

Monthly Ridership and Service Level Report February, 2022 Covid-19 Recovery

"Safety, Courtesy, Reliability, and the Environment"

TABLE OF CONTENTS

Glossary & Route Abbreviations	3-4
Summary - All Routes	5
Total Ridership per Route - Blacksburg, Fixed Routes	6
Total Ridership per Route - Christiansburg Routes	7
Passengers per Revenue Hour per Route - All Fixed Routes	8
Passengers per Revenue Hour per Day of Week - All Fixed Routes	9
Passengers per Revenue Mile per Day of Week - All Fixed Routes	10
Passengers per Revenue Hour per Day of Week - Demand Response Service	11
Passengers per Revenue Mile per Day of Week - Demand Response Service	12
Average Ridership and Revenue Hours by Time of Day - All Fixed Routes	13
Graph: Average Total Passengers by Time of Day - All Fixed Routes	14
Graph: Average Passengers per Revenue Hour by Time of Day - All Fixed Routes	15
Blacksburg Fare Type Totals – Blacksburg, Fixed Routes and Athletics/Specials	16
Addendum: Covid Impacts on Service and Ridership	17

GLOSSARY

- <u>Demand-Response Service (DR):</u> DR service operates in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations. This service does not operate on a fixed route or schedule and satisfies a special need.
- <u>Driver Hours (DH):</u> DH are the hours a driver is on duty, including hours on stand-by, driving to and from the garage, and when there are no passengers on board. These are the hours paid to the drivers; a combination of revenue and non-revenue hours.
- <u>Emergency Service</u>: This is for changes in planned service level operated due to long term (more than 7 days) situations that have an impact on the amount of service provided due to the circumstances of the declared emergency.
- <u>Fiscal Year (FY):</u> The operational year starting from July 1st to June 30th and is year abbreviated with the second Calendar Year. (IE FY 19 is July 1, 2018 to June 30, 2019)
- <u>Fixed Route Service (FR):</u> FR operate along a specific route according to a fixed or preset schedule. Each trip serves the same stops, continuously, until service ends.
- <u>Focused Demand-Response Service:</u> This is a Demand-Response Service (DR) that does not operate throughout a workweek, or only operates during part of the year. These may service a specialized area to meet a special need.
- <u>Full Service</u>: This is our peak service typically operated during the fall and spring semesters.
 During Full Service, all routes are in operation with multiple buses operating on each route for peak frequency typically every 10-15 minutes. Tandems are also utilized in the first couple of weeks of Fall and Spring Service to increase capacity on high demand routes.
- <u>Intermediate Service:</u> This service operates the week before Virginia Tech classes resume for the fall semester and other select days throughout the year. It strongly resembles the Full Service with lower frequency on most routes.
- <u>No Service</u>: This service occurs on five different days: New Year's Day, Memorial Day, July 4th, Thanksgiving, and Christmas. No routes run on these days.
- Previous Year: These sections refer to data for the same month in the previous year.
- Reduced Service: This service is operated outside of fall and spring semesters during winter, spring, summer and fall breaks. Each route provides 30 minute or hourly service depending on the length of the route. Some routes do not operate; others follow an altered route.
- Revenue Hours (RH): RH are the hours of service where a bus is providing passenger service.
- Revenue Mile (RM): RM are the miles a bus travels on a route while providing passenger service.
- <u>Ridership:</u> Ridership is the number of people using a public transportation service in a given time period.
- <u>Tandems:</u> Additional vehicles that follow the scheduled route vehicles on high demand routes
 during the first few weeks of Full Service in the Fall and Spring. These catch the overloads and
 late arrivals of passengers new to the service at this time.
- <u>Trippers:</u> Additional stand-by service vehicles scheduled around special events such as Football Games to assist Routes in sudden passenger peak demands.
- <u>Year-to-Date (YTD):</u> YTD numbers are the sum of values for a period beginning July 1st of the current Fiscal Year until the end of a specified month.

