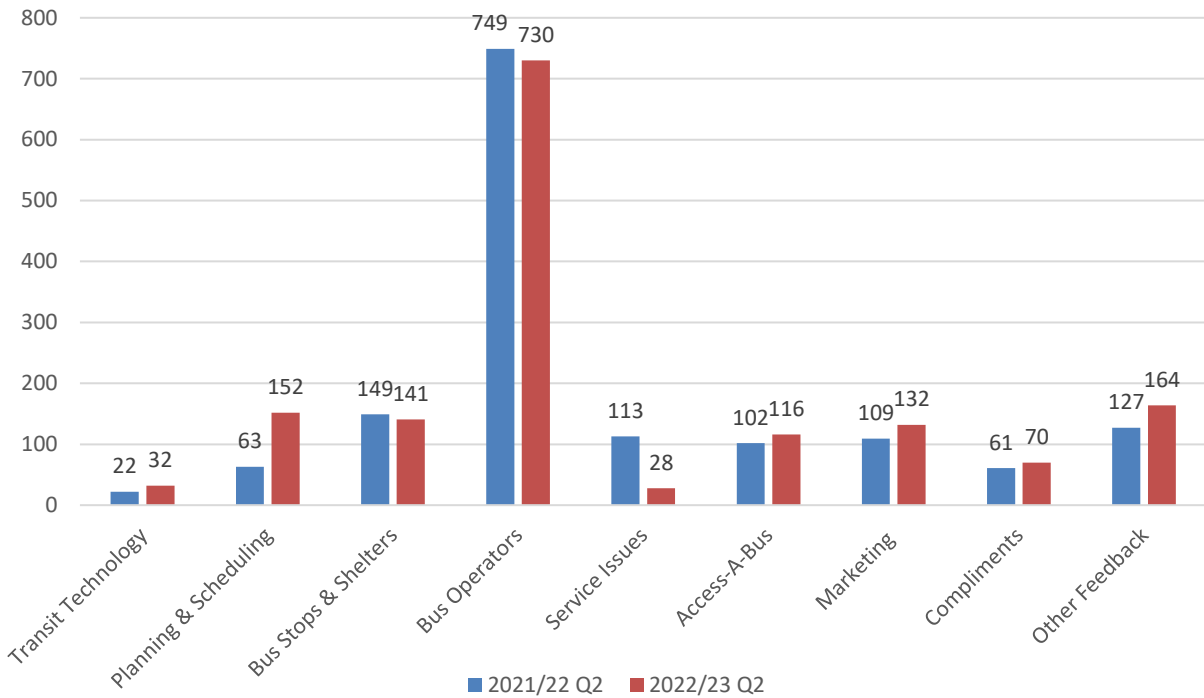
Customer service statistics are measured monthly using the Cityworks Customer Relationship Management software. Feedback is first categorized by subject matter and then divided into two categories: feedback resolved within service standard and feedback resolved outside service standard. The service standard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

In the second quarter, 47% of feedback received was related to Bus Operators. The remaining 53% is comprised of feedback regarding service issues, planning and scheduling, bus stops and shelters, marketing, compliments and other miscellaneous comments. Halifax Transit aims to address 90% of feedback within service standard. This quarter, 67% of customer feedback was resolved within standard. This drop was anticipated due to staffing challenges, as well as the transition from the Hansen platform to Cityworks. Staff have developed and implemented a plan to address staffing challenges, and have made adjustments to the Cityworks platform to increase efficiency and processing time for service inquiries. These measures are expected to be completed in the coming days, and will bring the response time back within the service standard by February, 2023.

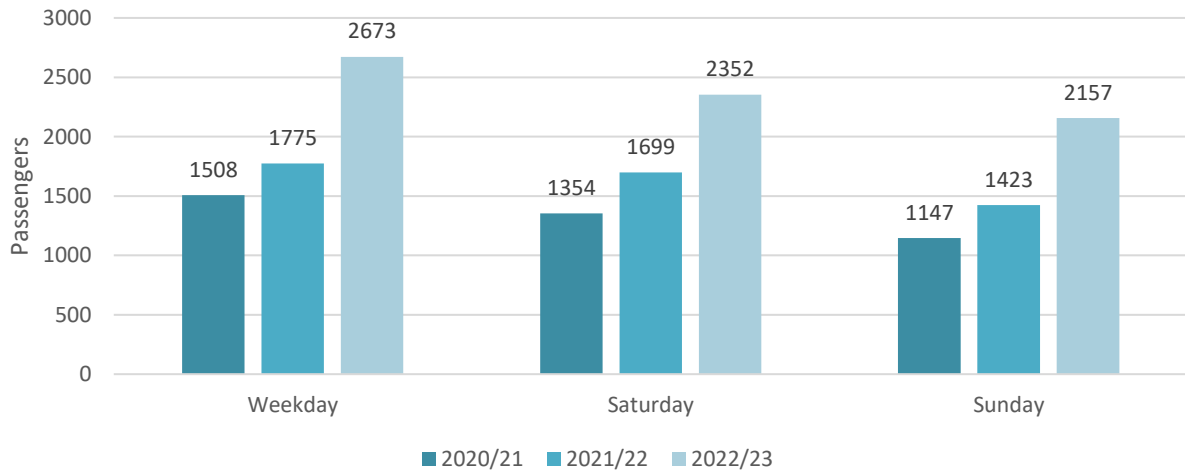
Call volumes to the Departures Line (902-480-8000) are displayed by day of the week.



