

### Monthly Ridership and Service Level Report January, 2021 Covid-19 Response 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

	Current Month	Previous Year	Change by Month	Current YTD Total	Previous YTD Total	YTD Change
Total Passengers	48,147	312,353	-85%	417,932	2,773,526	-85%
Total Revenue Hours	7,006.11	8,788.40	-20%	57,045.02	66,517.50	-14%
Total Revenue Miles	70,574.00	92,624.30	-24%	581,725.00	688,087.19	-15%
Total Driver Hours	8,136.00	10,069.50	-19%	65,119.75	75,504.75	-14%
Passengers/RH	6.87	35.54	-81%	7.33	41.70	-82%
Passengers/RM	0.68	3.37	-80%	0.72	4.03	-82%
Passengers/DH	5.92	31.02	-81%	6.42	36.73	-83%
Full Service Weekdays	5	9	(4)	68	86	(18)
Full Service Weekends	3	3	0	29	34	(5)
Reduced Service Weekdays	15	12	3	75	62	13
Reduced Service Weekends	6	5	1	31	26	5
Intermediate Service	0	1	(1)	7	3	4
Emergency Service Weekdays	0	0	0	0	0	0
Emergency Service Weekends	0	0	0	0	0	0
No Service Days	2	1	1	5	4	1

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

### **Total Ridership per Route**

Blacksburg: Motor Bus Month: January, 2021

Route	Current Month	% of Ridership	Previous Year	Change by Month	Current YTD Total	% of YTD Ridership	Previous YTD Total	YTD Change
CAS	393	0.85%	7,032	-94%	2,509	0.62%	48,541	-95%
CBD	408	0.88%	4,951	-92%	3,519	0.87%	44,987	-92%
CRC	1,579	3.41%	10,304	-85%	14,079	3.47%	80,870	-83%
HDG	2,008	4.34%	15,810	-87%	20,233	4.99%	129,020	-84%
HWD	955	2.06%	3,477	-73%	11,759	2.90%	40,644	-71%
HWA	3,002	6.48%	28,594	-90%	26,789	6.61%	255,293	-90%
HWB	3,572	7.71%	26,072	-86%	30,314	7.48%	221,922	-86%
НХР	1,856	4.01%	15,272	-88%	13,791	3.40%	116,563	-88%
MSA	1,209	2.61%	0	0%	6,756	1.67%	0	0%
MSN	2,769	5.98%	18,551	-85%	25,682	6.34%	174,888	-85%
MSS	4,460	9.63%	22,730	-80%	41,103	10.14%	195,172	-79%
PHD	3,260	7.04%	24,242	-87%	31,618	7.80%	205,437	-85%
PRB	2,038	4.40%	11,666	-83%	16,238	4.01%	100,652	-84%
PRO	2,465	5.32%	24,060	-90%	21,280	5.25%	221,257	-90%
TOM	8,656	18.69%	48,301	-82%	69,910	17.25%	414,210	-83%
TTT	3,015	6.51%	5,555	-46%	24,772	6.11%	45,746	-46%
UCB	3,325	7.18%	22,933	-86%	32,349	7.98%	208,941	-85%
UMS	1,333	2.88%	14,939	-91%	12,474	3.08%	161,600	-92%
Totals	46,303	100.00%	304,489	-85%	405,175	100.00%	2,665,743	-85%

### **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
Commuter	0	0.00%	152	-100%	104	1.30%	1,401	-93%
Explorer Blue	0	0.00%	938	-100%	0	0.00%	6,033	-100%
Explorer Gold	0	0.00%	1,216	-100%	0	0.00%	7,198	-100%
GoAnywhere	1,154	100.00%	781	48%	7,913	98.70%	5,881	35%
Totals	1,154	100%	3,087	-63%	8,017	100%	20,513	-61%
Christiansburg Fixed Route Total	0	0.00%	2,306	-100.00%	104	1.30%	14,632	-99.29%
Christiansburg Demand Response Total	1,154	100.00%	781	47.76%	7,913	98.70%	5,881	34.55%
Totals	1,154	100%	3,087	-63%	8,017	100%	20,513	-61%

