

### Monthly Ridership and Service Level Report May, 2021 Covid-19 Recovery Service

"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 1<sup>st</sup> to June 30<sup>th</sup> 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 4<sup>th</sup>, 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			
CBD	Carpenter Boulevard			
CRC	Corporate Research Center			
GLD	Explorer Gold			
HDG	Harding Avenue			
HWD	Hethwood			
HWA	Hethwood A			
HWB	Hethwood B			
HXP	Hokie Express			

Abbreviation	Route Full Name			
MSA	South Main - Airport			
MSN	Main Street North			
MSS	Main Street South			
PHD	Patrick Henry Drive			
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: May, 2021

	Current Month	Previous Year	Change by Month	Current YTD Total	Previous YTD Total	YTD Change
Total Passengers	54,434	11,499	373%	776,701	3,542,032	-78%
<b>Total Revenue Hours</b>	7,951.63	4,252.76	87%	98,363.48	97,802.24	1%
Total Revenue Miles	85,434.00	44,393.00	92%	1,012,227.00	1,011,394.79	0%
Total Driver Hours	8,824.25	5,002.25	76%	110,862.33	110,993.50	0%
Passengers/RH	6.85	2.70	153%	7.90	36.22	-78%
Passengers/RM	0.64	0.26	146%	0.77	3.50	-78%
Passengers/DH	6.17	2.30	168%	7.01	31.91	-78%
Full Service Weekdays	8	0	8	135	111	24
Full Service Weekends	4	0	4	57	44	13
Reduced Service Weekdays	12	0	12	87	67	20
Reduced Service Weekends	6	0	6	37	29	8
Intermediate Service	0	0	0	12	3	9
Emergency Service Weekdays	0	20	(20)	0	54	(54)
Emergency Service Weekends	0	10	(10)	0	23	(23)
No Service Days	1	1	0	7	5	2

<sup>\*</sup>Note: These numbers include Blacksburg and Christiansburg: Motor Bus, Demand Response and Shuttle Services.

### **Total Ridership per Route**

Blacksburg: Motor Bus Month: May, 2021

Route	Current Month	% of Ridership	Previous Year	Change by Month	Current YTD Total	% of YTD Ridership	Previous YTD Total	YTD Change
CAS	517	1.00%	0	0%	7,098	0.94%	68,430	-90%
CBD	226	0.44%	0	0%	6,515	0.86%	56,763	-89%
CRC	1,893	3.65%	196	866%	28,605	3.80%	106,282	-73%
HDG	2,390	4.61%	436	448%	35,217	4.67%	166,317	-79%
HWD	2,003	3.86%	1,035	94%	19,293	2.56%	51,501	-63%
HWA	3,595	6.93%	92	3808%	52,008	6.90%	324,227	-84%
HWB	3,873	7.47%	113	3327%	57,677	7.65%	283,850	-80%
НХР	2,064	3.98%	0	0%	33,445	4.44%	155,696	-79%
MSA	1,268	2.44%	0	0%	12,441	1.65%	0	0%
MSN	4,016	7.74%	792	407%	48,631	6.45%	221,423	-78%
MSS	5,349	10.31%	2,282	134%	71,597	9.50%	249,108	-71%
PHD	3,230	6.23%	735	339%	55,978	7.43%	264,705	-79%
PRB	2,260	4.36%	506	347%	31,195	4.14%	129,259	-76%
PRO	2,523	4.86%	58	4250%	41,328	5.48%	281,442	-85%
TOM	9,299	17.93%	1,481	528%	132,751	17.62%	535,254	-75%
ттт	2,851	5.50%	971	194%	39,009	5.18%	57,658	-32%
UCB	3,456	6.66%	1,284	169%	57,084	7.57%	266,782	-79%
UMS	1,048	2.02%	0	0%	23,719	3.15%	199,513	-88%
Totals	51,861	100.00%	9,981	420%	753,591	100.00%	3,418,210	-78%

### **Total Ridership per Route**

Christiansburg: Motor Bus and Demand Response

Month: May, 2021

Route	Current Month	% of Ridership	Previous Year	Change by Month	Current YTD Total	% of YtD Ridership	Previous YTD	YTD Change
Commuter	0	0.00%	0	N/A	104	0.70%	1,622	-94%
Explorer Blue	196	11.93%	0	N/A	701	4.74%	7,671	-91%
Explorer Gold	188	11.44%	0	N/A	706	4.78%	9,490	-93%
GoAnywhere	1,259	76.63%	1,003	26%	13,268	89.78%	9,152	45%
Totals	1,643	100%	1,003	64%	14,779	100%	27,935	-47%
Christiansburg Fixed Route Total	384	23.37%	0	N/A	1,511	10.22%	18,783	-91.96%
Christiansburg Demand Response Total	1,259	76.63%	1,003	25.52%	13,268	89.78%	9,152	44.97%
Totals	1,643	100%	1,003	64%	14,779	100%	27,935	-47%