Customer Feedback Comparison - Q2



Average Departures Line Call Volumes - Q2

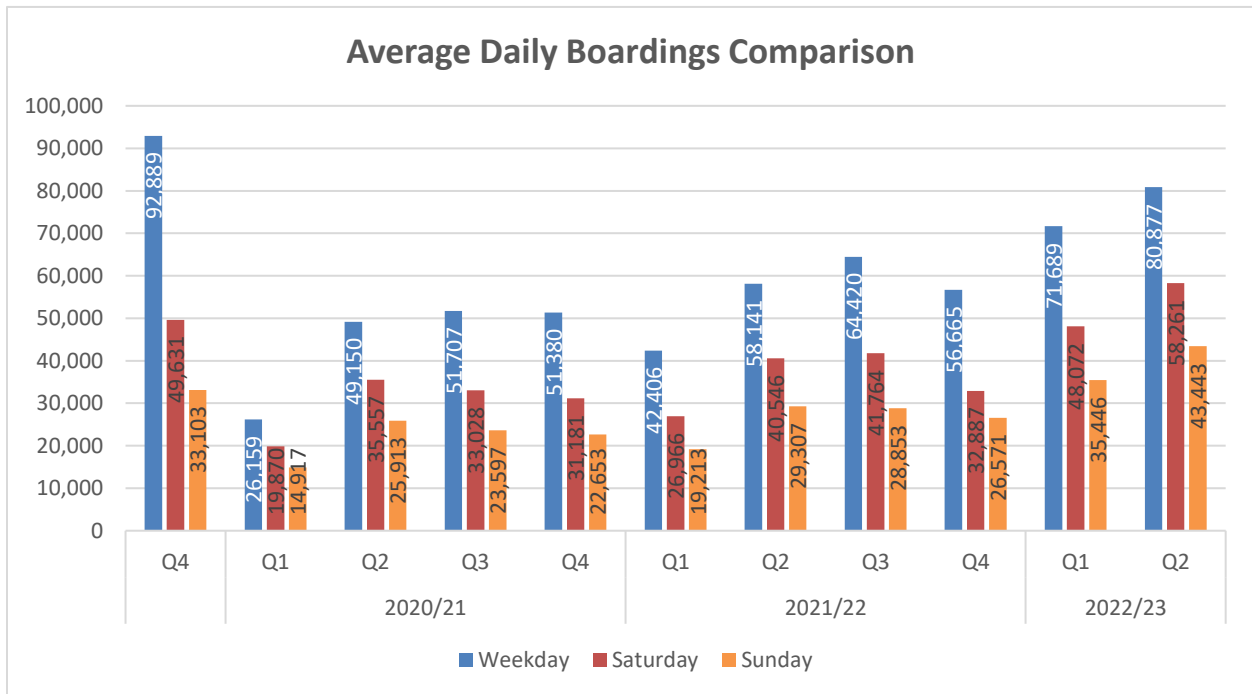


Service Utilization

Boardings

Average weekday boardings in the second quarter were 80,877 ± 10,025 (12.4% variance). Average Saturday boardings this quarter were 58,261 ± 4,944 (8.5% variance). Average Sunday boardings this quarter were 43,443 ± 5,088 (11.7% variance).