### Passengers per Revenue Hour per Route All Fixed Routes

Route	Current Month	Previous Year	Change by Month
CAS	1.35	20.49	-93%
CBD	3.50	42.43	-92%
CRC	3.42	20.04	-83%
HDG	4.83	31.37	-85%
HWD	10.52	32.68	-68%
HWA	9.32	60.37	-85%
HWB	11.08	54.68	-80%
НХР	4.74	32.81	-86%
MSA	5.14	0.00	N/A
MSN	7.68	41.80	-82%
MSS	9.56	40.79	-77%
PHD	9.25	54.25	-83%
PRB	7.01	32.48	-78%
PRO	7.67	55.22	-86%
TOM	18.17	75.09	-76%
TTT	9.05	17.78	-49%
UCB	9.28	52.56	-82%
UMS	6.57	61.67	-89%
ВТС	0.00	3.07	-100%
BLU	0.00	3.69	-100%
GLD	0.00	4.76	-100%

### Passengers per Revenue Hour per Day of Week All Fixed Routes

	<u>(</u>	Current Month	<u>1</u>				
Week Day	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	2,264	209.20	10.82	5,813	168.70	34.46	-69%
Monday	7,724	1,057.71	7.30	39,994	1,173.04	34.09	-79%
Tuesday	7,760	1,057.71	7.34	66,289	1,365.15	48.56	-85%
Wednesday	8,090	1,057.71	7.65	64,929	1,366.32	47.52	-84%
Thursday	7,628	1,057.71	7.21	65,675	1,572.83	41.76	-83%
Friday	8,290	1,057.21	7.84	56,950	1,570.17	36.27	-78%
Saturday	4,547	311.34	14.60	7,145	220.53	32.40	-55%
Total	46,303	5,808.59	7.97	306,795	7,436.74	41.25	-81%

<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

<u>Current Month</u>							
Week Day	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	2,264	2,240	1.01	5,813	1,878	3.10	-67%
Monday	7,724	10,964	0.70	39,994	12,823	3.12	-77%
Tuesday	7,760	10,926	0.71	66,289	14,557	4.55	-84%
Wednesday	8,090	10,902	0.74	64,929	14,642	4.43	-83%
Thursday	7,628	10,931	0.70	65,675	16,906	3.88	-82%
Friday	8,290	10,924	0.76	56,950	16,922	3.37	-77%
Saturday	4,547	3,388	1.34	7,145	2,454	2.91	-54%
Total	46,303	60,275	0.77	306,795	80,182	3.83	-80%

<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: January, 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	18	15.12	1.19	10	11.77	0.85	40%
Monday	102	97.60	1.05	203	135.50	1.50	-30%
Tuesday	153	126.45	1.21	238	124.83	1.91	-37%
Wednesday	126	117.30	1.07	225	136.97	1.64	-35%
Thursday	118	94.77	1.25	300	154.27	1.94	-36%
Friday	98	77.83	1.26	272	155.87	1.75	-28%
Saturday	75	69.20	1.08	87	64.65	1.35	-19%
Total	690	598.27	1.15	1,335	783.85	1.70	-32%
Ge	oAnywhere Cu	rrent Month		GoAny	whore Drevies	Voor	
	DANYWHELE CU	THEIR MOHEN		GUAITY	where Previoเ	<u>is Year</u>	
Day of Week	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	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  0 187	Revenue Hours 0.00 104.10	0.00 1.80	Passengers  0 124	Revenue Hours 0.00 62.28	Pass/RH  0.00  1.99	Pass/RH  0% -10%
Day of Week  Sunday  Monday  Tuesday	Passengers  0 187 249	Revenue Hours 0.00 104.10 119.32	0.00 1.80 2.09	Passengers  0 124 146	Revenue Hours 0.00 62.28 64.63	0.00 1.99 2.26	Pass/RH  0% -10% -8%
Day of Week  Sunday  Monday  Tuesday  Wednesday	Passengers  0 187 249 214	Revenue Hours 0.00 104.10 119.32 104.48	0.00 1.80 2.09 2.05	Passengers  0 124 146 118	Revenue Hours 0.00 62.28 64.63 69.07	0.00 1.99 2.26 1.71	Pass/RH  0% -10% -8% 20%
Day of Week  Sunday  Monday  Tuesday  Wednesday  Thursday	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	Passengers  0 124 146 118 190	Revenue Hours 0.00 62.28 64.63 69.07 82.65	0.00 1.99 2.26 1.71 2.30	Pass/RH  0% -10% -8% 20% -15%

