

# On-Time Performance

## Introduction

We have recently standardized the way we calculate our on-time performance in order to provide more consistent and accurate results. This page explains how we gather and analyze our data. The following pages show On-Time data results for the past month. The appendix includes on-time performance data analyzed by route.

## Procedures

### *1. SQL Queries*

- Our Streets Database contains data collected through Automatic Vehicle Location (AVL)
- Compares the AVL data to the scheduled times for each route
- Query generates a table which includes Route Name, Pattern Name, Stop Name, Scheduled Departure Times, and Actual Departure Times

### *2. Removing Outliers*

- Outliers can distort the accuracy of data with erroneous data brought on by AVL or user error
- Any data with a "Minutes Late" value outside of -5 and 15 will be considered an outlier

### *3. Range Analysis*

- The total usable data count is the count of the data that does not contain any outliers; this is the number used in percentage calculations
- The established On-Time range of "Minutes Late" values is between -1 and 3
- The established Late range of "Minutes Late" values is between 3 and 15
- The established Early range of "Minutes Late" values is between -5 and -1

## On-Time Performance Results

### *FY19 July: Blacksburg Fixed Route*

Date Range: July 1, 2018 – July 31, 2018

Total recorded departures from Timechecks: 10,298

Outliers (<-5 or >15): 90

Total departures used in calculations: 10,208

On-time Departures (-1 to 3): 9,631; 94.35%

Late departures (3 to 15): 518; 5.07%

Early departures (-5 to -1): 59; 0.58%

### *FY19 July: Christiansburg Fixed Route*

Date Range: July 1, 2018 – July 31, 2018

Total recorded departures from Timechecks: 642

Outliers (<-5 or >15): 28

Total departures used in calculations: 614

On-time Departures (-1 to 3): 408; 66.45%

Late departures (3 to 15): 84; 13.68%

Early departures (-5 to -1): 122; 19.87%

## Appendix

### On Time Performance By Route, Fiscal Year 2019 July: Blacksburg

Route Name	Total Departures*	Early Departures	Late Departures	On Time Departures	% On Time Departures
Campus Shuttle	0	0	0	0	0
Carpenter Blvd	0	0	0	0	0
Corporate Research Center	703	1	70	632	89.90%
Harding Ave	1344	2	59	1283	95.46%
Hethwood	270	2	10	258	95.56%
Hethwood A	539	0	12	527	97.77%
Hethwood B	946	3	45	898	94.93%
Hokie Express	0	0	0	0	0
Main Street - North	1340	31	74	1236	92.24%
Main Street - South	1285	12	52	1222	95.10%
Patrick Henry	983	4	24	955	97.15%
Progress B	0	0	0	0	0
Progress Street	0	0	0	0	0
Toms Creek	1495	2	128	1365	91.30%
Two Town Trolley	574	1	42	531	92.51%
University City Blvd	727	1	9	717	98.62%
University Mall Shuttle	0	0	0	0	0

\*Total departures excludes extreme outliers with values above 15 or below -5.

### On Time Performance By Route, Fiscal Year 2019 July: Christiansburg

Route Name	Total Departures*	Early Departures	Late Departures	On Time Departures	% On Time Departures
BT Commuter	33	4	11	18	54.55%
Christiansburg East West	0	0	0	0	0
The Explorer	581	119	73	389	66.95%

\*Total departures excludes extreme outliers with values above 15 or below -5.