# Passengers per Revenue Hour per Route All Fixed Routes Month: May, 2021

Route	Current Month	Previous Year	Change by Month
CAS	1.60	0.00	N/A
CBD	2.42	0.00	N/A
CRC	4.07	0.79	416%
HDG	5.10	1.43	255%
HWD	19.25	3.33	478%
HWA	10.26	1.31	683%
HWB	11.05	1.60	593%
НХР	4.73	0.00	N/A
MSA	5.40	0.00	N/A
MSN	10.00	2.59	286%
MSS	10.32	6.02	71%
PHD	8.36	2.91	187%
PRB	6.97	2.15	224%
PRO	7.23	0.82	779%
TOM	17.32	3.81	355%
TTT	8.51	3.16	169%
UCB	8.90	3.30	170%
UMS	5.05	0.00	N/A
ВТС	0.00	0.00	N/A
BLU	0.85	0.00	N/A
GLD	0.81	0.00	N/A

### Passengers per Revenue Hour per Day of Week All Fixed Routes Month: May, 2021

<u>Current Month</u>							
Week Day	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	3,052	267.08	11.43	801	195.25	4.10	179%
Monday	9,257	1,319.69	7.01	1,247	433.85	2.87	144%
Tuesday	9,938	1,319.36	7.53	1,421	568.82	2.50	202%
Wednesday	9,434	1,319.56	7.15	1,421	568.82	2.50	186%
Thursday	8,403	1,093.41	7.69	1,717	569.12	3.02	155%
Friday	7,348	1,093.49	6.72	2,283	736.73	3.10	117%
Saturday	4,813	326.04	14.76	1,091	259.75	4.20	251%
Total	52,245	6,738.63	7.75	9,981	3,332.34	3.00	159%

<sup>\*</sup> Note: these numbers DO NOT include Demand Response Service, Tandems, Trippers or Shuttles

### Passengers per Revenue Mile per Day of Week All Fixed Routes Month: May, 2021

<u>Current Month</u>							
Week Day	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	3,052	2,884	1.06	801	2,033	0.39	169%
Monday	9,257	14,199	0.65	1,247	4,715	0.26	147%
Tuesday	9,938	14,209	0.70	1,421	6,299	0.23	210%
Wednesday	9,434	14,285	0.66	1,421	6,304	0.23	193%
Thursday	8,403	12,017	0.70	1,717	6,326	0.27	158%
Friday	7,348	11,975	0.61	2,283	8,039	0.28	116%
Saturday	4,813	3,566	1.35	1,091	2,703	0.40	234%
Total	52,245	73,135	0.71	9,981	36,419	0.27	161%

<sup>\*</sup> Note: these numbers DO NOT include Demand Response Service, Tandems, Trippers or Shuttles

#### Passengers per Revenue Hour per Day of Week

Demand Response Service Month: May, 2021

	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	33	22.80	1.45	4	2.58	1.55	-7%
Monday	156	109.88	1.42	63	51.97	1.21	17%
Tuesday	170	134.62	1.26	105	89.67	1.17	8%
Wednesday	176	105.72	1.66	86	86.72	0.99	68%
Thursday	138	93.57	1.47	64	52.28	1.22	20%
Friday	172	107.02	1.61	132	100.33	1.32	22%
Saturday	85	50.72	1.68	0	0.00	0.00	0%
Total	930	624.32	1.49	454	383.55	1.18	26%
<u>G</u> (	oAnywhere Cu	rrent Month		GoAny	where Previou	ıs Year	
Day of Week	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change
Sunday					Hours		Pass/RH
	0	0.00	0.00	0	0.00	0.00	0%
Monday	0 240	0.00 109.67	0.00 2.19	0 122		0.00 1.78	
•	_			_	0.00		0%
Monday	240	109.67	2.19	122	0.00 68.38	1.78	0% 23%
Monday Tuesday	240 244	109.67 110.23	2.19 2.21	122 197	0.00 68.38 91.37	1.78 2.16	0% 23% 3%
Monday Tuesday Wednesday	240 244 226	109.67 110.23 112.63	2.19 2.21 2.01	122 197 194	0.00 68.38 91.37 93.38	1.78 2.16 2.08	0% 23% 3% -3%
Monday Tuesday Wednesday Thursday	240 244 226 254	109.67 110.23 112.63 112.97	2.19 2.21 2.01 2.25	122 197 194 170	0.00 68.38 91.37 93.38 91.67	1.78 2.16 2.08 1.85	0% 23% 3% -3% 21%

<sup>\*</sup>Please note: these numbers DO NOT include Fixed Route Service. It includes Access and GoAnywhere.

