

Monthly Ridership and Service Level Report January, 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: January, 2022

	Current Month	Previous Year	Change by Month	Current YTD Total	Previous YTD Total	YTD Change
Total Passengers	234,626	48,147	387%	1,957,152	417,932	368%
Total Revenue Hours	7,191.86	7,006.11	3%	60,939.20	57,045.02	7%
Total Revenue Miles	75,927.00	70,574.00	8%	642,671.80	581,725.00	10%
Total Driver Hours	8,096.25	8,136.00	0%	68,218.83	65,119.75	5%
Passengers/RH	32.62	6.87	375%	32.12	7.33	338%
Passengers/RM	3.09	0.68	353%	3.05	0.72	324%
Passengers/DH	28.98	5.92	390%	28.69	6.42	347%
Full Service Weekdays	10	5	5	87	68	19
Full Service Weekends	4	3	1	35	29	6
Reduced Service Weekdays	10	15	(5)	57	75	(18)
Reduced Service Weekends	4	6	(2)	22	31	(9)
Intermediate Service	1	0	1	8	7	1
No Service Days	2	2	0	6	5	1

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

Total Ridership per Route

Blacksburg: Motor Bus Month: January, 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%	393	-100%	8,350	0.44%	2,509	233%
CRB	1,923	0.83%	408	371%	26,531	1.39%	3,519	654%
CRC	6,145	2.64%	1,579	289%	57,483	3.01%	14,079	308%
HDG	12,838	5.51%	2,008	539%	96,759	5.07%	20,233	378%
HWA	21,605	9.28%	3,002	620%	176,744	9.26%	26,789	560%
HWB	18,723	8.04%	3,572	424%	154,225	8.08%	30,314	409%
HWD	5,264	2.26%	955	451%	32,230	1.69%	11,759	174%
НХР	13,228	5.68%	1,856	613%	94,695	4.96%	13,791	587%
MSA	2,739	1.18%	1,209	127%	29,864	1.57%	6,756	342%
MSN	18,339	7.88%	2,769	562%	143,441	7.52%	25,682	459%
MSS	17,077	7.33%	4,460	283%	134,294	7.04%	41,103	227%
PHB	6,850	2.94%	0	0%	48,046	2.52%	0	0%
PHD	20,295	8.72%	3,260	523%	156,089	8.18%	31,618	394%
PRB	2,175	0.93%	2,038	7%	34,879	1.83%	16,237	115%
PRO	19,127	8.22%	2,465	676%	148,329	7.77%	21,280	597%
том	38,738	16.64%	8,656	348%	308,055	16.14%	69,910	341%
TTT	5,280	2.27%	3,015	75%	46,699	2.45%	24,772	89%
UCB	21,528	9.25%	3,325	547%	150,625	7.89%	32,349	366%
UMS	0	0.00%	1,333	-100%	60,769	3.18%	12,474	387%
ACC	942	0.40%	690	37%	7,178	0.38%	4,745	51%
Totals	232,816	100.00%	46,303	403%	1,908,107	100.00%	405,174	371%
Blacksburg MB Total	231,874	99.60%	46,303	400.78%	1,908,107	99.63%	405,174	370.94%
Blacksburg DR Total	942	0.40%	690	36.52%	7,178	0.37%	4,745	51.28%
Totals	232,816	100%	46,993	395%	1,915,285	100%	409,919	367%

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	589	32.54%	0	N/A	3,146	22.00%	0	N/A
втс	0	0.00%	0	N/A	0	0.00%	104	-100%
GLD	361	19.94%	0	N/A	2,992	20.93%	0	N/A
GAR	860	47.51%	1,154	-25%	8,160	57.07%	7,913	3%
Totals	1,810	100%	1,154	57%	14,298	100%	8,017	78%
Christiansburg MB Total	950	52.49%	0	#DIV/0!	6,138	42.93%	104	5801.92%
Christiansburg DR Total	860	47.51%	1,154	-25.48%	8,160	57.07%	7,913	3.12%
Totals	1,810	100%	1,154	57%	14,298	100%	8,017	78%