Route Abbreviations

Abbreviation	Route Full Name
BLU	Explorer Blue
BTC	BT Commuter
CAS	Campus Shuttle
CRB	Carpenter Boulevard
CRC	Corporate Research Center
GLD	Explorer Gold
HDG	Harding Avenue
HWA	Hethwood A
HWB	Hethwood B
HWD	Hethwood
HXP	Hokie Express

Abbreviation	Route Full Name			
MSA	South Main Airport Rd			
MSN	Main Street North			
MSS	Main Street South			
PHB	Patrick Henry B			
PHD	Patrick Henry			
PRB	Progress B			
PRO	Progress Street			
TOM	Toms Creek			
TTT	Two Town Trolley			
UCB	University City Boulevard			
UMS	University Mall Shuttle			

Summary All Routes Month: February, 2022

	Current Month	Previous Year	Change by Month	Current YTD Total	Previous YTD Total	YTD Change
Total Passengers	402,965	90,449	346%	2,360,117	508,381	364%
Total Revenue Hours	8,694.01	9,749.28	-11%	69,633.20	66,794.29	4%
Total Revenue Miles	89,258.00	99,295.00	-10%	731,929.80	681,020.00	7%
Total Driver Hours	9,654.25	10,813.75	-11%	77,873.08	75,933.50	3%
Passengers/RH	46.35	9.28	400%	33.89	7.61	345%
Passengers/RM	4.51	0.91	396%	3.22	0.75	332%
Passengers/DH	41.74	8.36	399%	30.31	6.70	353%
Full Service Weekdays	20	17	3	107	85	22
Full Service Weekends	8	8	0	43	37	6
Reduced Service Weekdays	0	0	0	57	75	(18)
Reduced Service Weekends	0	0	0	22	31	(9)
Intermediate Service	0	2	(2)	8	9	(1)
No Service Days	0	1	(1)	6	6	0

^{*}Note: These numbers include Blacksburg and Christiansburg: Motor Bus, Demand Response and Shuttle Services.

Total Ridership per Route

Blacksburg: Motor Bus Month: February, 2022

				•				
Route	Current Month	% of Ridership	Previous Year	Change by Month	Current YTD Total	% of YTD Ridership	Previous YTD Total	YTD Change
CAS	0	0.00%	1,121	-100%	8,350	0.36%	3,630	130%
CRB	5,816	1.45%	801	626%	32,347	1.40%	4,320	649%
CRC	10,557	2.63%	3,502	201%	68,040	2.95%	17,581	287%
HDG	22,161	5.53%	3,950	461%	118,920	5.15%	24,183	392%
HWA	36,048	8.99%	6,282	474%	212,792	9.22%	33,071	543%
HWB	31,240	7.79%	6,817	358%	185,465	8.04%	37,131	399%
HWD	9,775	2.44%	1,583	517%	42,005	1.82%	13,342	215%
НХР	25,992	6.48%	4,923	428%	120,687	5.23%	18,714	545%
MSA	2,471	0.62%	1,364	81%	32,335	1.40%	8,120	298%
MSN	31,533	7.87%	5,426	481%	174,974	7.58%	31,108	462%
MSS	27,404	6.84%	7,725	255%	161,698	7.01%	48,828	231%
PHB	12,998	3.24%	0	0%	61,044	2.64%	0	0%
PHD	35,174	8.77%	6,319	457%	191,263	8.29%	37,937	404%
PRB	2,230	0.56%	3,659	-39%	37,109	1.61%	19,896	87%
PRO	34,403	8.58%	5,356	542%	182,732	7.92%	26,636	586%
TOM	67,303	16.79%	16,241	314%	375,358	16.26%	86,151	336%
TTT	6,270	1.56%	3,463	81%	52,969	2.30%	28,235	88%
UCB	38,430	9.59%	6,687	475%	189,055	8.19%	39,036	384%
UMS	0	0.00%	3,087	-100%	60,769	2.63%	15,561	291%
ACC	1,101	0.27%	730	51%	8,279	0.36%	5,475	51%
Totals	400,906	100.00%	88,306	354%	2,307,912	100.00%	493,480	368%
Blacksburg MB Total	399,805	99.73%	88,306	352.75%	2,307,912	99.64%	493,480	367.68%
Blacksburg DR Total	1,101	0.27%	730	50.82%	8,279	0.36%	5,475	51.21%
Totals	400,906	100%	89,036	350%	2,316,191	100%	498,955	364%

Total Ridership per Route

Christiansburg: Motor Bus and Demand Response

Route	Current Month	% of Ridership	Previous Year	Change by Month	Current YTD Total	% of YtD Ridership	Previous YTD	YTD Change
BLU	681	33.07%	56	1116%	3,827	23.40%	56	6734%
втс	0	0.00%	0	N/A	0	0.00%	104	-100%
GLD	358	17.39%	65	451%	3,350	20.48%	65	5054%
GAR	1,020	49.54%	1,292	-21%	9,180	56.12%	9,205	0%
Totals	2,059	100%	1,413	46%	16,357	100%	9,430	73%
Christiansburg MB Total	1,039	50.46%	121	758.68%	7,177	43.88%	225	3089.78%
Christiansburg DR Total	1,020	49.54%	1,292	-21.05%	9,180	56.12%	9,205	-0.27%
Totals	2,059	100%	1,413	46%	16,357	100%	9,430	73%