### Passengers per Revenue Mile per Day of Week

Demand Response Service Month: May, 2021

	Access Curre	nt Month		Acc	Access Previous Year			
Day of Week	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM	
Sunday	33	195	0.17	4	10	0.40	-58%	
Monday	156	888	0.18	63	429	0.15	20%	
Tuesday	170	1,102	0.15	105	571	0.18	-16%	
Wednesday	176	978	0.18	86	553	0.16	16%	
Thursday	138	922	0.15	64	329	0.19	-23%	
Friday	172	926	0.19	132	731	0.18	3%	
Saturday	85	446	0.19	0	0	0.00	0%	
Total	930	5,457	0.17	454	2,623	0.17	-2%	
<u>Gc</u>	o Anywhere Cu	ırrent Month		Go Any	where Previo	us Year		
Day of Week	Anywhere Cu Passengers	rrent Month Revenue Miles	Pass/RM	Go Any Passengers	where Previo 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  0 240	Revenue Miles 0 1,309	0.00 0.18	Passengers  0 122	Revenue Miles 0 581	Pass/RM 0.00 0.21	Pass/RM 0% -13%	
Day of Week Sunday Monday Tuesday	Passengers  0 240 244	Revenue Miles 0 1,309 1,311	0.00 0.18 0.19	Passengers  0 122 197	Revenue Miles 0 581 989	0.00 0.21 0.20	Pass/RM  0%  -13%  -7%	
Day of Week  Sunday  Monday  Tuesday  Wednesday	Passengers  0 240 244 226	Revenue Miles  0 1,309 1,311 1,322	0.00 0.18 0.19 0.17	Passengers  0 122 197 194	Revenue Miles  0 581 989 1,111	0.00 0.21 0.20 0.17	Pass/RM  0%  -13%  -7%  -2%	
Day of Week  Sunday  Monday  Tuesday  Wednesday  Thursday	Passengers  0 240 244 226 254	Revenue Miles 0 1,309 1,311 1,322 1,320	0.00 0.18 0.19 0.17 0.19	Passengers  0 122 197 194 170	Revenue Miles 0 581 989 1,111 891	0.00 0.21 0.20 0.17 0.19	Pass/RM  0% -13% -7% -2% 1%	

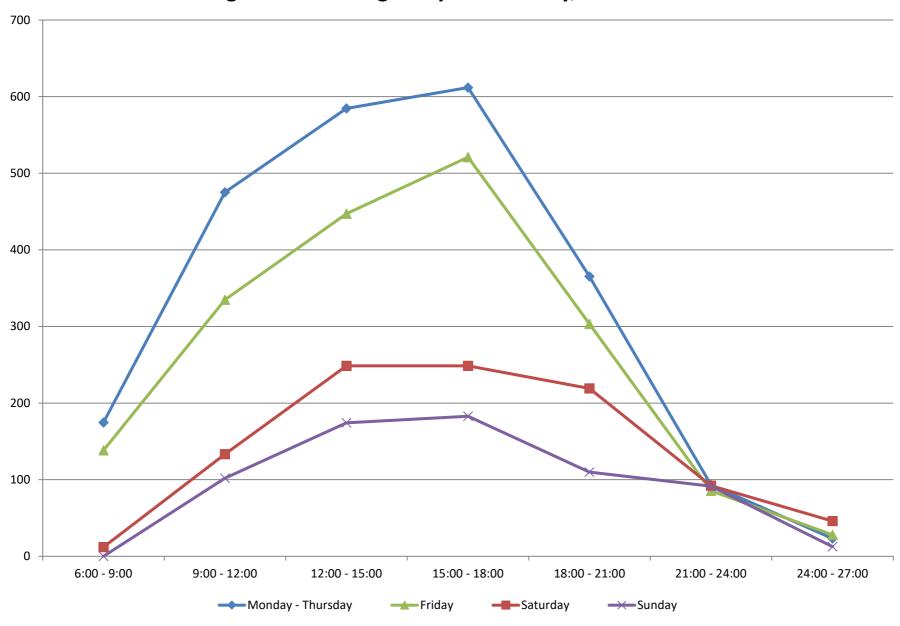
<sup>\*</sup>Please note: these numbers DO NOT include Fixed Route Service. It includes Access and GoAnywhere.