Passengers per Revenue Hour per Route All Fixed Routes

Route	Current Month	Previous Year	Change by Month
CAS	0.00	1.35	-100%
CRB	26.36	3.50	654%
CRC	11.61	3.42	239%
HDG	26.86	4.83	457%
HWA	57.58	33.06	74%
HWB	53.32	11.09	381%
HWD	52.93	2.96	1687%
НХР	31.39	4.74	563%
MSA	15.37	5.14	199%
MSN	44.32	7.68	477%
MSS	31.70	9.56	232%
РНВ	55.18	0.00	N/A
PHD	49.48	9.25	435%
PRB	12.43	7.01	77%
PRO	51.93	7.67	577%
ТОМ	74.74	18.17	311%
TTT	15.92	9.05	76%
UCB	50.05	9.28	439%
UMS	0.00	6.57	-100%
BLU	2.58	0.00	N/A
втс	0.00	0.00	N/A
GLD	2.14	0.00	N/A

Passengers per Revenue Hour per Day of Week All Fixed Routes

<u>Current Month</u>							
Week Day	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	4,883	188.70	25.88	2,264	209.20	10.82	139%
Monday	48,091	1,248.03	38.53	7,724	1,057.71	7.30	428%
Tuesday	46,240	1,146.96	40.32	7,760	1,057.71	7.34	450%
Wednesday	46,106	1,153.65	39.97	8,090	1,057.71	7.65	423%
Thursday	44,290	1,148.85	38.55	7,628	1,057.71	7.21	435%
Friday	34,447	1,070.98	32.16	8,290	1,057.21	7.84	310%
Saturday	8,767	255.79	34.27	4,547	311.34	14.60	135%
Total	232,824	6,212.96	37.47	46,303	5,808.59	7.97	370%

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

Passengers per Revenue Mile per Day of Week All Fixed Routes

	<u>(</u>	Current Month	<u>1</u>				
Week Day	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	4,883	2,090	2.34	2,264	2,240	1.01	131%
Monday	48,091	13,174	3.65	7,724	10,964	0.70	418%
Tuesday	46,240	12,224	3.78	7,760	10,926	0.71	433%
Wednesday	46,106	12,345	3.73	8,090	10,902	0.74	403%
Thursday	44,290	12,249	3.62	7,628	10,931	0.70	418%
Friday	34,447	11,437	3.01	8,290	10,924	0.76	297%
Saturday	8,767	2,872	3.05	4,547	3,388	1.34	127%
Total	232,824	66,391	3.51	46,303	60,275	0.77	357%

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

Passengers per Revenue Hour per Day of Week

Demand Response Service Month: January, 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	43	32.05	1.34	18	15.12	1.19	13%
Monday	137	93.45	1.47	102	97.60	1.05	40%
Tuesday	180	118.45	1.52	153	126.45	1.21	26%
Wednesday	203	128.00	1.59	126	117.30	1.07	48%
Thursday	185	128.92	1.44	118	94.77	1.25	15%
Friday	143	106.49	1.34	98	77.83	1.26	7%
Saturday	51	29.22	1.75	75	69.20	1.08	61%
Total	942	636.57	1.48	690	598.27	1.15	28%
GoAnywhere Current Month							
<u>G</u> (oAnywhere Cu	rrent Month		GoAny	where Previou	ıs Year	
Day of Week	oAnywhere Cu Passengers	Revenue Hours	Pass/RH	GoAny Passengers	where Previou Revenue Hours	us Year Pass/RH	Change Pass/RH
		Revenue	Pass/RH 0.00		Revenue		
Day of Week	Passengers	Revenue Hours		Passengers	Revenue Hours	Pass/RH	Pass/RH
Day of Week Sunday	Passengers 0	Revenue Hours 0.00	0.00	Passengers 0	Revenue Hours 0.00	Pass/RH 0.00	Pass/RH 0%
Day of Week Sunday Monday	Passengers 0 139	Revenue Hours 0.00 59.02	0.00 2.36	Passengers 0 187	Revenue Hours 0.00 104.10	Pass/RH 0.00 1.80	Pass/RH 0% 31%
Day of Week Sunday Monday Tuesday	Passengers 0 139 157	Revenue Hours 0.00 59.02 64.67	0.00 2.36 2.43	Passengers 0 187 249	Revenue Hours 0.00 104.10 119.32	0.00 1.80 2.09	Pass/RH 0% 31% 16%
Day of Week Sunday Monday Tuesday Wednesday	Passengers 0 139 157 191	Revenue Hours 0.00 59.02 64.67 65.38	0.00 2.36 2.43 2.92	Passengers 0 187 249 214	Revenue Hours 0.00 104.10 119.32 104.48	0.00 1.80 2.09 2.05	Pass/RH 0% 31% 16% 43%
Day of Week Sunday Monday Tuesday Wednesday Thursday	Passengers 0 139 157 191 178	Revenue Hours 0.00 59.02 64.67 65.38 64.73	0.00 2.36 2.43 2.92 2.75	Passengers 0 187 249 214 224	Revenue Hours 0.00 104.10 119.32 104.48 114.48	0.00 1.80 2.09 2.05 1.96	Pass/RH 0% 31% 16% 43% 41%

