



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

**“Safety, Courtesy, Reliability,
and the Environment”**

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GLOSSARY

- Demand-Response Service (DR): 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.
- Driver Hours (DH): 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.
- Emergency Service: 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.
- Fiscal Year (FY): 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)
- Fixed Route Service (FR): FR operate along a specific route according to a fixed or preset schedule. Each trip serves the same stops, continuously, until service ends.
- Focused Demand-Response Service: 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.
- Full Service: 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.
- Intermediate Service: 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.
- No Service: 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.
- Ridership: Ridership is the number of people using a public transportation service in a given time period.
- Tandems: 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.
- Trippers: Additional stand-by service vehicles scheduled around special events such as Football Games to assist Routes in sudden passenger peak demands.
- Year-to-Date (YTD): 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: December, 2021

	Current Month	Previous Year	Change by Month	Current YTD Total	Previous YTD Total	YTD Change
Total Passengers	180,008	22,147	713%	1,722,526	369,785	366%
Total Revenue Hours	7,616.31	6,353.36	20%	53,747.34	50,038.91	7%
Total Revenue Miles	81,437.00	64,228.00	27%	566,744.80	511,151.00	11%
Total Driver Hours	8,507.25	7,550.50	13%	60,122.58	56,983.75	6%
Passengers/RH	23.63	3.49	578%	32.05	7.39	334%
Passengers/RM	2.21	0.34	541%	3.04	0.72	320%
Passengers/DH	21.16	2.93	621%	28.65	6.49	341%
Full Service Weekdays	12	0	12	77	63	14
Full Service Weekends	4	0	4	31	26	5
Reduced Service Weekdays	11	22	(11)	47	60	(13)
Reduced Service Weekends	2	8	(6)	18	25	(7)
Intermediate Service	0	0	0	7	7	0
No Service Days	2	1	1	4	3	1

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

Total Ridership per Route

Blacksburg: Motor Bus

Month: December, 2021

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%	65	-100%	8,350	0.50%	2,116	295%
CRB	1,955	1.10%	144	1258%	24,608	1.47%	3,111	691%
CRC	4,595	2.58%	865	431%	51,338	3.06%	12,500	311%
HDG	9,070	5.10%	972	833%	83,921	5.01%	18,225	360%
HWA	15,120	8.50%	1,320	1045%	155,139	9.26%	23,787	552%
HWB	13,693	7.69%	1,677	717%	135,502	8.08%	26,742	407%
HWD	4,349	2.44%	431	909%	26,966	1.61%	10,804	150%
HXP	8,294	4.66%	177	4586%	81,467	4.86%	11,935	583%
MSA	2,301	1.29%	827	178%	27,125	1.62%	5,547	389%
MSN	13,194	7.41%	1,302	913%	125,102	7.46%	22,913	446%
MSS	14,256	8.01%	2,499	470%	117,217	6.99%	36,643	220%
PHB	3,586	2.02%	0	N/A	41,196	2.46%	0	N/A
PHD	14,410	8.10%	1,284	1022%	135,794	8.10%	28,358	379%
PRB	3,372	1.89%	1,022	230%	32,704	1.95%	14,199	130%
PRO	12,837	7.21%	735	1647%	129,202	7.71%	18,815	587%
TOM	33,124	18.61%	3,400	874%	269,317	16.07%	61,254	340%
TTT	5,553	3.12%	1,635	240%	41,419	2.47%	21,757	90%
UCB	13,981	7.86%	1,615	766%	129,097	7.70%	29,024	345%
UMS	3,268	1.84%	463	606%	60,769	3.63%	11,141	445%
ACC	1,002	0.56%	590	70%	6,236	0.37%	4,055	54%
Totals	177,960	100.00%	20,433	771%	1,676,233	100.00%	358,871	367%
Blacksburg MB Total	176,958	99.44%	20,433	766.04%	1,676,233	99.63%	358,871	367.09%
Blacksburg DR Total	1,002	0.56%	590	69.83%	6,236	0.37%	4,055	53.79%
Totals	177,960	100%	21,023	747%	1,682,469	100%	362,926	364%