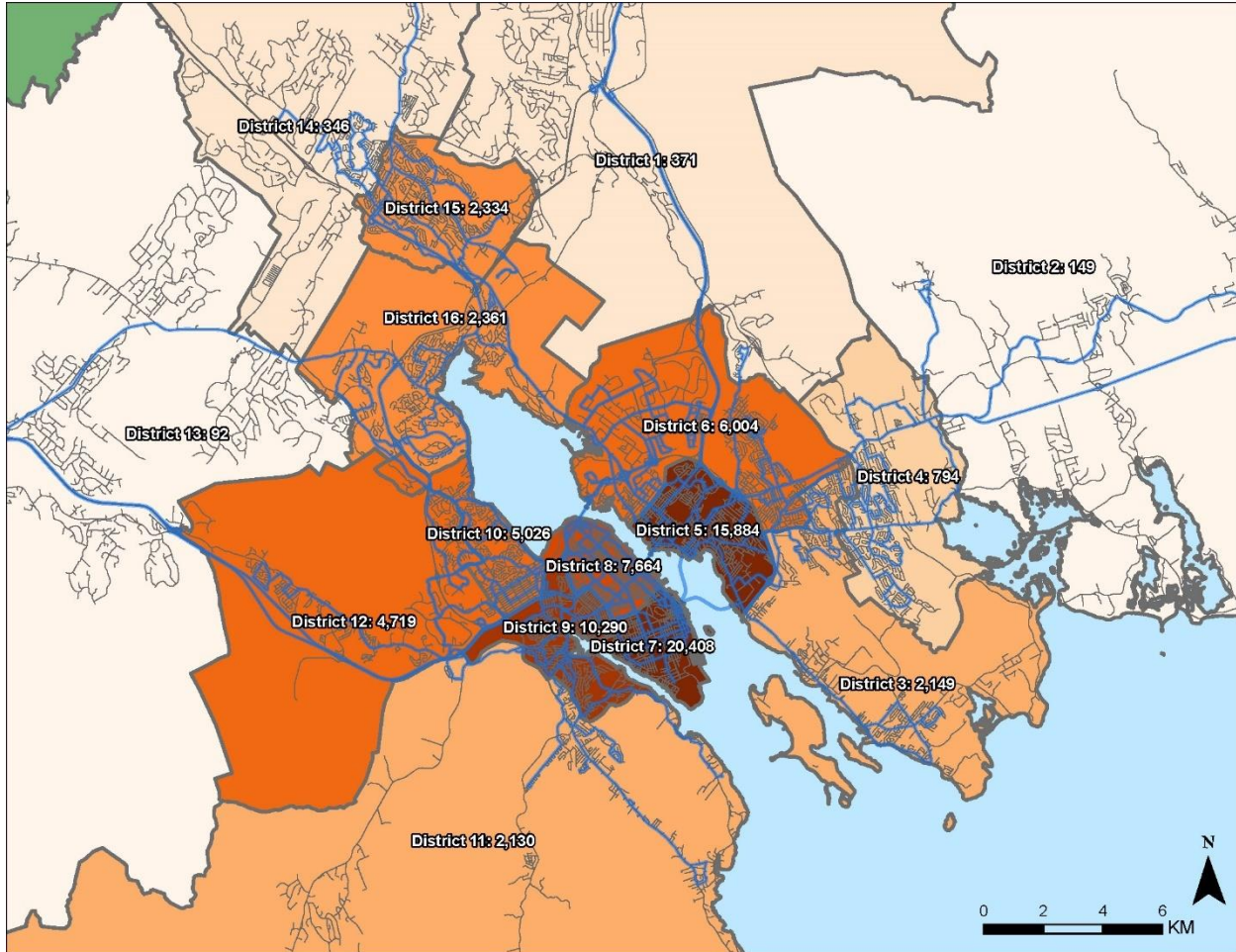
Average Daily Boardings by Service Day



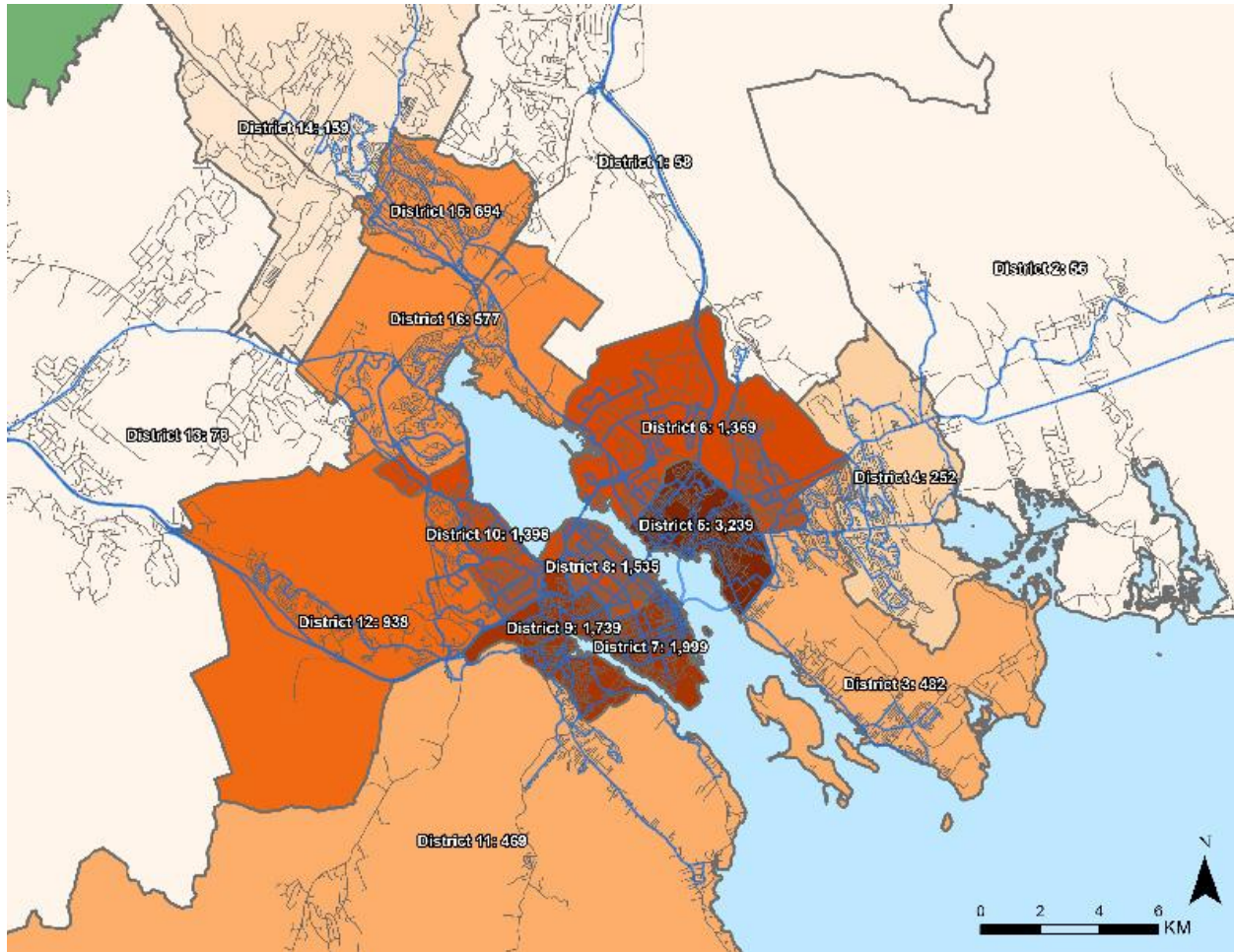
Boardings by District

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



Weekday Boardings by District – AM Peak Period



Passengers per Hour

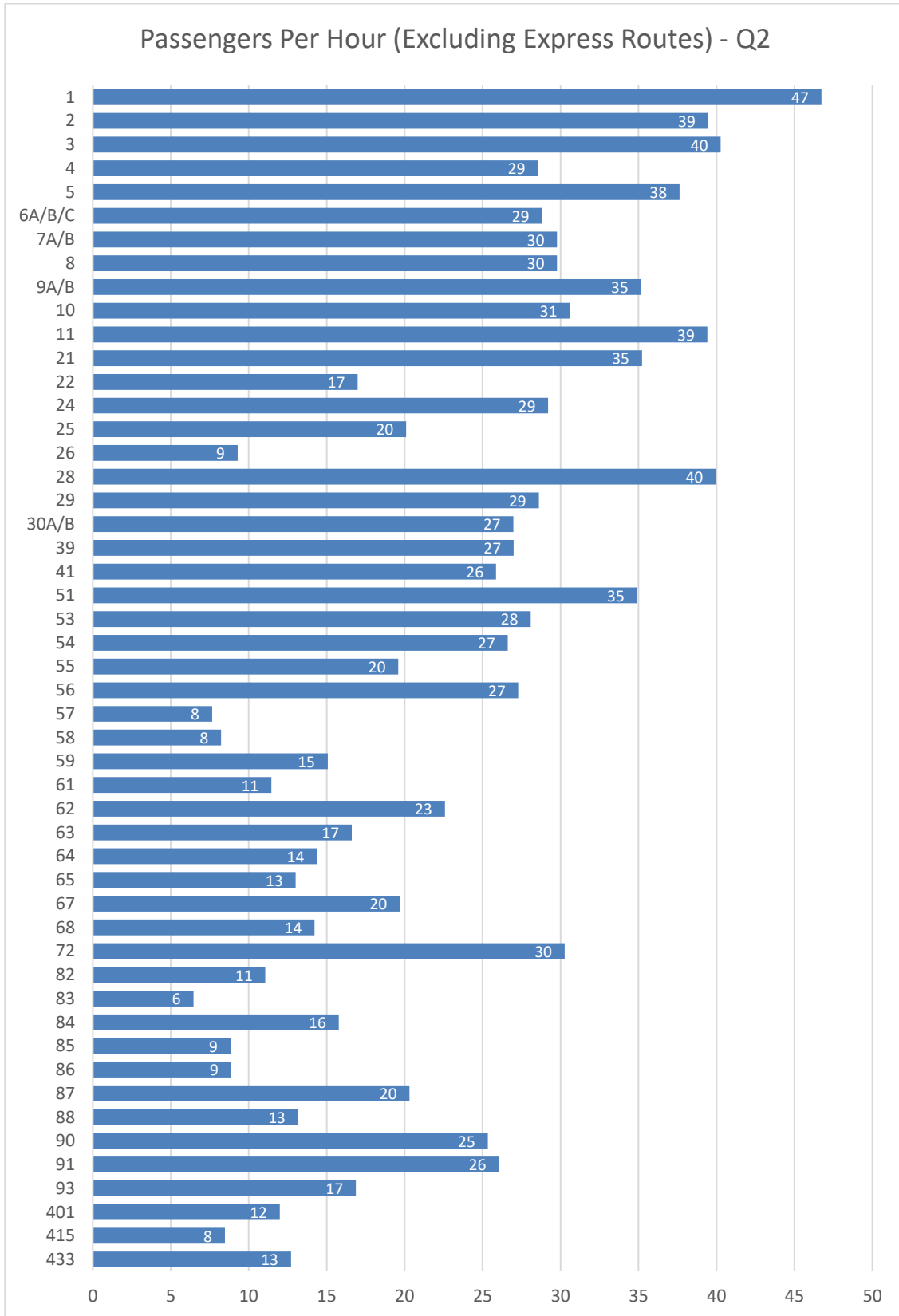
Passengers per hour measures the volume of passengers carried per service hour by route. Due to differences in service model/design, Express Routes are measured instead by passengers per trip. Ridership fluctuates significantly by season and therefore figures are compared to the same quarter in the previous year. Conventional route targets vary by time of day and are not illustrated at this time as data is being presented over the entire service day only. Express routes have a ridership target of 20 passengers per trip, while Regional Express Routes have a target of 15 passengers per trip. Significant service changes were implemented on November 22, 2021, former routes are listed for comparison from Q2 2021/22.