<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: January, 2021

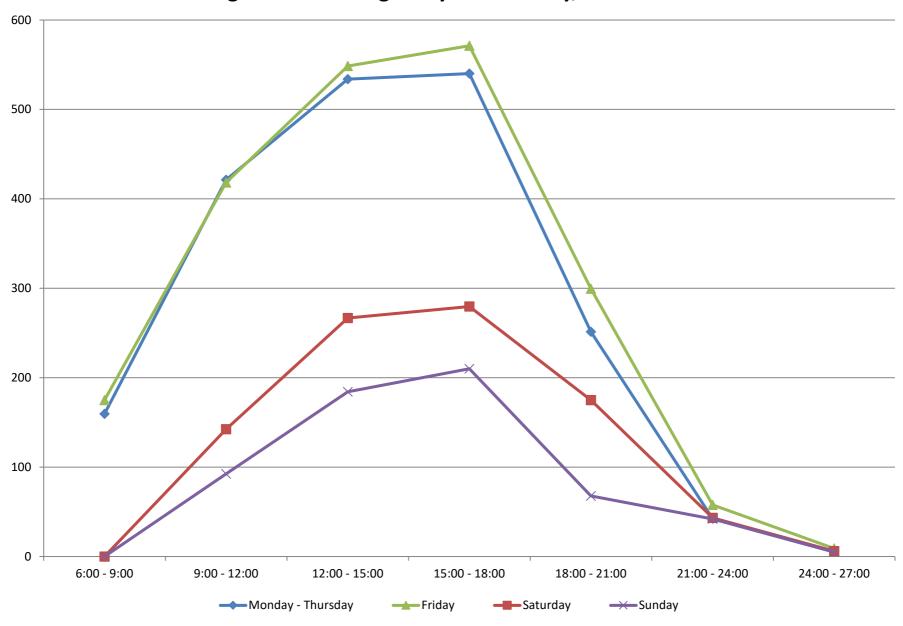
	Access Curre	nt Month		Acc	ess Previous Y	<u>'ear</u>	
Day of Week	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	18	89	0.20	10	40	0.25	-19%
Monday	102	583	0.17	203	1,193	0.17	3%
Tuesday	153	794	0.19	238	1,260	0.19	2%
Wednesday	126	679	0.19	225	1,165	0.19	-4%
Thursday	118	665	0.18	300	1,636	0.18	-3%
Friday	98	515	0.19	272	1,451	0.19	2%
Saturday	75	443	0.17	87	725	0.12	41%
Total	690	3,768	0.18	1,335	7,470	0.18	2%
<u>Gc</u>	Anywhere Cu	ırrent Month		<u>Go Any</u>	where Previo	us Year	
Day of Week	Anywhere Cu Passengers	Revenue Miles	Pass/RM	Go Any Passengers	where Previo	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  0 187	Revenue Miles 0 1,096	0.00 0.17	Passengers 0 124	Revenue Miles 0 657	Pass/RM 0.00 0.19	Pass/RM 0% -10%
Day of Week Sunday Monday Tuesday	Passengers  0 187 249	Revenue Miles 0 1,096 1,330	0.00 0.17 0.19	Passengers  0 124 146	Revenue Miles 0 657 692	0.00 0.19 0.21	Pass/RM  0%  -10%  -11%
Day of Week  Sunday  Monday  Tuesday  Wednesday	Passengers  0 187 249 214	Revenue Miles 0 1,096 1,330 1,265	0.00 0.17 0.19 0.17	Passengers  0 124 146 118	Revenue Miles  0 657 692 787	0.00 0.19 0.21 0.15	Pass/RM  0% -10% -11% 13%
Day of Week  Sunday  Monday  Tuesday  Wednesday  Thursday	Passengers  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	0 124 146 118 190	Revenue Miles 0 657 692 787 900	0.00 0.19 0.21 0.15 0.21	Pass/RM  0% -10% -11% 13% -15%