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

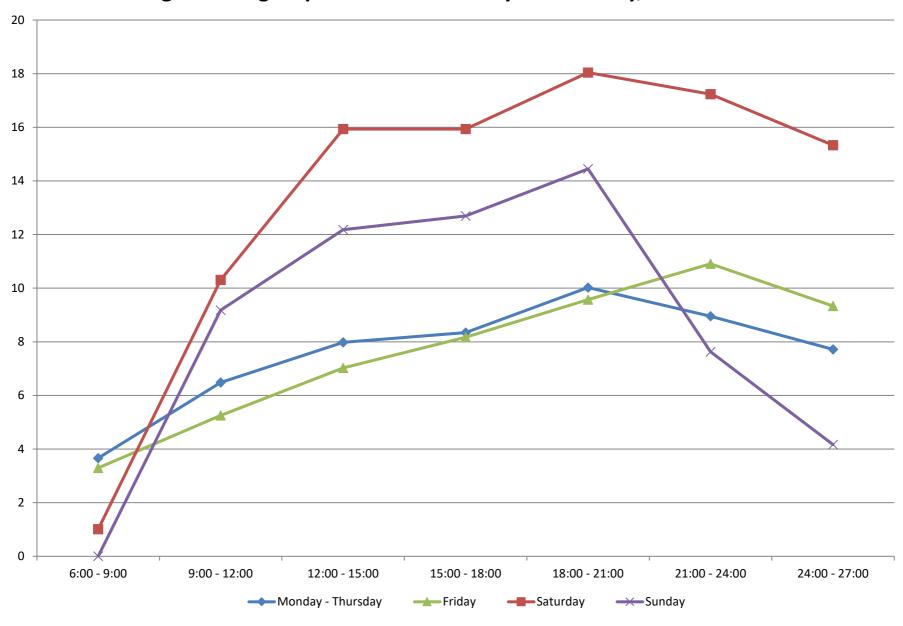
Month: May, 2021

т	ime of Day	Avg Total Passengers	Average RH	Avg Pass. per RH
ay	6:00 - 9:00	174.63	47.69	3.66
Monday - Thursday	9:00 - 12:00	475.19	73.31	6.48
Jhu	12:00 - 15:00	584.69	73.28	7.98
	15:00 - 18:00	611.88	73.31	8.35
day	18:00 - 21:00	365.25	36.44	10.02
1on	21:00 - 24:00	93.13	10.40	8.95
2	24:00 - 27:00	23.14	3.00	7.71
	6:00 - 9:00	138.25	41.95	3.30
	9:00 - 12:00	334.75	63.75	5.25
>e	12:00 - 15:00	447.25	63.65	7.03
Friday	15:00 - 18:00	521.00	63.75	8.17
Œ.	18:00 - 21:00	303.25	31.69	9.57
	21:00 - 24:00	85.50	7.84	10.91
	24:00 - 27:00	28.00	3.00	9.33
	6:00 - 9:00	12.00	11.92	1.01
	9:00 - 12:00	133.20	12.92	10.31
day	12:00 - 15:00	248.60	15.60	15.94
Saturday	15:00 - 18:00	248.60	15.60	15.94
Sat	18:00 - 21:00	219.20	12.15	18.04
	21:00 - 24:00	92.20	5.35	17.23
	24:00 - 27:00	46.00	3.00	15.33
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	102.00	11.12	9.18
a	12:00 - 15:00	174.20	14.30	12.18
Sunday	15:00 - 18:00	182.80	14.40	12.69
Su	18:00 - 21:00	109.80	7.60	14.45
	21:00 - 24:00	91.50	12.00	7.63
	24:00 - 27:00	12.50	3.00	4.17