Boardings & Passengers per Hour

Q2 Comparison - Average Daily Boardings by Route												
Route	Weekday				Saturday				Sunday			
	2021/22		2022/23		2021/22		2022/23		2021/22		2022/23	
	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr
1	5,119	33	7,283	47	4,414	40	5,776	51	3,217	38	4,345	50
2	3,060	28	4,354	39	3,147	31	4,189	42	1,946	28	3,039	43
3	4,638	31	6,108	40	2,526	29	3,401	41	2,722	29	3,839	40
4	2,978	23	3,719	29	1,500	30	1,648	34	1,269	28	1,632	36
5			3,460	38			2,721	40			1,944	46
6A/B/C			2,678	29			1,621	36			1,336	32
Former 60	1,576	21			1,293	32			939	34		
Former 63	476	28										
Former 7	2,807	25			2,251	24			1,314	25		
7A/B			4,061	30			2,948	29			2,091	30
8	2,694	20	4,010	30	2,203	20	3,015	29	1,721	16	2,807	27
9A/B	4,284	25	5,809	35	2,689		3,441	48	2,207		3,133	46
10	2,611	24	3,261	31	1,929	26	2,206	30	1,329	27	1,864	38
11	63	32	81	39								
Former 14	1,430	23			813	25			703	24		
21	747	25	1,032	35	607	18	895	26	417	23	664	37
22	431	14	556	17	360	11	414	13	295	8	396	11
24			1,634	29			1,648	29			1,368	26
25	266	12	418	20	171	11	285	21	148	13	273	20
Former 5												
26			24	9								
28	1,141	30	1,614	40	1,069	24	1,443	36	559	28	864	41
29	1,618	18	2,634	29	1,211	19	1,804	29	933	16	1,553	26
30A/B	583	16	957	27	487		681	20	266		508	24
30A	330	18	533	30	256	15	319	19	120	13	223	19
30B	253	14	424	24	231	13	362	21	146	16	285	31
39	845	19	1,187	27	760	14	1,079	22	323	15	524	24
41	686	20	892	26								
51	681	29	878	35	417	26	555	35	217	21	329	22

Q2 Comparison - Average Daily Boardings by Route												
Route	Weekday				Saturday				Sunday			
	2021/22		2022/23		2021/22		2022/23		2021/22		2022/23	
	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr	Boardings	Pass/Hr
Former 53	703	29			516	34			221	27		
53			960	28			939	29			507	25
54	519	24	819	27	317	20	534	26	194	20	374	23
55	218	10	413	20	170	11	348	23	116	8	296	21
56	762	24	931	27	852	24	996	32	610	19	721	24
Former 57	392	10			231	8			121	7		
57			37	8								
Former 58	452	16			322	17			251	15		
58			129	8			121	8			69	5
Former 59	1,154	15			568	24			408	17		
59			151	15			130	18			103	16
Former 61	1,470	19			823	21			717	19		
61			187	11			199	12			147	9
Former 62	428	14			336	15			170	11		
62			533	23			341	21			331	21
63			383	17			236	16			185	13
64	427	11	561	14								
65	174	10	111	13	68	5	103	10	47	7	101	10
Former 66	704	23			389	24			271	17		
67			557	20			269	17			207	13
Former 68	786	17			536	18			380	13		
68			236	14			230	13			149	10
72	907	20	1,419	30	854	19	1,155	26	414	15	641	25
82	130	7	224	11	112	7	179	11	88	6	149	9
83	70	6	86	6	61	6	82	8	47	4	64	6
84	682	12	879	16	272	8	392	13	239	8	340	11
85	96	7	134	9	74	9	104	13	51	8	93	11
86	106	8	140	9	96	6	135	8	70	5	118	8
87	863	15	1,132	20	614	12	828	16	358	12	487	19
88	145	10	182	13	120	8	141	9	70	5	102	7
90	1,091	16	1,741	25	817	13	1,364	22	441	13	819	24
91	469	13	840	26	272	12	411	20	245	9	457	21
93	107	11	158	17								
401	110	8	126	12			50	11			43	7
415	37	6	53	8								
433	48	9	81	13								
Alderney	2,463	82	4,187	151	4,156	255	8,681	467	2,649	153	6,311	350
Woodside	1,129	54	1,728	83								

