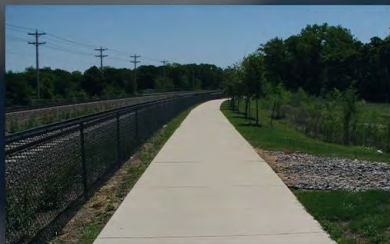


# Bicycle and Pedestrian Traffic Count Report

North Central Texas

2021



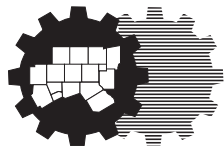
North Central Texas  
Council of Governments

## What is NCTCOG?

The **North Central Texas Council of Governments** (NCTCOG) is a voluntary association of, by, and for **local governments** within the 16-county North Central Texas Region. The agency was established by state enabling legislation in 1966 to assist local governments in **planning** for common needs, **cooperating** for mutual benefit, and **coordinating** for sound regional development. Its purpose is to strengthen both the individual and collective power of local governments, and to help them recognize regional opportunities, resolve regional problems, eliminate unnecessary duplication, and make joint regional decisions – as well as to develop the means to implement those decisions.

North Central Texas is a 16-county **metropolitan region** centered around Dallas and Fort Worth. The region has a population of more than 7 million (which is larger than 38 states), and an area of approximately 12,800 square miles (which is larger than nine states). NCTCOG has 229 member governments, including all 16 counties, 167 cities, 19 independent school districts, and 27 special districts.

NCTCOG's **structure** is relatively simple. An elected or appointed public official from each member government makes up the **General Assembly** which annually elects NCTCOG's **Executive Board**. The Executive Board is composed of 17 locally elected officials and one ex-officio non-voting member of the legislature. The Executive Board is the policy-making body for all activities undertaken by NCTCOG, including program activities and decisions, regional plans, and fiscal and budgetary policies. The Board is supported by policy development, technical advisory and study **committees** – and a professional staff led by **R. Michael Eastland**, Executive Director.



NCTCOG's offices are located in Arlington in the Centerpoint Two Building at 616 Six Flags Drive (approximately one-half mile south of the main entrance to Six Flags Over Texas).

**North Central Texas Council of Governments**  
**P. O. Box 5888**  
**Arlington, Texas 76005-5888**  
**(817) 640-3300**

### NCTCOG's Department of Transportation

Since 1974 NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation for the Dallas-Fort Worth area. NCTCOG's Department of Transportation is responsible for the regional planning process for all modes of transportation. The department provides technical support and staff assistance to the Regional Transportation Council and its technical committees, which compose the MPO policy-making structure. In addition, the department provides technical assistance to the local governments of North Central Texas in planning, coordinating, and implementing transportation decisions.

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Prepared in cooperation with the Federal Highway Administration, US Department of Transportation, and the Texas Department of Transportation.

*"The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation."*

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Deputy District Engineer, TxDOT Dallas District

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## Introduction

In partnership with local agencies, the North Central Texas Council of Governments (NCTCOG) collects bicycle and pedestrian traffic counts on regionally significant trails in Collin, Dallas, Denton, and Tarrant Counties. The objective of the NCTCOG's annual bicycle and pedestrian traffic count report is to provide regional stakeholders and the public a better understanding of travel behavior and how much activity is occurring on shared-use paths throughout the region.

In May 2021, the Denton County Transportation Authority (DCTA) installed four trail counters along the A-train Rail Trail in Denton County, expanding upon the existing data collection sites along the corridor. Trail count equipment installed by DCTA were activated in May 2021, providing partial year data for this report. With the installation of DCTA's count equipment, the number of communities expands in the 2021 report to include Corinth and Lewisville.

Forty count stations are installed across the Dallas-Fort Worth region, spread across four counties. Four agencies in addition to NCTCOG own and maintain bicycle and pedestrian count equipment (Irving, Plano, Dallas, and DCTA), providing data in nine cities). Throughout 2021 several count stations did not collect sufficient data

for reporting purposes. A total of 30 count stations are included in this report focused on trails that provide a means of transportation.