Passengers per Revenue Hour per Route All Fixed Routes

Route	Current Month	Previous Year	Change by Month
CAS	0.00	2.71	-100%
CRB	27.02	3.61	648%
CRC	18.45	4.75	288%
HDG	37.01	7.04	426%
HWA	80.14	71.81	12%
HWB	69.42	14.40	382%
HWD	63.48	3.34	1798%
НХР	43.22	7.60	469%
MSA	20.67	6.11	238%
MSN	60.46	11.16	442%
MSS	40.30	12.19	231%
PHB	55.31	0.00	N/A
PHD	69.13	13.35	418%
PRB	19.56	8.85	121%
PRO	71.20	11.36	527%
ТОМ	104.37	25.04	317%
TTT	17.39	10.02	74%
UCB	69.82	12.31	467%
UMS	0.00	6.57	-100%
BLU	2.96	0.54	451%
ВТС	0.00	0.00	N/A
GLD	2.67	0.62	331%

Passengers per Revenue Hour per Day of Week All Fixed Routes

	<u>c</u>	Current Month	<u>ı</u>				
Week Day	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	8,394	227.78	36.85	4,769	302.12	15.79	133%
Monday	78,539	1,415.41	55.49	16,529	1,725.09	9.58	479%
Tuesday	82,270	1,451.88	56.66	17,039	1,724.84	9.88	474%
Wednesday	80,494	1,426.43	56.43	17,734	1,725.84	10.28	449%
Thursday	79,185	1,433.21	55.25	10,831	1,125.36	9.62	474%
Friday	59,823	1,331.88	44.92	15,029	1,567.53	9.59	368%
Saturday	12,139	337.30	35.99	6,496	362.13	17.94	101%
Total	400,844	7,623.89	52.58	88,427	8,532.91	10.36	407%

^{*} Note: these numbers DO NOT include Demand Response Service

Passengers per Revenue Mile per Day of Week All Fixed Routes

<u>Current Month</u>							
Week Day	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	8,394	2,489	3.37	4,769	3,132	1.52	121%
Monday	78,539	14,484	5.42	16,529	17,731	0.93	482%
Tuesday	82,270	14,821	5.55	17,039	17,810	0.96	480%
Wednesday	80,494	14,626	5.50	17,734	17,776	1.00	452%
Thursday	79,185	14,636	5.41	10,831	11,638	0.93	481%
Friday	59,823	13,632	4.39	15,029	16,264	0.92	375%
Saturday	12,139	3,815	3.18	6,496	3,959	1.64	94%
Total	400,844	78,503	5.11	88,427	88,310	1.00	410%