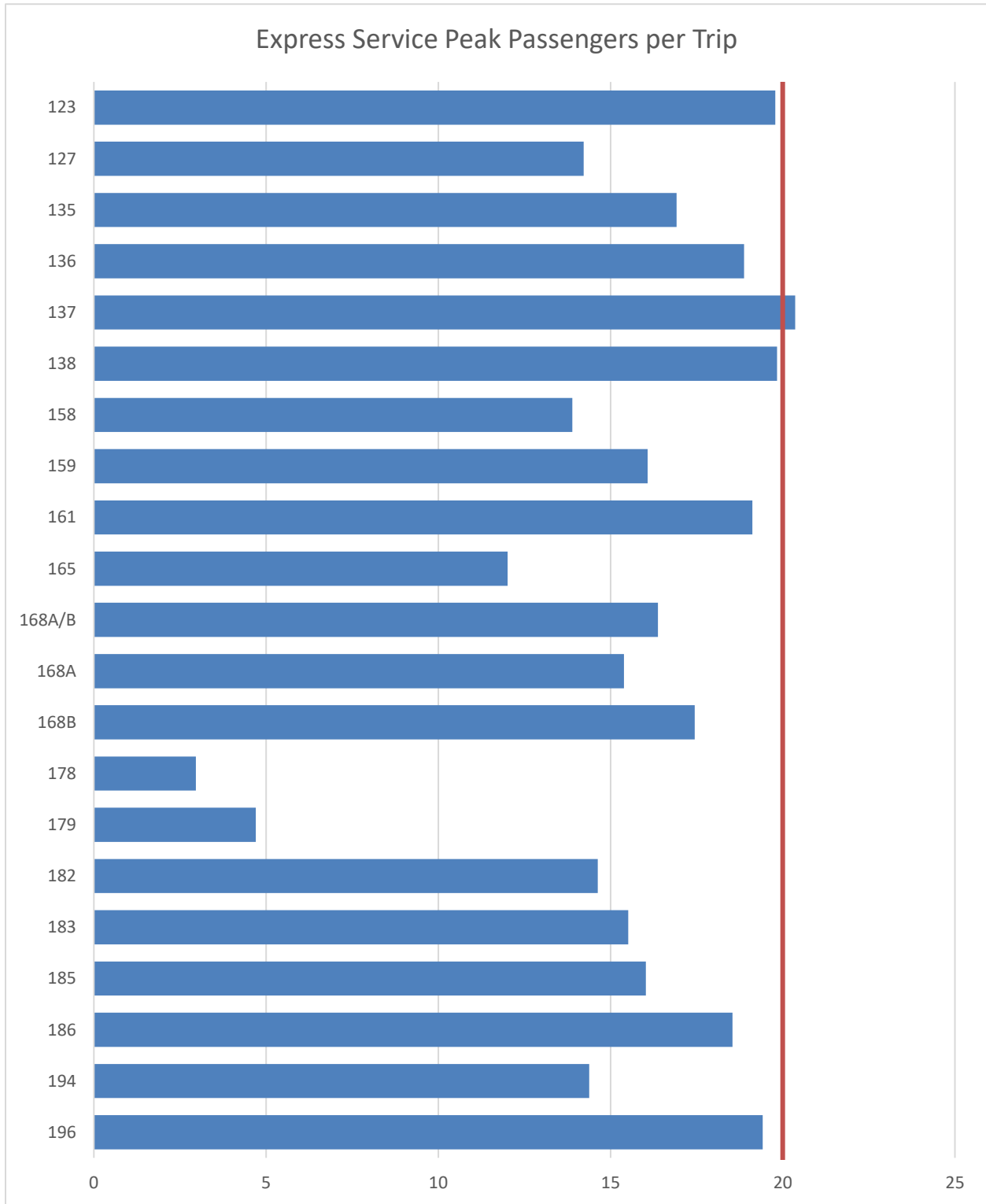
Passengers per Hour by Route



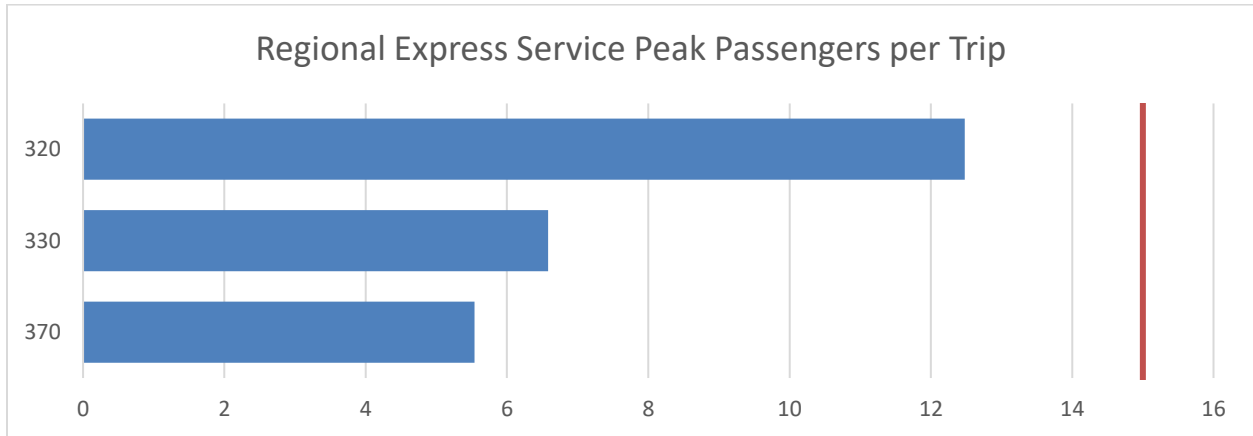
Express Service Peak Boardings and Passengers per Trip

Q2 Comparison - Average Daily Peak Boardings by Express Route				
	Weekday			
	2021/22		2022/23	
	Boardings	Pass/Trip	Boardings	Pass/Trip
123	141	10	257	20
127	177	10	256	14
135	211	15	237	17
136	296	19	302	19
137	145	12	244	20
138	176	13	278	20
158			111	14
Former 159	185	5		
159			289	16
161			229	19
165			144	12
168A/B			409	16
178	35	2	27	3
179	23	2	38	5
182	262	9	410	15
183	125	10	202	16
185	288	11	417	16
186	146	12	222	19
194	67	8	115	14
196	33	8	78	19
320	82	6	324	12
330	80	4	178	7
370	61	5	78	6

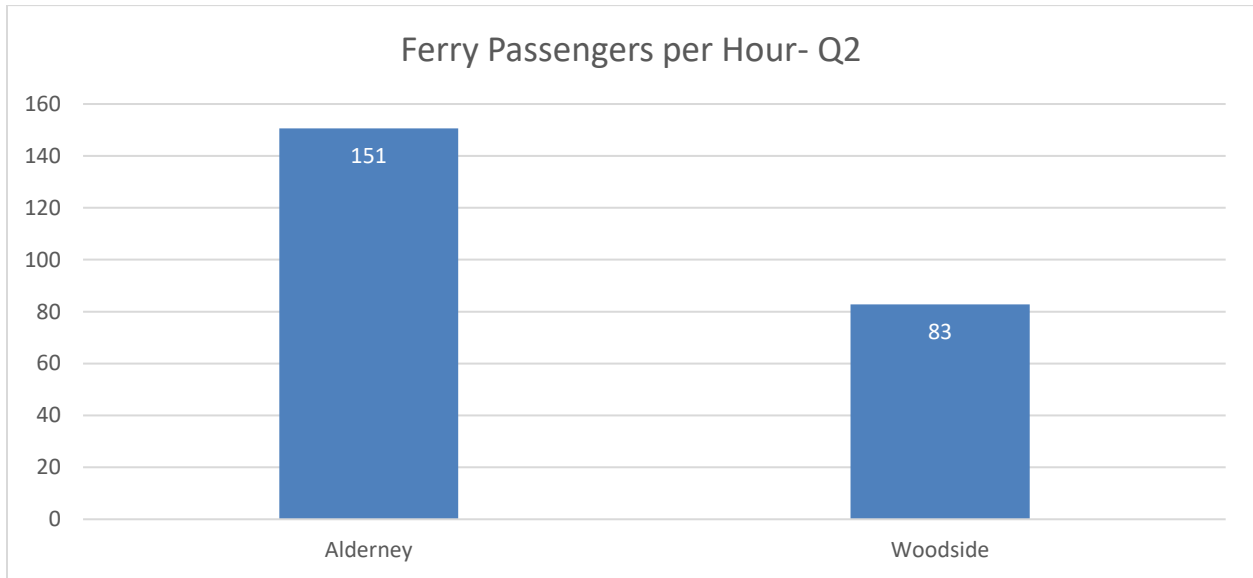
Express Service Peak Passengers per Trip by Route