Exhibit 1 identifies the number of count stations per city included in this report and Exhibit 2 identifies the location of existing shared-use path corridors with equipment collecting data. The permanent equipment utilizes inductive loop and passive-infrared sensor technology to distinguish bicyclists from pedestrians, as well as the direction of travel.

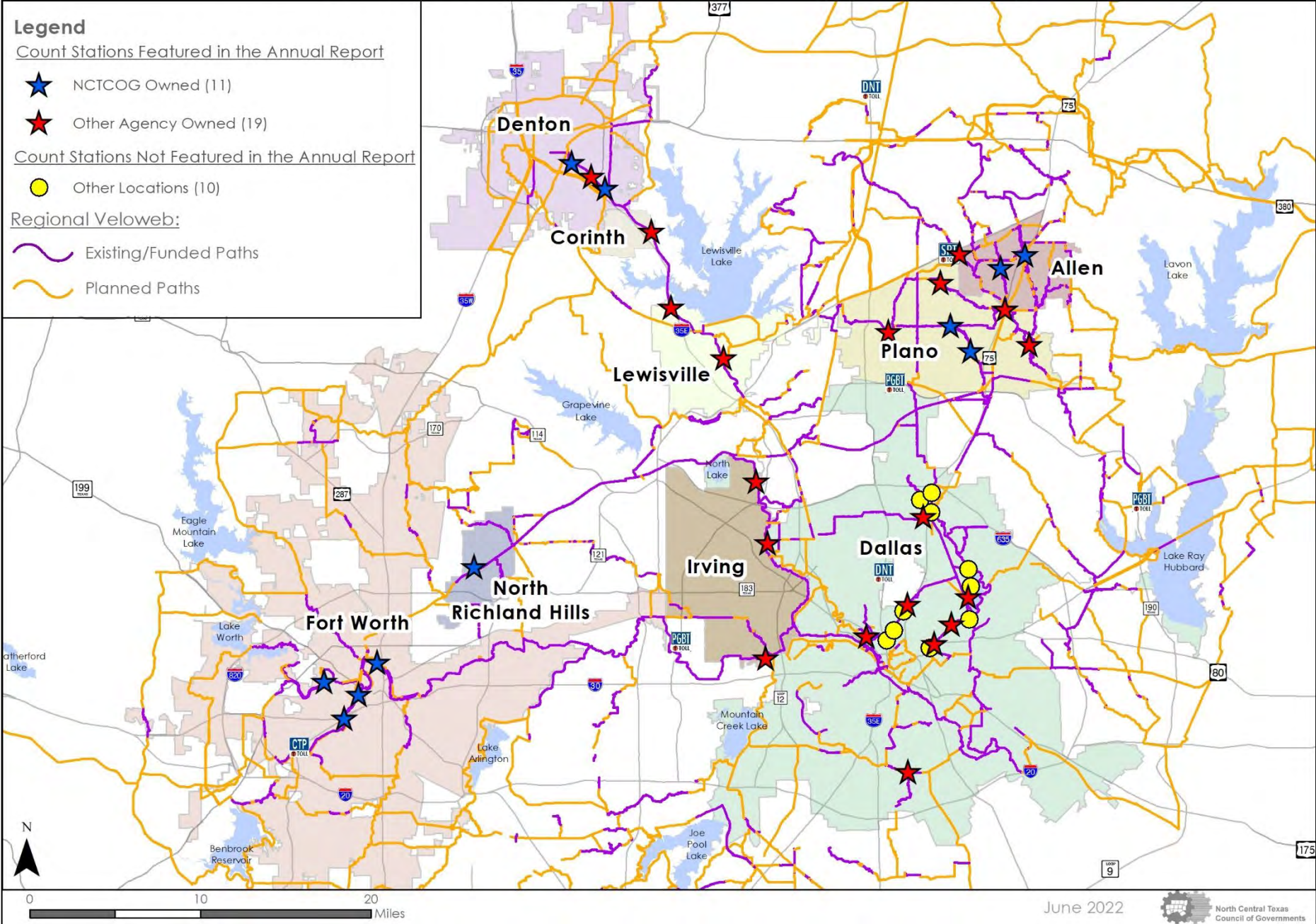
***Exhibit 1: Counters by City (2021)***