Total Ridership per Route

Christiansburg: Motor Bus and Demand Response

Month: December, 2021

Route	Current Month	% of Ridership	Previous Year	Change by Month	Current YTD Total	% of YtD Ridership	Previous YTD	YTD Change
BLU	428	20.90%	0	N/A	2,557	20.48%	0	N/A
BTC	0	0.00%	0	N/A	0	0.00%	104	-100%
GLD	599	29.25%	0	N/A	2,631	21.07%	0	N/A
GAR	1,021	49.85%	1,124	-9%	7,300	58.46%	6,759	8%
Totals	2,048	100%	1,124	82%	12,488	100%	6,863	82%
Christiansburg MB Total	1,027	50.15%	0	N/A	5,188	41.54%	104	4888.46%
Christiansburg DR Total	1,021	49.85%	1,124	-9.16%	7,300	58.46%	6,759	8.00%
Totals	2,048	100%	1,124	82%	12,488	100%	6,863	82%

Passengers per Revenue Hour per Route

All Fixed Routes

Month: December, 2021

Route	Current Month	Previous Year	Change by Month
CAS	0.00	0.40	-100%
CRB	15.52	0.90	1632%
CRC	9.50	1.78	434%
HDG	18.34	2.67	588%
HWA	47.81	20.64	132%
HWB	42.58	5.66	652%
HWD	20.58	1.44	1327%
HXP	23.64	0.72	3195%
MSA	15.06	3.23	366%
MSN	28.59	4.14	590%
MSS	24.11	6.10	295%
PHB	27.74	0.00	N/A
PHD	32.94	4.01	722%
PRB	12.63	4.01	215%
PRO	46.81	2.47	1796%
TOM	56.53	8.42	572%
TTT	16.06	4.59	250%
UCB	31.17	4.82	546%
UMS	68.18	2.28	2885%
BLU	1.67	0.00	N/A
BTC	0.00	0.00	N/A
GLD	2.39	0.00	N/A

Passengers per Revenue Hour per Day of Week

All Fixed Routes

Month: December, 2021

Week Day	Current Month			Previous Year			Change Pass/RH
	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	
Sunday	5,347	166.40	32.13	1,037	187.20	5.54	480%
Monday	29,273	1,074.06	27.25	3,133	841.06	3.73	632%
Tuesday	28,910	1,067.40	27.08	4,100	1,092.08	3.75	621%
Wednesday	43,826	1,383.07	31.69	3,681	1,042.31	3.53	797%
Thursday	32,113	1,451.12	22.13	3,962	1,076.83	3.68	501%
Friday	28,974	1,186.74	24.41	3,043	751.56	4.05	503%
Saturday	9,542	224.44	42.51	1,477	239.37	6.17	589%
Total	177,985	6,553.23	27.16	20,433	5,230.41	3.91	595%

* Note: these numbers DO NOT include Demand Response Service

Passengers per Revenue Mile per Day of Week

All Fixed Routes

Month: December, 2021

Week Day	Current Month			Previous Year			Change Pass/RM
	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	
Sunday	5,347	1,857	2.88	1,037	2,000	0.52	455%
Monday	29,273	11,429	2.56	3,133	8,797	0.36	619%
Tuesday	28,910	11,608	2.49	4,100	11,389	0.36	592%
Wednesday	43,826	14,894	2.94	3,681	10,854	0.34	768%
Thursday	32,113	15,524	2.07	3,962	11,242	0.35	487%
Friday	28,974	12,915	2.24	3,043	7,787	0.39	474%
Saturday	9,542	2,572	3.71	1,477	2,642	0.56	564%
Total	177,985	70,799	2.51	20,433	54,711	0.37	573%

* Note: these numbers DO NOT include Demand Response Service

Passengers per Revenue Hour per Day of Week
 Demand Response Service
 Month: December, 2021

<u>Access Current Month</u>				<u>Access Previous Year</u>			
Day of Week	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	31	19.33	1.60	8	5.72	1.40	15%
Monday	119	81.17	1.47	84	70.45	1.19	23%
Tuesday	177	119.69	1.48	163	140.55	1.16	28%
Wednesday	222	150.25	1.48	110	97.95	1.12	32%
Thursday	205	148.33	1.38	121	111.38	1.09	27%
Friday	189	119.60	1.58	59	52.22	1.13	40%
Saturday	59	33.32	1.77	45	34.52	1.30	36%
Total	1,002	671.68	1.49	590	512.78	1.15	30%