Regional Express Peak Passengers per Trip by Route



Ferry Passengers per Hour

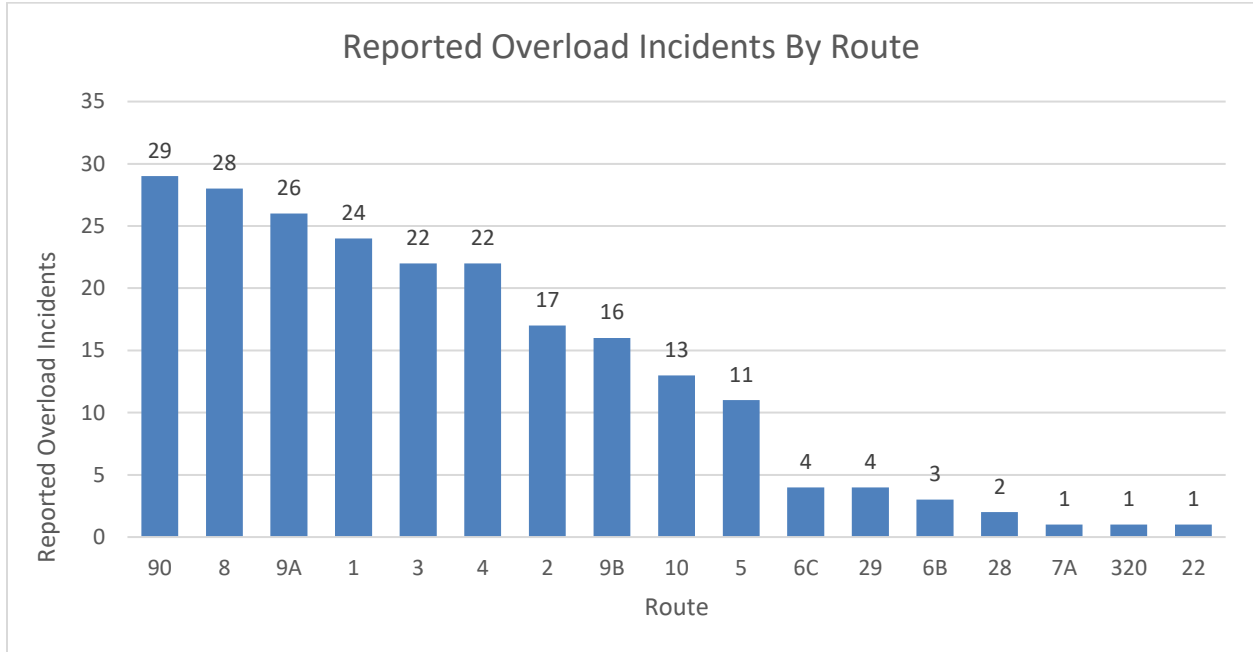


Passenger Overloads

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

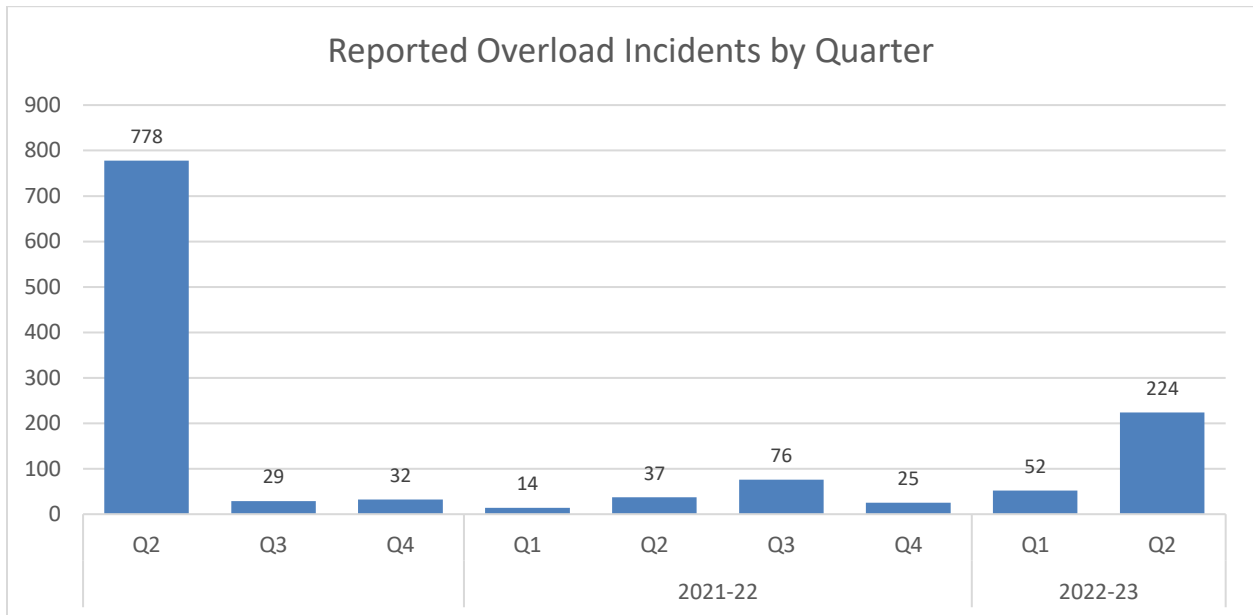
Passenger Overloads by Route

The following graph shows overloaded routes during the second quarter. 224 overload incidents were reported during the second quarter of 2022/23.



Passenger Overloads by Quarter

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



On-Time Performance

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

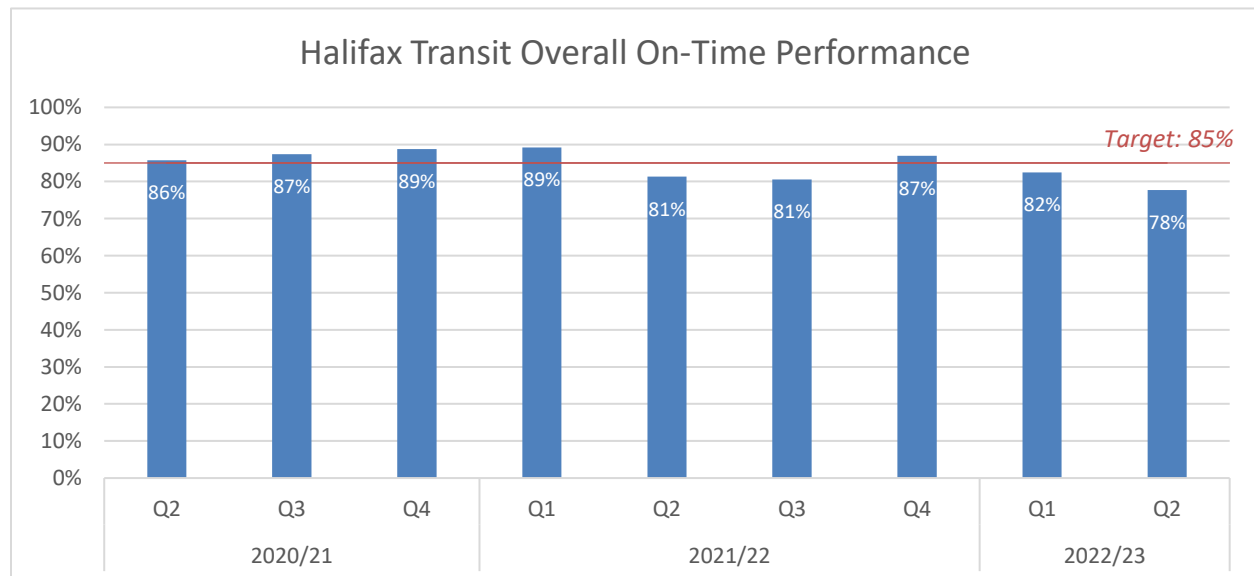
Halifax Transit has established a target for on-time performance of 85%, which is in line with Transit industry standards. While this target has been exceeded in recent periods throughout the pandemic, this is largely due to reduced traffic demands, these conditions have mostly subsided. During these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