<b>Community</b>	<b>Number of Counters Featured in the Annual Report</b>
Allen	2
Corinth (Denton County Transportation Authority)	1
Dallas	7
Denton (Denton County Transportation Authority)	3
Fort Worth (Tarrant Regional Water District)	4
Irving	3
Lewisville (Denton County Transportation Authority)	2
North Richland Hills	1
Plano	7
<b>Total</b>	<b>30</b>



Exhibit 2:

# Bicycle and Pedestrian Count Stations in the North Central Texas Region (2021)



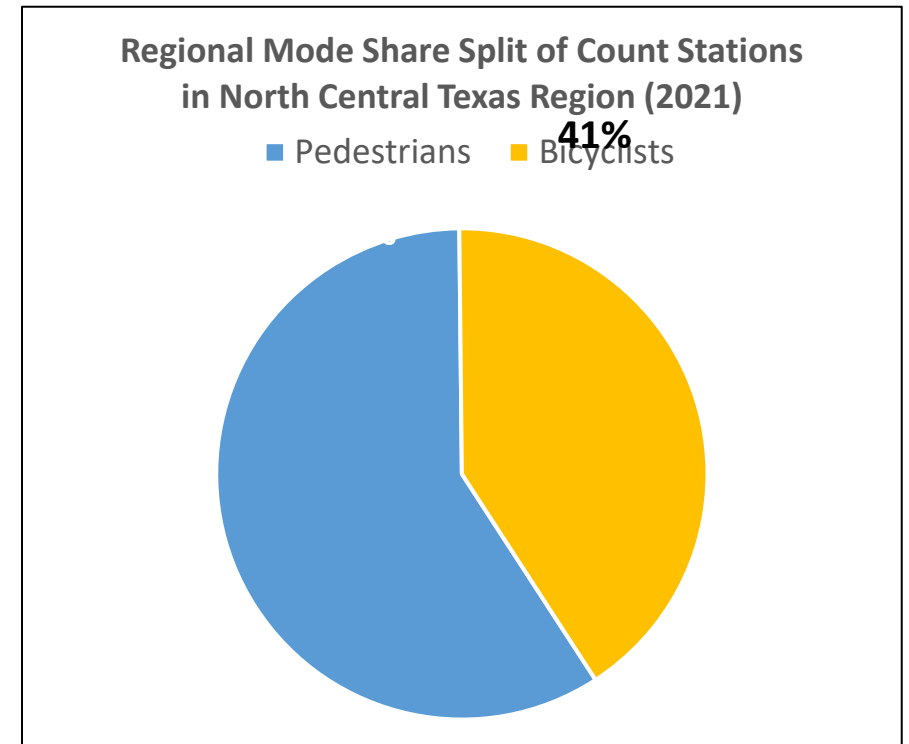
## Mode Share Split

In 2021, the regional mode share split of all count stations featured in this annual report was 59 percent pedestrians and 41 percent bicyclists, one percent decrease in mode share for pedestrians compared to 2020 (see Exhibit 3). Exhibit 4 identifies the mode share split per individual count station with a marker indicating how that site compares to the regional average.



Bicycle and pedestrian traffic along the Katy Trail in Dallas.