^{*} Note: these numbers DO NOT include Demand Response Service

Passengers per Revenue Hour per Day of Week

Demand Response Service Month: February, 2022

	Access Curre	nt Month		Acc	ess Previous Y	<u>ear</u>	
Day of Week	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	36	35.67	1.01	17	15.47	1.10	-8%
Monday	177	108.35	1.63	115	109.73	1.05	56%
Tuesday	220	132.83	1.66	157	138.17	1.14	46%
Wednesday	245	137.73	1.78	145	133.28	1.09	64%
Thursday	183	121.89	1.50	121	93.05	1.30	15%
Friday	177	115.87	1.53	114	95.35	1.20	28%
Saturday	63	48.07	1.31	61	51.57	1.18	11%
Total	1,101	700.41	1.57	730	636.62	1.15	37%
GoAnywhere Current Month							
<u>G</u> c		rrent Month			where Previou		
Day of Week		Revenue Hours	Pass/RH				Change Pass/RH
	oAnywhere Cu	Revenue		GoAny	where Previou	us Year	
Day of Week	oAnywhere Cu Passengers	Revenue Hours	Pass/RH	GoAny Passengers	where Previou Revenue Hours	us Year Pass/RH	Pass/RH
Day of Week Sunday	oAnywhere Cu Passengers 0	Revenue Hours 0.00	Pass/RH 0.00	GoAny Passengers 0	where Previou Revenue Hours 0.00	Pass/RH	Pass/RH 0%
Day of Week Sunday Monday	Passengers 0 186	Revenue Hours 0.00 68.28	Pass/RH 0.00 2.72	GoAny Passengers 0 204	Revenue Hours 0.00 103.63	Pass/RH 0.00 1.97	Pass/RH 0% 38%
Day of Week Sunday Monday Tuesday	Passengers 0 186 185	Revenue Hours 0.00 68.28 67.62	Pass/RH 0.00 2.72 2.74	Passengers 0 204 279	Revenue Hours 0.00 103.63 114.12	Pass/RH 0.00 1.97 2.44	Pass/RH 0% 38% 12%
Day of Week Sunday Monday Tuesday Wednesday	Passengers 0 186 185 209	Revenue Hours 0.00 68.28 67.62 68.50	Pass/RH 0.00 2.72 2.74 3.05	Passengers 0 204 279 278	Revenue Hours 0.00 103.63 114.12 122.12	Pass/RH 0.00 1.97 2.44 2.28	Pass/RH 0% 38% 12% 34%
Day of Week Sunday Monday Tuesday Wednesday Thursday	Passengers 0 186 185 209 203	Revenue Hours 0.00 68.28 67.62 68.50 70.64	Pass/RH 0.00 2.72 2.74 3.05 2.87	GoAny Passengers 0 204 279 278 226	Revenue Hours 0.00 103.63 114.12 122.12 98.75	Pass/RH 0.00 1.97 2.44 2.28 2.29	Pass/RH 0% 38% 12% 34% 26%

*Please note: these numbers DO NOT include Fixed Route Service.

Passengers per Revenue Mile per Day of Week

Demand Response Service Month: February, 2022

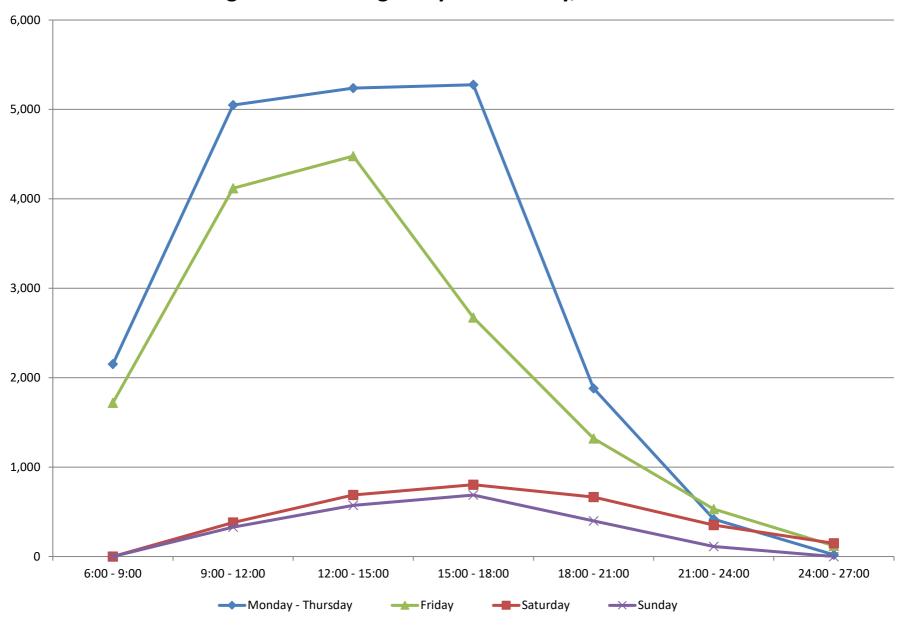
	Access Curre	nt Month		<u>Acc</u>	ess Previous Y	<u>'ear</u>	
Day of Week	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	36	213	0.17	17	53	0.32	-47%
Monday	177	985	0.18	115	627	0.18	-2%
Tuesday	220	1,126	0.20	157	946	0.17	18%
Wednesday	245	1,333	0.18	145	851	0.17	8%
Thursday	183	982	0.19	121	708	0.17	9%
Friday	177	915	0.19	114	672	0.17	14%
Saturday	63	366	0.17	61	384	0.16	8%
Total	1,101	5,920	0.19	730	4,241	0.17	8%
<u> </u>							
<u>Gc</u>	o Anywhere Cu	<u> </u>		Go Any	where Previo		
Go Day of Week	Anywhere Cu Passengers	<u> </u>	Pass/RM	Go Any Passengers			Change Pass/RM
		rrent Month Revenue	Pass/RM 0.00		where Previo	us Year	Change
Day of Week	Passengers	Revenue Miles		Passengers	Revenue Miles	us Year Pass/RM	Change Pass/RM
Day of Week Sunday	Passengers 0	Revenue Miles	0.00	Passengers 0	where Previous Revenue Miles	Pass/RM	Change Pass/RM 0%
Day of Week Sunday Monday	Passengers 0 186	Revenue Miles 0 971	0.00 0.19	Passengers 0 204	Revenue Miles 0 1,130	Pass/RM 0.00 0.18	Change Pass/RM 0% 6%
Day of Week Sunday Monday Tuesday	Passengers 0 186 185	Revenue Miles 0 971 850	0.00 0.19 0.22	Passengers 0 204 279	Revenue Miles 0 1,130 1,392	Pass/RM 0.00 0.18 0.20	Change Pass/RM 0% 6% 9%
Day of Week Sunday Monday Tuesday Wednesday	Passengers 0 186 185 209	Revenue Miles 0 971 850 953	0.00 0.19 0.22 0.22	Passengers 0 204 279 278	Revenue Miles 0 1,130 1,392 1,510	Pass/RM 0.00 0.18 0.20 0.18	Change Pass/RM 0% 6% 9% 19%
Day of Week Sunday Monday Tuesday Wednesday Thursday	Passengers 0 186 185 209 203	Revenue Miles 0 971 850 953 974	0.00 0.19 0.22 0.22 0.21	Passengers 0 204 279 278 226	Revenue Miles 0 1,130 1,392 1,510 1,126	0.00 0.18 0.20 0.18 0.20	Change Pass/RM 0% 6% 9% 19% 4%