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

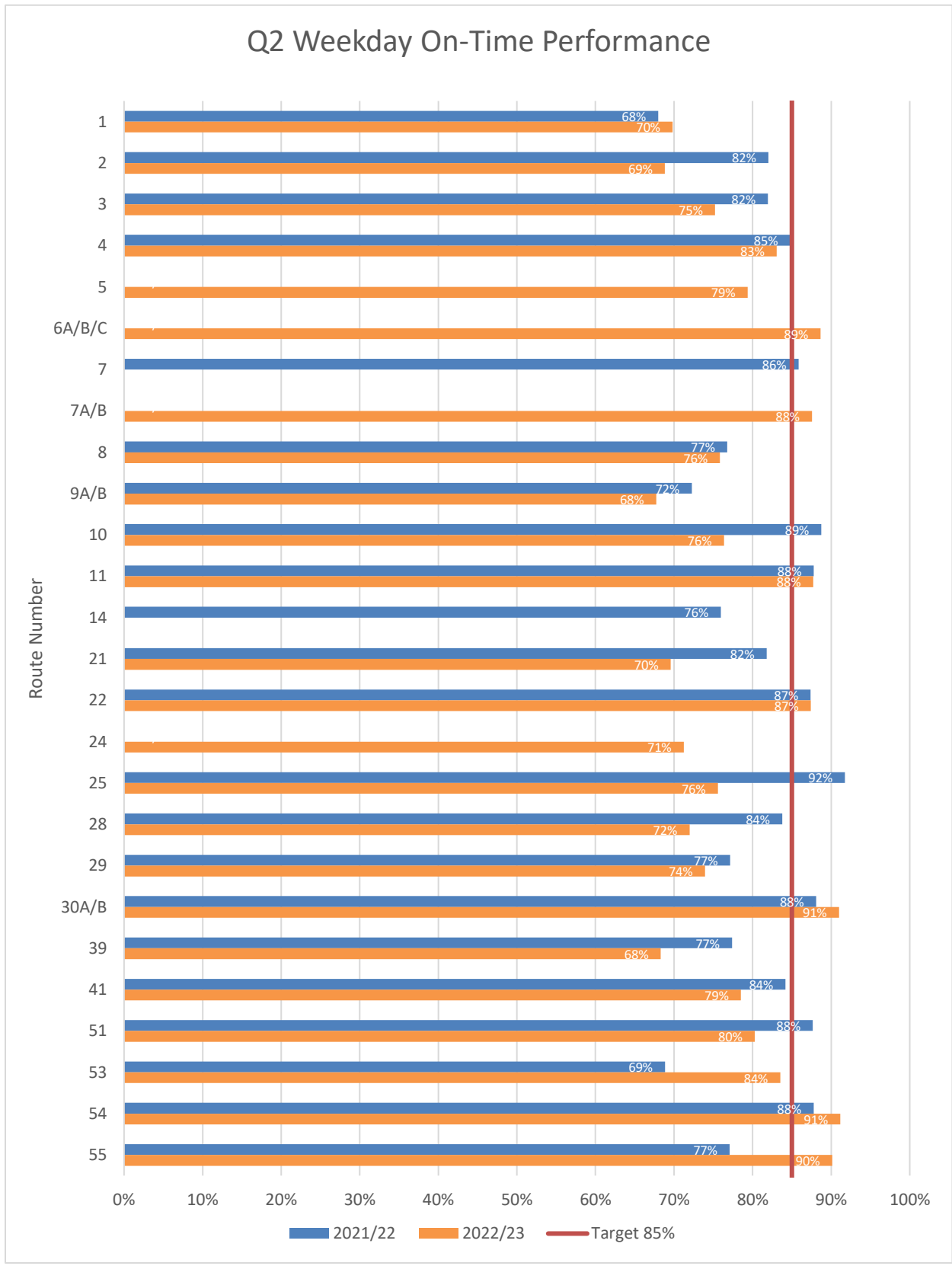
Portland Street Express routes (158, 159, 161, 165, 168A/B) continued to perform poorly in the second quarter, as mentioned in the previous report these routes will undergo minor schedule adjustments in the future to address this.

Route 433 Tantallon rural route also performed poorly in this period, this route underwent schedule adjustments to address on time performance effective November 21, 2022.