### Exhibit 3:

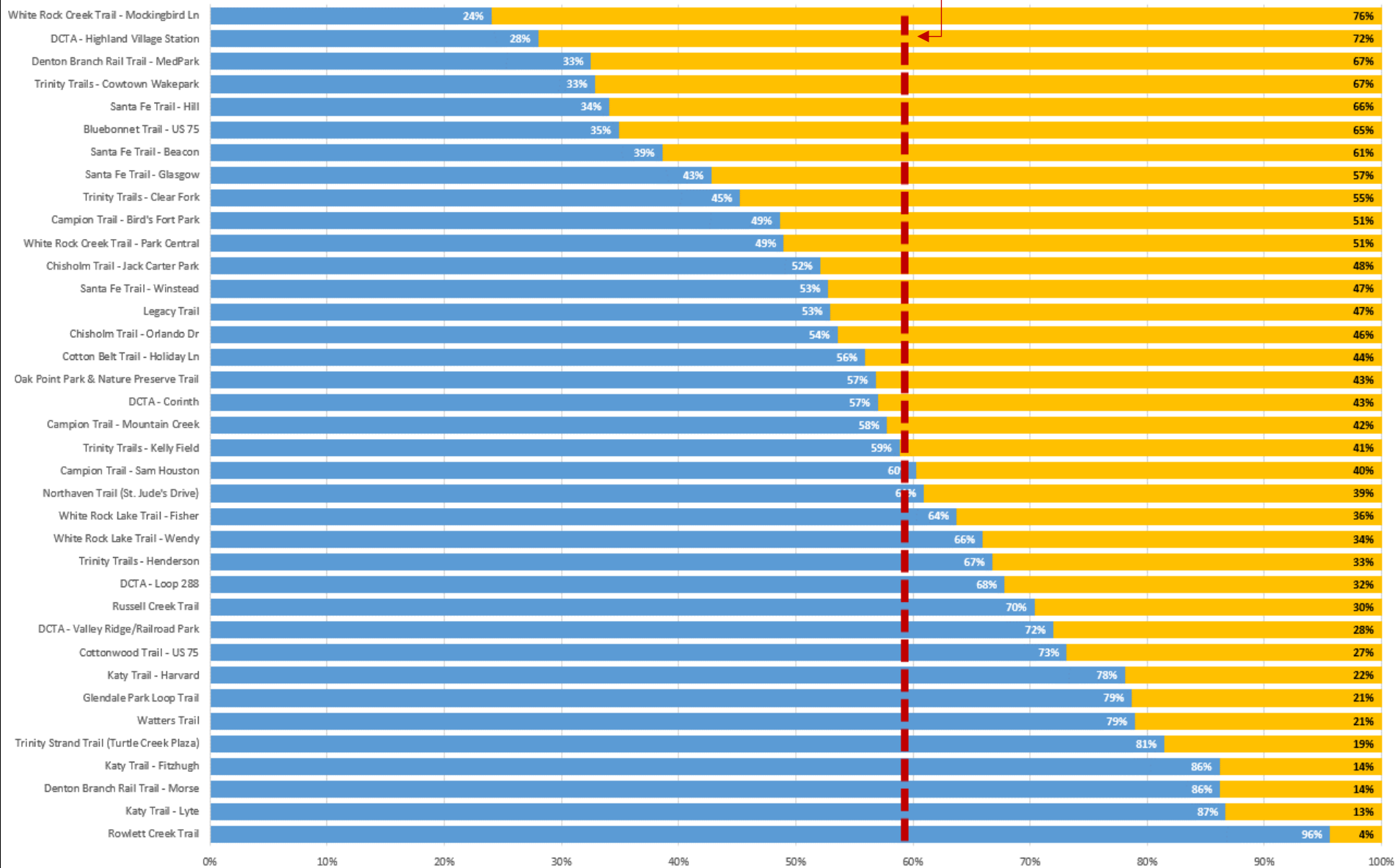


### Exhibit 4:

### Mode Share Split by Count Station (2021)

■ Pedestrians ■ Bicyclists

Regional Mode Share Split (59% Pedestrian / 41% Bicyclists)