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

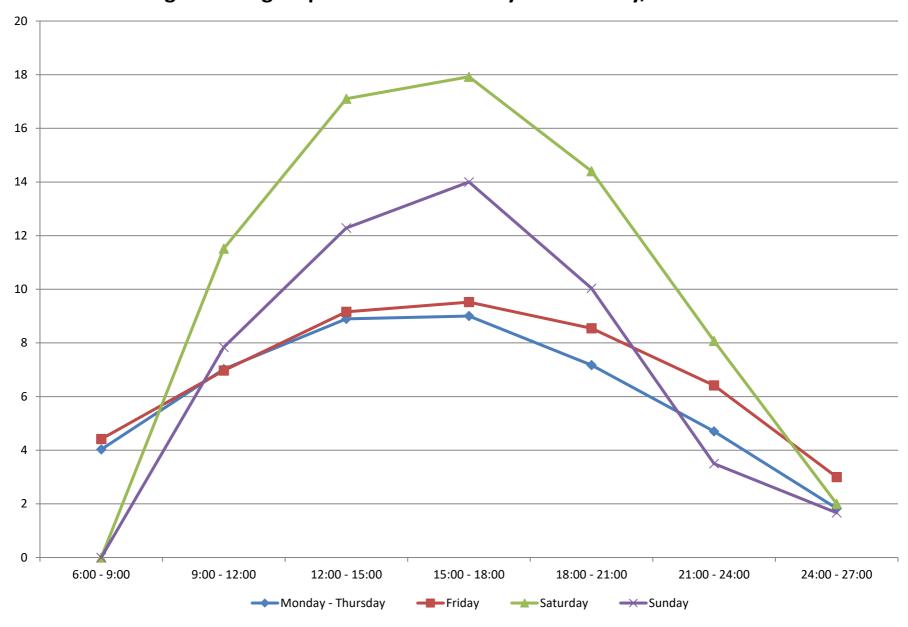
### Average Ridership and Revenue Hours by Time of Day All Fixed Routes

Ti	ime of Day	Avg Total Passengers	Average RH	Avg Pass. per RH
ay	6:00 - 9:00	159.63	39.63	4.03
rsd	9:00 - 12:00	421.31	60.00	7.02
nų.	12:00 - 15:00	533.88	60.00	8.90
L-/	15:00 - 18:00	540.13	60.00	9.00
day	18:00 - 21:00	251.38	35.05	7.17
Monday - Thursday	21:00 - 24:00	42.38	9.01	4.71
2	24:00 - 27:00	5.50	3.00	1.83
	6:00 - 9:00	175.00	39.63	4.42
	9:00 - 12:00	418.25	60.00	6.97
>	12:00 - 15:00	548.50	59.88	9.16
Friday	15:00 - 18:00	571.25	60.00	9.52
Œ.	18:00 - 21:00	299.50	35.05	8.55
	21:00 - 24:00	57.75	9.01	6.41
	24:00 - 27:00	9.00	3.00	3.00
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	142.40	12.37	11.51
day	12:00 - 15:00	266.80	15.60	17.10
Saturday	15:00 - 18:00	279.60	15.60	17.92
Sat	18:00 - 21:00	175.00	12.15	14.40
	21:00 - 24:00	43.20	5.35	8.07
	24:00 - 27:00	6.00	3.00	2.00
	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	92.50	11.80	7.84
a \	12:00 - 15:00	184.25	15.00	12.28
Sunday	15:00 - 18:00	210.00	15.00	14.00
Su	18:00 - 21:00	67.75	6.75	10.04
	21:00 - 24:00	42.00	12.00	3.50
	24:00 - 27:00	5.00	3.00	1.67

### 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		Facul	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	98,374	98,052	99.67%	136	0.14%	98,188	99.81%	186	0.19%	
Total for 1st Quarter:	166,365	165,302	99.36%	180	0.11%	165,482	99.47%	883	0.53%	
October-20	100,568	100,177	99.61%	85	0.08%	100,262	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:	192,606	191,695	99.53%	194	0.10%	191,889	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										
March-21										
Total for 3rd Quarter:	46,303	45,880	99.09%	41	0.09%	45,921	99.17%	382	0.83%	
April-21										
May-21										
June-21										
Total for 4th Quarter:	0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	
Total for Year:	405,274	402,877	99.41%	415	0.10%	403,292	99.51%	1,982	0.49%	

# 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	<b>Approximate Service</b>	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 planned services.

Fall FY21 Planned Service Levels Comparatives (Tentative)							
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	Full	Reduced instead of Full				
12/18-12/31/20	Reduced, Holiday	Reduced	Less routes, hours on Holiday				

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.