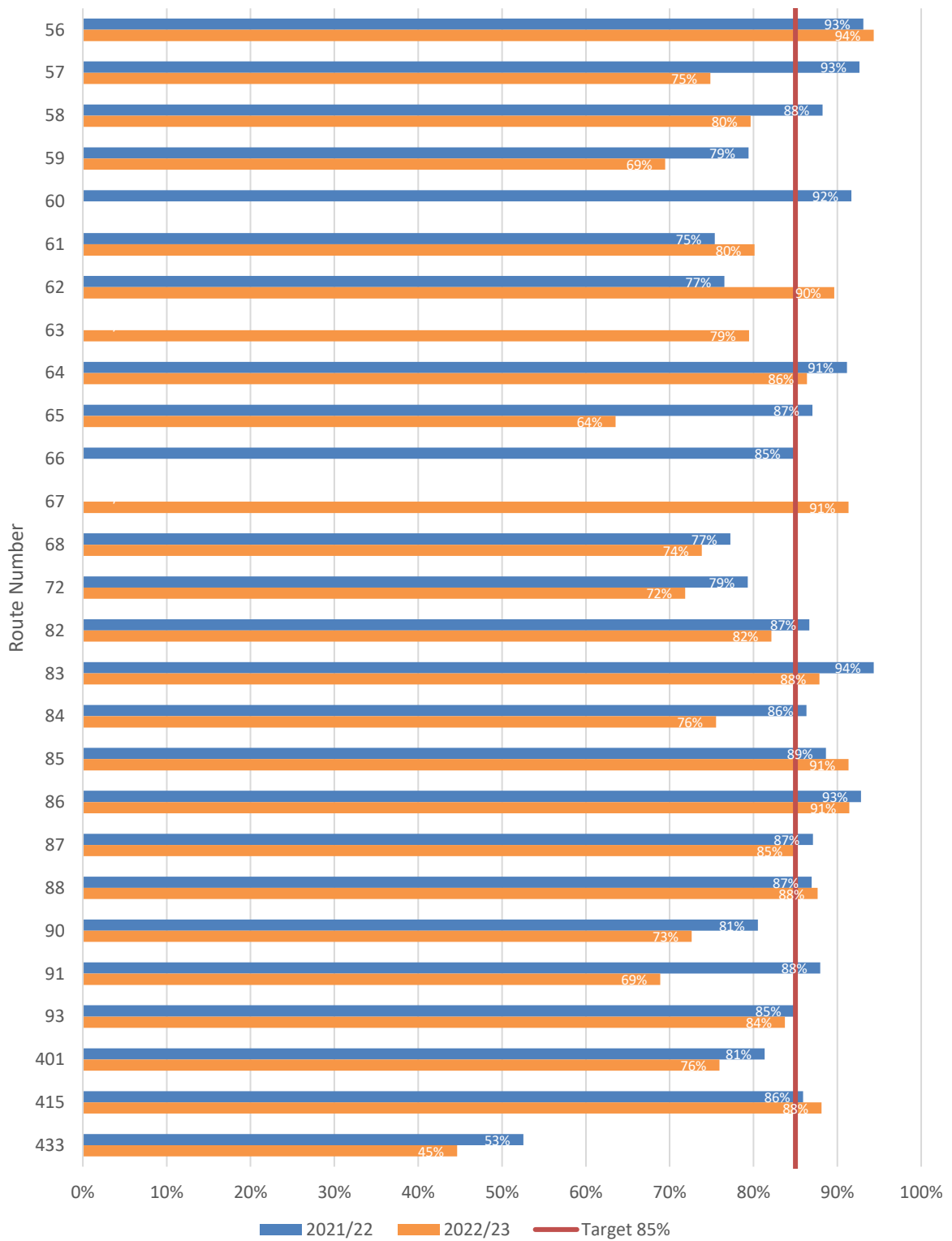
Overall Network On-Time Performance



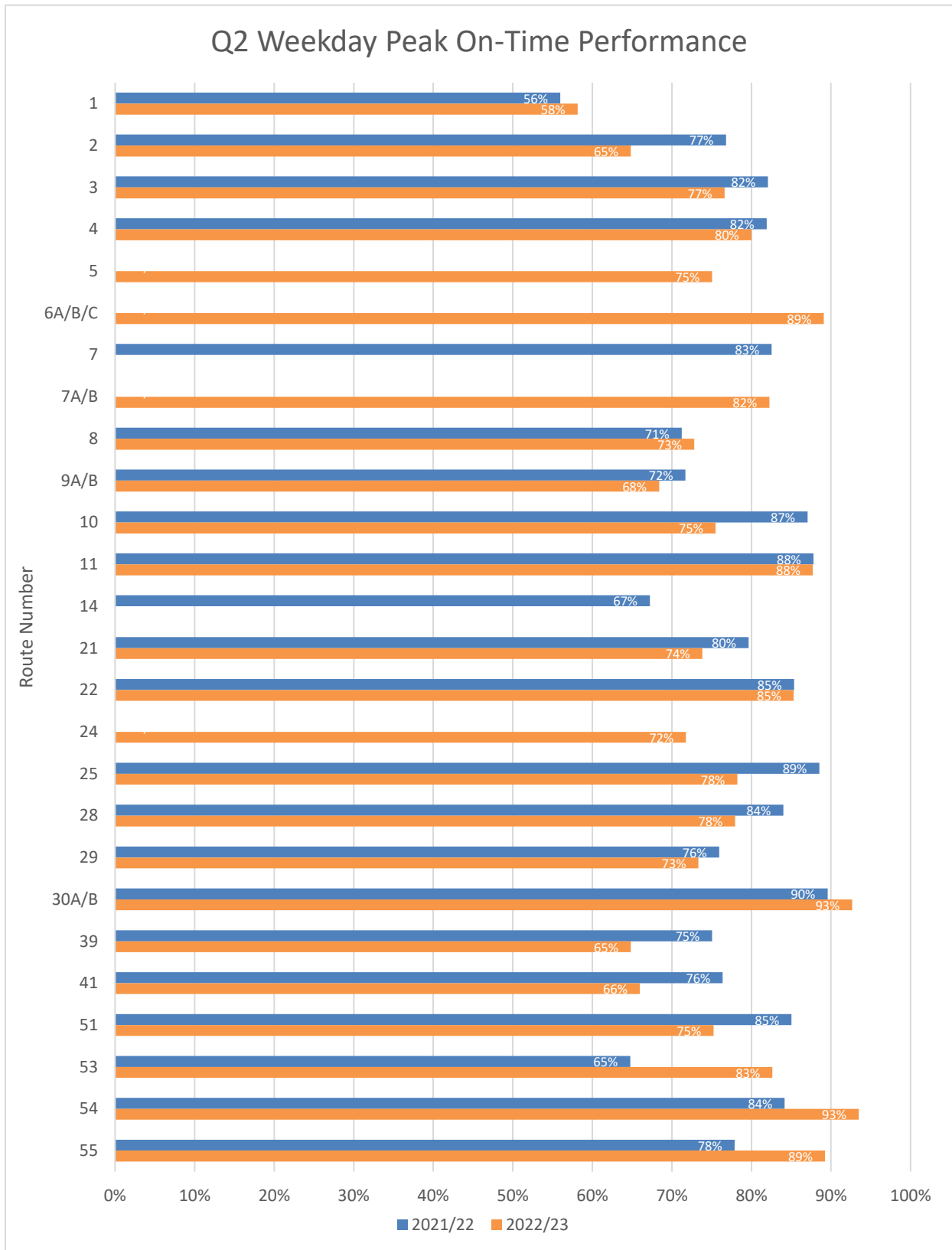
Weekday On-Time Performance



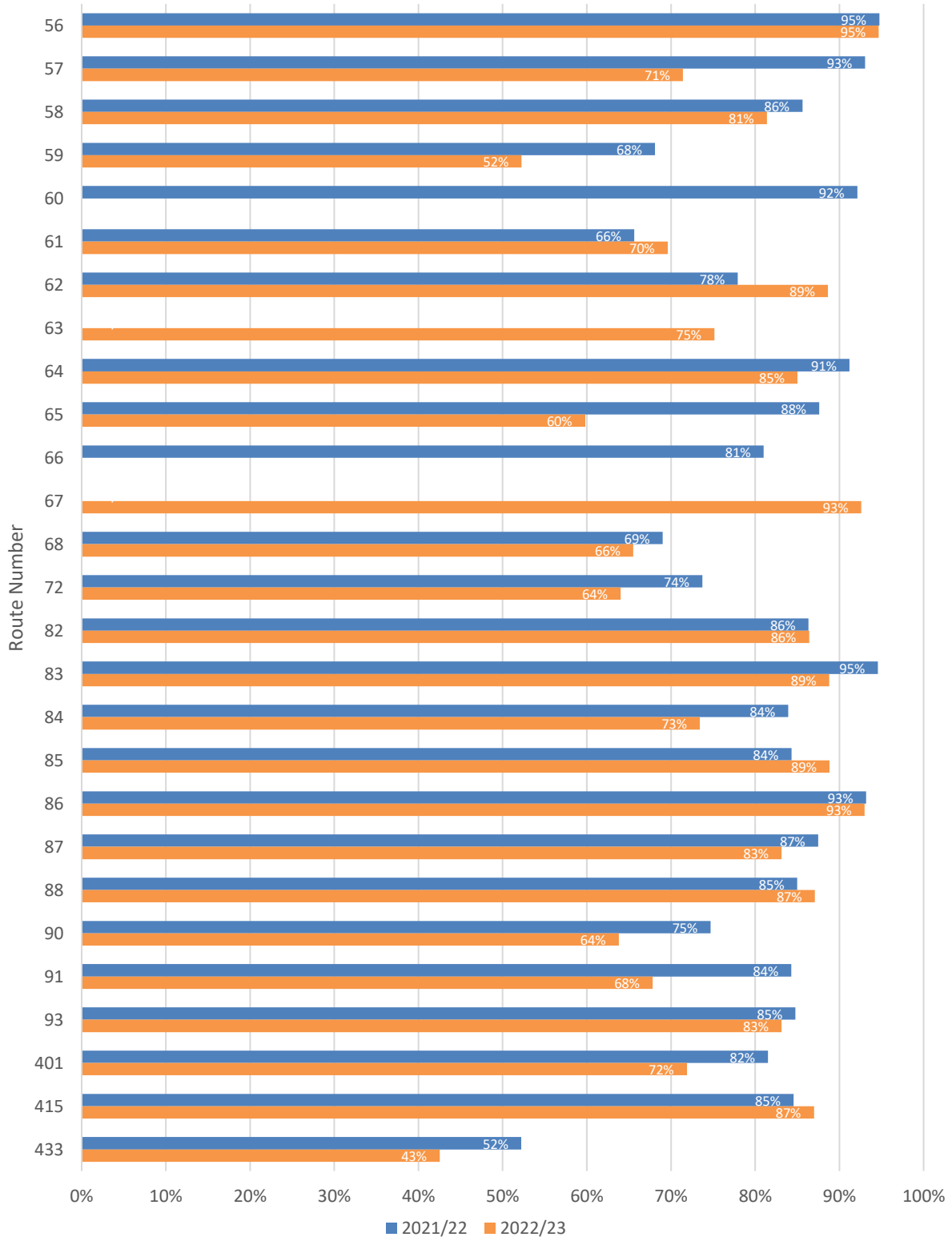
Q2 Weekday On-Time Performance



Weekday Peak Period On-Time Performance



Q2 Weekday Peak On-Time Performance



Express Service On-Time Performance