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

Passengers per Revenue Mile per Day of Week

Demand Response Service Month: January, 2022

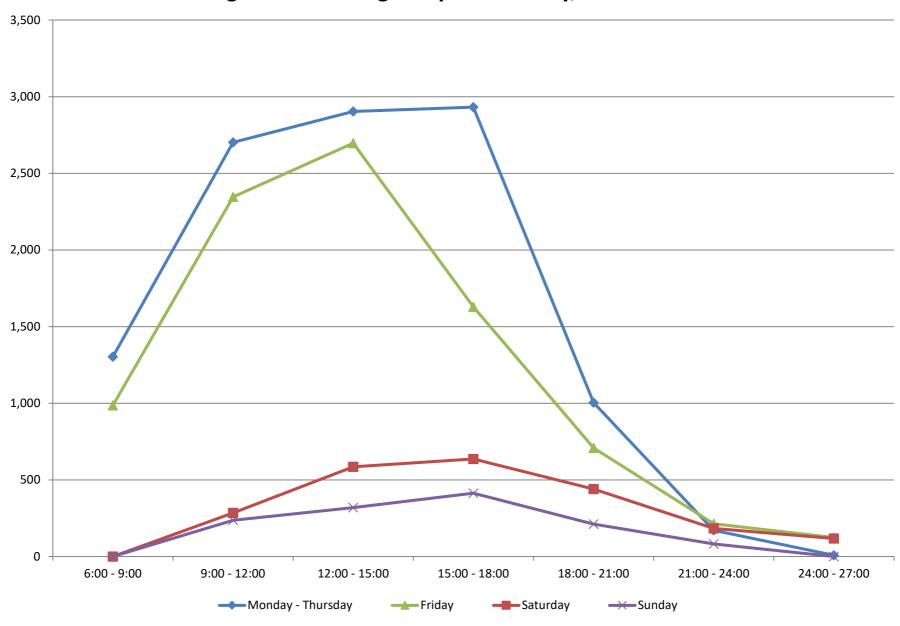
	Access Curre	nt Month		<u>Acc</u>	ess Previous Y	<u>'ear</u>	
Day of Week	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	43	225	0.19	18	89	0.20	-6%
Monday	137	725	0.19	102	583	0.17	8%
Tuesday	180	967	0.19	153	794	0.19	-3%
Wednesday	203	1,168	0.17	126	679	0.19	-6%
Thursday	185	1,118	0.17	118	665	0.18	-7%
Friday	143	742	0.19	98	515	0.19	1%
Saturday	51	260	0.20	75	443	0.17	16%
Total	942	5,205	0.18	690	3,768	0.18	-1%
Go Anywhere Current Month							
<u>G</u> c	o Anywhere Cu	rrent Month		Go Any	where Previo	us Year	
Day of Week	Passengers	rrent Month Revenue Miles	Pass/RM	Go Any Passengers	where Previous Revenue Miles	us Year Pass/RM	Change Pass/RM
		Revenue	Pass/RM 0.00		Revenue		
Day of Week	Passengers	Revenue Miles		Passengers	Revenue Miles	Pass/RM	Pass/RM
Day of Week Sunday	Passengers 0	Revenue Miles	0.00	Passengers 0	Revenue Miles 0	Pass/RM 0.00	Pass/RM 0%
Day of Week Sunday Monday	Passengers 0 139	Revenue Miles 0 748	0.00 0.19	Passengers 0 187	Revenue Miles 0 1,096	Pass/RM 0.00 0.17	Pass/RM 0% 9%
Day of Week Sunday Monday Tuesday	Passengers 0 139 157	Revenue Miles 0 748 761	0.00 0.19 0.21	Passengers 0 187 249	Revenue Miles 0 1,096 1,330	0.00 0.17 0.19	Pass/RM 0% 9% 10%
Day of Week Sunday Monday Tuesday Wednesday	Passengers 0 139 157 191	Revenue Miles 0 748 761 997	0.00 0.19 0.21 0.19	Passengers 0 187 249 214	Revenue Miles 0 1,096 1,330 1,265	0.00 0.17 0.19 0.17	Pass/RM 0% 9% 10% 13%
Day of Week Sunday Monday Tuesday Wednesday Thursday	Passengers 0 139 157 191 178	Revenue Miles 0 748 761 997 843	0.00 0.19 0.21 0.19 0.21	0 187 249 214 224	Revenue Miles 0 1,096 1,330 1,265 1,245	0.00 0.17 0.19 0.17 0.18	Pass/RM 0% 9% 10% 13% 17%

