

# 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

### *FY18 June: Christiansburg Fixed Route*

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

Total recorded departures from Timechecks: 752

Outliers (<-5 or >15): 26

Total departures used in calculations: 726

On-time Departures (-1 to 3): 466; 64.19%

Late departures (3 to 15): 122; 16.80%

Early departures (-5 to -1): 138; 19.01%

## Appendix

### On Time Performance By Route, Fiscal Year 2018 June: Christiansburg

Route Name	Total Departures*	Early Departures	Late Departures	On Time Departures	% On Time Departures
BT Commuter	34	9	6	19	55.88%
Christiansburg East West	0	0	0	0	0
The Explorer	692	131	117	444	64.16%

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