*Please note: these numbers DO NOT include Fixed Route Service.

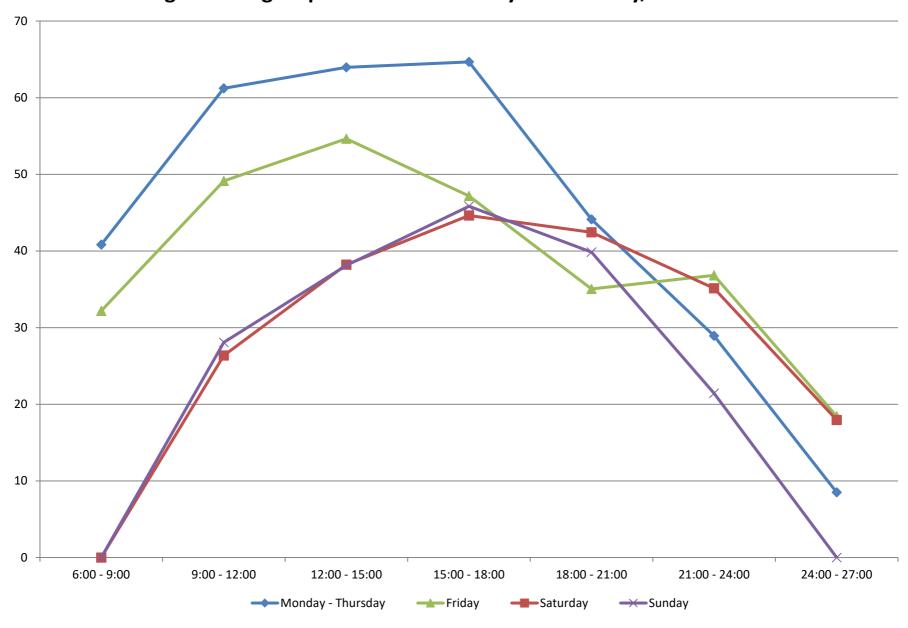
Average Ridership and Revenue Hours by Time of Day All Fixed Routes