### **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		Faculty/Staff		Total Virginia Tech		Total Non-VT	
	Ridership	#	%	#	%	#	%	#	%
July-20	16,761	16,396	97.82%	6	0.04%	16,402	97.86%	359	2.14%
August-20	51,230	50,854	99.27%	38	0.07%	50,892	99.34%	338	0.66%
September-20	98,375	98,053	99.67%	136	0.14%	98,189	99.81%	186	0.19%
Total for 1st Quarter:	166,366	165,303	99.36%	180	0.11%	165,483	99.47%	883	0.53%
October-20	100,571	100,180	99.61%	85	0.08%	100,265	99.70%	306	0.30%
November-20	71,605	71,241	99.49%	72	0.10%	71,313	99.59%	292	0.41%
December-20	20,433	20,277	99.24%	37	0.18%	20,314	99.42%	119	0.58%
Total for 2nd Quarter:	192,609	191,698	99.53%	194	0.10%	191,892	99.63%	717	0.37%
January-21	46,303	45,880	99.09%	41	0.09%	45,921	99.17%	382	0.83%
February-21	88,427	88,053	99.58%	49	0.06%	88,102	99.63%	325	0.37%
March-21	107,477	106,978	99.54%	54	0.05%	107,032	99.59%	445	0.41%
Total for 3rd Quarter:	242,207	240,911	99.46%	144	0.06%	241,055	99.52%	1,152	0.48%
April-21	101,675	101,397	99.73%	44	0.04%	101,441	99.77%	234	0.23%
May-21	52,245	52,151	99.82%	22	0.04%	52,173	99.86%	72	0.14%
June-21									
Total for 4th Quarter:	153,920	153,548	99.76%	66	0.04%	153,614	99.80%	306	0.20%
Total for Year:	755,102	751,460	99.52%	584	0.08%	752,044	99.60%	3,058	0.40%

# 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 weeks, people were restricted from making any unnecessary trips. University went to online classes and sent many students home. Some business closed for the second half of our normal Spring Service. Continuing restrictions and impacts will be going on through the Fall Semester and possibly into the 2021 calendar year.

After discussions with NTD, we were informed to report what had initially been scheduled as what we had planned regardless of the changes we made for the rest of the fiscal year (July-June). In August, NTD updated that, telling all systems to report what they ran as their expected service. BT ran considerable different service than what was initially planned and have reported here as Emergency Service to distinguish it from the planned service that was in place. So from March 15<sup>th</sup> – June 30<sup>th</sup> 2020 in these reports you find the service levels reported as Emergency Service. As with what was initially stated by NTD to consider the service not normal. Starting with July 1<sup>st</sup> 2020 onward will be reported as planned service as our planning year starts in July and with planned adjustments made for the Spring Semester halfway through.

Spring FY20 Emergency Service Levels Guide						
Dates Planned Service		Approximate Service	Differences			
3/15-3/21/20	Full Service	Reduced Service	Ran Reduced instead			
3/22-4/5/20	Full Service	Alt Full Service	Reduced Frequencies			
4/6-4/9/20	Full Service	Alt Full Minus C'Burg	C'burg FR canceled (ongoing)			
4/10-4/18/20	Full Service	Alt Intermediate	Reduced routes, freq, hours			
4/19-5/9/20	Full Service	Alt Intermediate 2	Additional routes cut			
5/10-5/13/20	Full Service	Alt Reduced	Ran Alternate Reduced instead			
5/14-6/30/20 Reduced		Alt Reduced	Reduced routes, hours			

With the start of the new planning year the new service level becomes the planned service level. This will however still have significant difference between the same service levels compared from one year to the next. At this time the following table is official. Also note there will be lower passenger load limitations allowed on vehicles at least for the Fall FY21 services.

FY21 Service Levels Comparatives						
FY21 Dates	Planned Service	FY20 Service	Differences			
7/1-8/16/20	Reduced	Reduced	Less routes, hours, no Shuttles			
8/17-8/21/20	Intermediate	Reduced Plus	More routes, hours, freq			
8/22-11/20/20	Full	Full	More routes, freq			
11/21-11/28/20	Reduced, Holiday	Reduced	Less routes, hours on Holiday			
11/29-12/17/20	Reduced Plus	Full	Reduced Plus instead of Full			
12/18-1/16/21	Reduced, Holiday	Reduced	Less routes, hours on Holiday			
1/17-1/22/21	Reduced Plus	Intermediate, Full	Altered First Week of Spring Svc			
1/23 – 5/12/21	Full, Intermediate	Full, Reduced, Alt Svcs	Many changes, 1 year of Covid			
5/13 – 6/30/21	Reduced	Reduced				

These differences will need to be kept in mind when comparing an affected service period with a non-affected period between two different service years.