<u>GoAnywhere Current Month</u>				<u>GoAnywhere Previous Year</u>			
Day of Week	Passengers	Revenue Hours	Pass/RH	Passengers	Revenue Hours	Pass/RH	Change Pass/RH
Sunday	0	0.00	0.00	0	0.00	0.00	0%
Monday	169	63.18	2.67	174	101.37	1.72	56%
Tuesday	173	64.58	2.68	272	142.97	1.90	41%
Wednesday	231	80.92	2.85	200	121.95	1.64	74%
Thursday	203	82.07	2.47	249	131.43	1.89	31%
Friday	201	80.69	2.49	183	83.37	2.20	13%
Saturday	44	19.97	2.20	46	29.08	1.58	39%
Total	1,021	391.40	2.61	1,124	610.17	1.84	42%

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

Passengers per Revenue Mile per Day of Week
Demand Response Service
Month: December, 2021

<u>Access Current Month</u>	<u>Access Previous Year</u>
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Day of Week	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	31	141	0.22	8	58	0.14	59%
Monday	119	702	0.17	84	508	0.17	3%
Tuesday	177	1,064	0.17	163	879	0.19	-10%
Wednesday	222	1,279	0.17	110	592	0.19	-7%
Thursday	205	1,257	0.16	121	654	0.19	-12%
Friday	189	888	0.21	59	355	0.17	28%
Saturday	59	349	0.17	45	234	0.19	-12%
Total	1,002	5,680	0.18	590	3,280	0.18	-2%

<u>Go Anywhere Current Month</u>	<u>Go Anywhere Previous Year</u>
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Day of Week	Passengers	Revenue Miles	Pass/RM	Passengers	Revenue Miles	Pass/RM	Change Pass/RM
Sunday	0	0	0.00	0	0	0.00	0%
Monday	169	844	0.20	174	944	0.18	9%
Tuesday	173	796	0.22	272	1,533	0.18	23%
Wednesday	231	1,126	0.21	200	1,241	0.16	27%
Thursday	203	1,022	0.20	249	1,355	0.18	8%
Friday	201	943	0.21	183	925	0.20	8%
Saturday	44	227	0.19	46	239	0.19	1%
Total	1,021	4,958	0.21	1,124	6,237	0.18	14%