Ti	me of Day	Avg Total Passengers	Average RH	Avg Pass. per RH
ау	6:00 - 9:00	2,151.13	52.69	40.83
Thursday	9:00 - 12:00	5,049.25	82.49	61.21
րրո	12:00 - 15:00	5,238.00	81.90	63.96
[-/	15:00 - 18:00	5,276.13	81.59	64.67
day	18:00 - 21:00	1,879.69	42.61	44.12
Monday	21:00 - 24:00	417.25	14.42	28.94
2	24:00 - 27:00	19.13	2.25	8.50
	6:00 - 9:00	1,719.75	53.45	32.17
	9:00 - 12:00	4,118.00	83.79	49.15
>	12:00 - 15:00	4,478.50	81.96	54.64
Friday	15:00 - 18:00	2,673.25	56.67	47.17
ш.	18:00 - 21:00	1,320.25	37.68	35.04
	21:00 - 24:00	531.00	14.42	36.82
	24:00 - 27:00	119.75	6.50	18.42
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	379.75	14.41	26.36
day	12:00 - 15:00	687.75	18.00	38.21
Saturday	15:00 - 18:00	803.25	18.00	44.63
Sat	18:00 - 21:00	664.75	15.67	42.43
	21:00 - 24:00	351.25	10.00	35.13
	24:00 - 27:00	148.00	8.25	17.94
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	328.25	11.70	28.07
a \	12:00 - 15:00	571.75	15.00	38.12
Sunday	15:00 - 18:00	687.50	15.00	45.83
Su	18:00 - 21:00	398.50	10.00	39.85
	21:00 - 24:00	112.50	5.25	21.43
	24:00 - 27:00	0.00	0.00	0.00

Average Total Passengers by Time of Day, All Fixed Routes



Average Passengers per Revenue Hour by Time of Day, All Fixed Routes



Blacksburg Transit Fare Totals

Does not include Demand Response. Does include Athletics/Specials

	Total	Students		Facult	Faculty/Staff		Total Virginia Tech		Total Non-VT	
	Ridership	#	%	#	%	#	%	#	%	
July-21	30,787	30,705	99.73%	31	0.10%	30,736	99.83%	51	0.17%	
August-21	224,141	223,960	99.92%	39	0.02%	223,999	99.94%	142	0.06%	
September-21	497,882	497,515	99.93%	111	0.02%	497,626	99.95%	256	0.05%	
Total for 1st Quarter:	752,810	752,180	99.92%	181	0.02%	752,361	99.94%	449	0.06%	
October-21	448,128	447,763	99.92%	88	0.02%	447,851	99.94%	277	0.06%	
November-21	330,067	329,716	99.89%	80	0.02%	329,796	99.92%	271	0.08%	
December-21	177,985	177,788	99.89%	56	0.03%	177,844	99.92%	141	0.08%	
Total for 2nd Quarter:	956,180	955,267	99.90%	224	0.02%	955,491	99.93%	689	0.07%	
January-22	232,824	232,384	99.81%	30	0.01%	232,414	99.82%	410	0.18%	
February-22	400,844	400,647	99.95%	0	0.00%	400,647	99.95%	197	0.05%	
March-22										
Total for 3rd Quarter:	633,668	633,031	99.90%	30	0.00%	633,061	99.90%	607	0.10%	
April-22										
May-22										
June-22										
Total for 4th Quarter:	0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	
Total for Year:	2,342,658	2,340,478	99.91%	435	0.02%	2,340,913	99.93%	1,745	0.07%	

^{*}During COVID Fare Free period. All passengers are to be reported as Student Fares. Variation from this are errors.

Addendum: Covid Impacts on Service and Ridership

Starting March 15, 2020 the Covid-19 Epidemic has had a very strong impact on BT customers, staff and the service itself. For the 20/21 Academic Year the university went to primarily online with a small portion of inperson classes. BT supplied Service initially as full then modified down when it became apparent that the university was having less in-person attendance than what their initial plans had suggested. Many businesses remained closed or restricted access for most all of FY21.

There was also a calendar modification as the university ended many classes or converted in-person to online for the post-Thanksgiving to Christmas class and exam period. BT service was modified down again to match the lower need. There was no Orientation, Basketball or Football Service for FY21.

The result is that the FY21 and the FY22 service calendars will not be completely comparable. And while we do expect more robust ridership in FY22, we still do not expect a full return to normal at this time. Full Service to the maximum extent of available personnel is planned for the Transit Service for the FY22 service year.

The Monthly reports will be highlighting the recovery from the Covid affected FY21 year. So large increases are expected compared to the affected service.

- FY19: Last Full Normal Year of Service
- FY20: Onset of the pandemic in March
- FY21: Heavily affected pandemic service and start of vaccinations
- FY22: Expected significant recovery but still affected
- FY23: Hope for near-normal return

As of Early August 2021 (FY22) prior to start of Full Service, regional and countrywide spikes in infection rates of Covid Variants are reversing some of the priorly relaxed guidelines.

As of the last quarter of 2021, issues with staffing and supplies for repair parts resulting from the ongoing pandemic and other issues resulted in continuing reductions in service and multiple service failures. Less vehicles on the road resulted in lessened passenger loads.