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

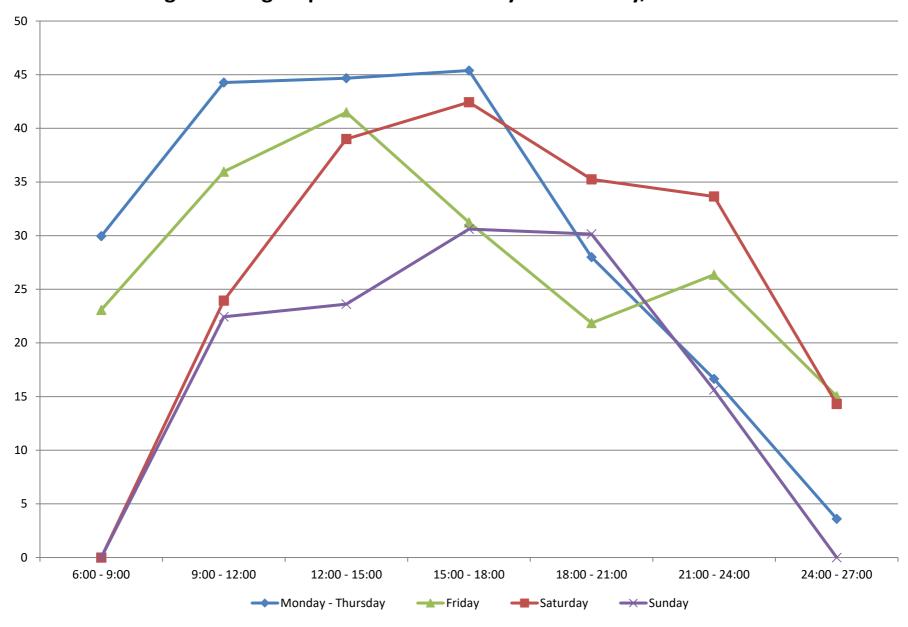
Average Ridership and Revenue Hours by Time of Day All Fixed Routes

Ti	me of Day	Avg Total Passengers	Average RH	Avg Pass. per RH
ay	6:00 - 9:00	1,302.93	43.50	29.95
Thursday	9:00 - 12:00	2,702.06	61.03	44.27
nų.	12:00 - 15:00	2,903.94	65.00	44.68
[-	15:00 - 18:00	2,931.88	64.60	45.39
day	18:00 - 21:00	1,003.53	35.84	28.00
Monday - `	21:00 - 24:00	171.24	10.29	16.64
2	24:00 - 27:00	8.11	2.25	3.60
	6:00 - 9:00	986.50	42.75	23.07
	9:00 - 12:00	2,346.50	65.25	35.96
>	12:00 - 15:00	2,696.75	65.00	41.49
Friday	15:00 - 18:00	1,628.75	52.15	31.23
Œ.	18:00 - 21:00	708.50	32.43	21.85
	21:00 - 24:00	213.75	8.11	26.36
	24:00 - 27:00	124.00	8.25	15.03
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	284.50	11.89	23.94
day	12:00 - 15:00	585.00	15.00	39.00
Saturday	15:00 - 18:00	636.50	15.00	42.43
Sat	18:00 - 21:00	440.50	12.50	35.24
	21:00 - 24:00	183.00	5.44	33.66
	24:00 - 27:00	118.00	8.25	14.30
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	236.75	10.55	22.44
a 🗡	12:00 - 15:00	318.75	13.50	23.61
Sunday	15:00 - 18:00	413.25	13.50	30.61
SL	18:00 - 21:00	211.00	7.00	30.14
	21:00 - 24:00	82.00	5.25	15.62
	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	Stude	Students		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										
March-22										
Total for 3rd Quarter:	232,824	232,384	99.81%	30	0.01%	232,414	99.82%	410	0.18%	
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:	1,941,814	1,939,831	99.90%	435	0.02%	1,940,266	99.92%	1,548	0.08%	

^{*}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.