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

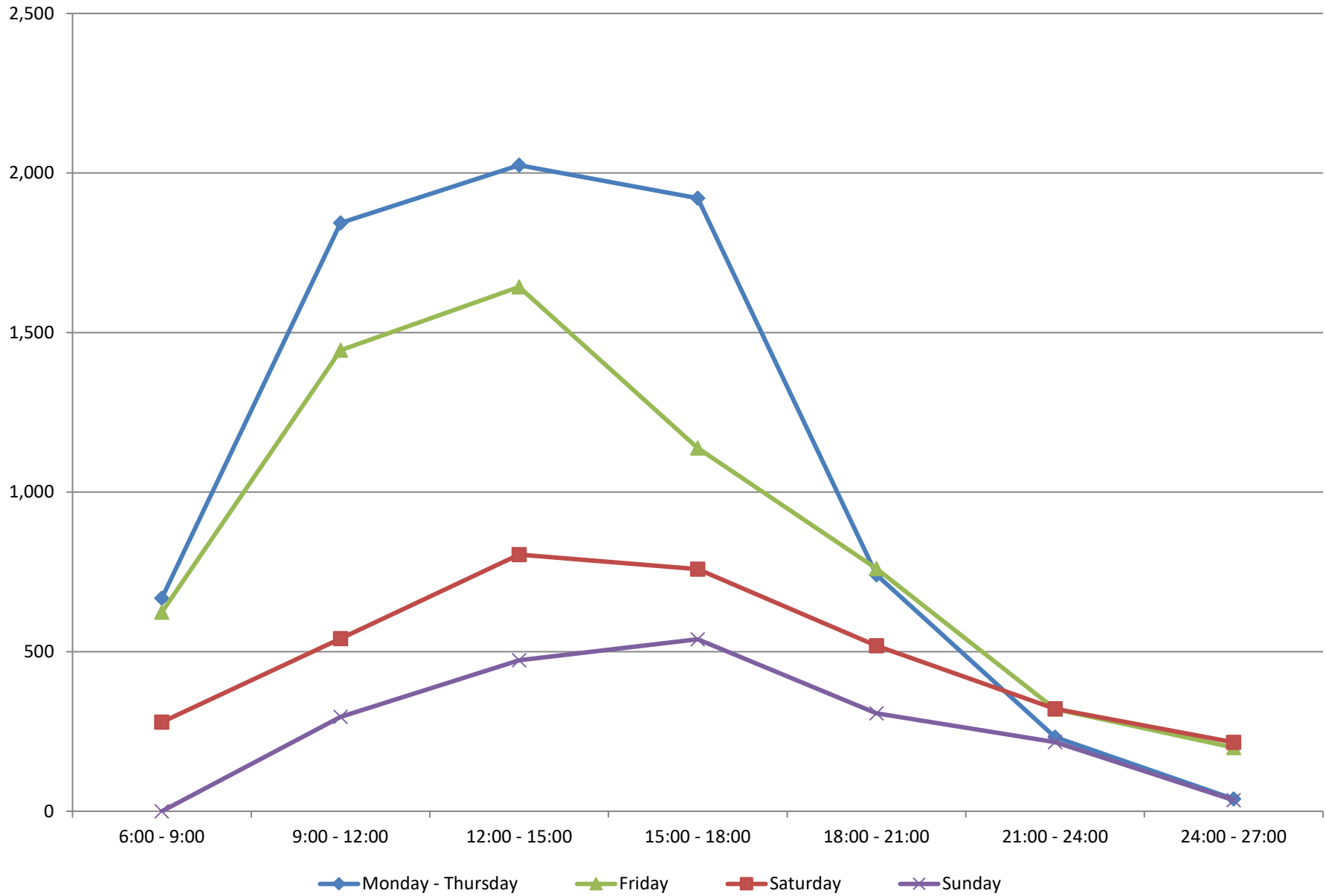
Average Ridership and Revenue Hours by Time of Day

All Fixed Routes

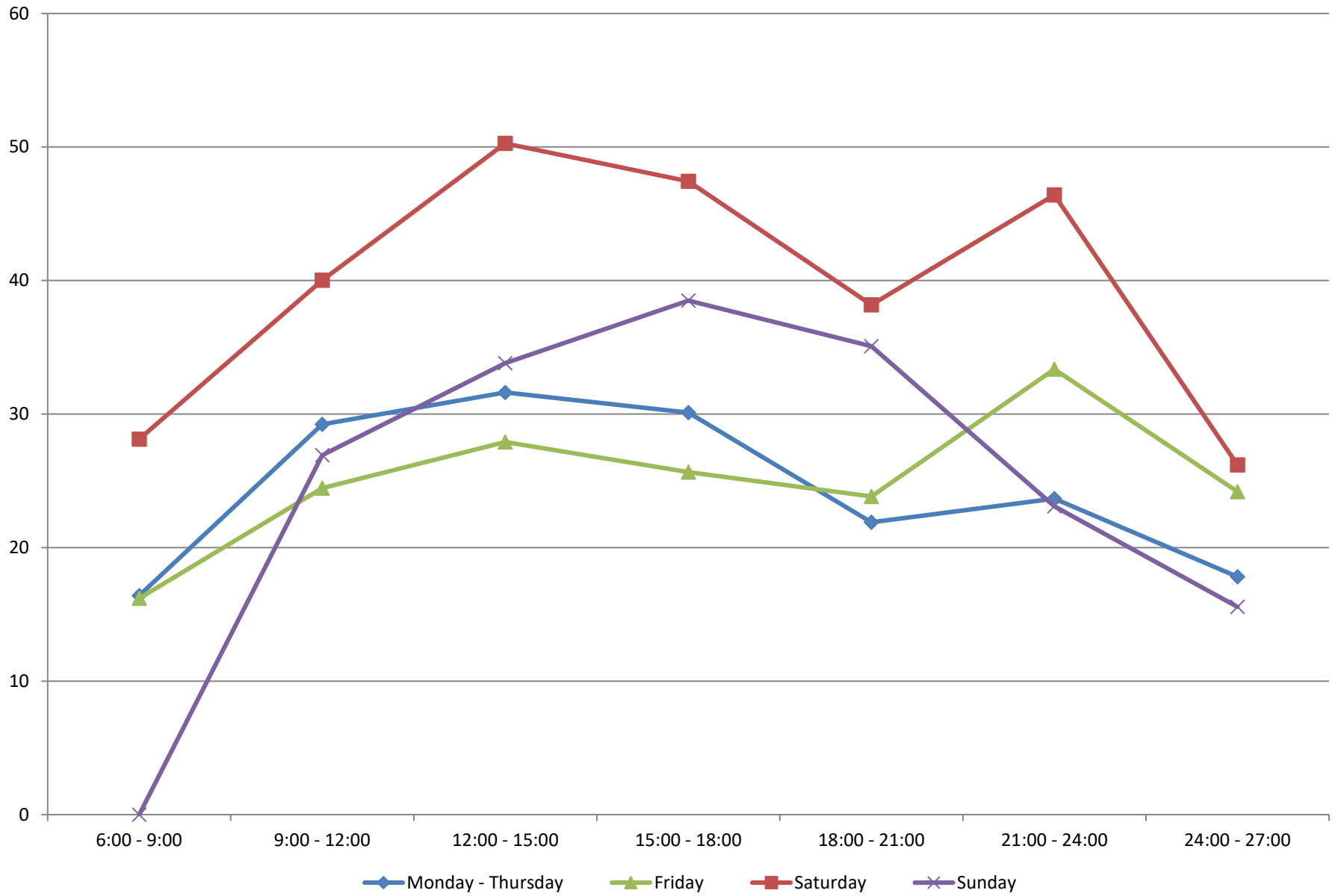
Month: December, 2021

	Time of Day	Avg Total Passengers	Average RH	Avg Pass. per RH
Monday - Thursday	6:00 - 9:00	667.56	40.69	16.40
	9:00 - 12:00	1,843.72	63.06	29.24
	12:00 - 15:00	2,024.44	64.02	31.62
	15:00 - 18:00	1,921.17	63.81	30.11
	18:00 - 21:00	740.94	33.84	21.90
	21:00 - 24:00	232.11	9.81	23.66
	24:00 - 27:00	38.30	2.15	17.81
Friday	6:00 - 9:00	624.00	38.53	16.20
	9:00 - 12:00	1,444.80	59.07	24.46
	12:00 - 15:00	1,643.00	58.87	27.91
	15:00 - 18:00	1,138.40	44.37	25.66
	18:00 - 21:00	760.50	31.92	23.83
	21:00 - 24:00	320.50	9.61	33.36
	24:00 - 27:00	199.50	8.25	24.18
Saturday	6:00 - 9:00	279.00	9.92	28.13
	9:00 - 12:00	540.67	13.51	40.03
	12:00 - 15:00	804.33	16.00	50.27
	15:00 - 18:00	759.00	16.00	47.44
	18:00 - 21:00	518.67	13.58	38.18
	21:00 - 24:00	321.00	6.92	46.41
	24:00 - 27:00	216.00	8.25	26.18
Sunday	6:00 - 9:00	0.00	0.00	0.00
	9:00 - 12:00	295.33	10.97	26.93
	12:00 - 15:00	473.33	14.00	33.81
	15:00 - 18:00	539.00	14.00	38.50
	18:00 - 21:00	307.00	8.75	35.09
	21:00 - 24:00	216.50	9.38	23.09
	24:00 - 27:00	35.00	2.25	15.56

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 Ridership		Students		Faculty/Staff		Total Virginia Tech		Total Non-VT	
		#	%	#	%	#	%	#	%	
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										
February-22										
March-22										
Total for 3rd Quarter:	0	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	
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:	1,708,990	1,707,447	99.91%	405	0.02%	1,707,852	99.93%	1,138	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 in-person 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.