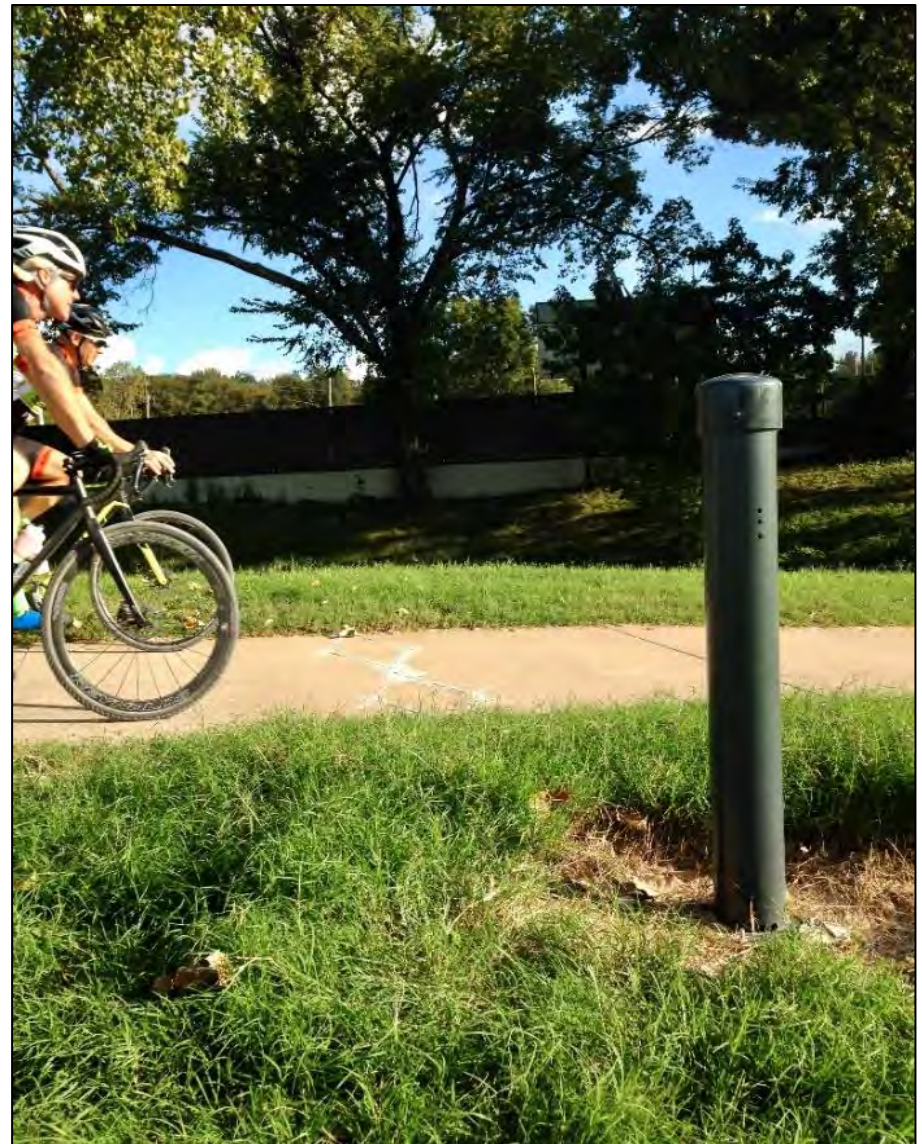


## Average Traffic Counts

A standard metric used in the transportation planning and engineering fields is annual average daily traffic (AADT) measurements. The AADT is a measure of the average number of motor vehicles traveling on a roadway. By applying the same methodology to bicyclists and pedestrians, seasonal variation of traffic counts throughout a year is averaged to summarize how much bicycling and walking activity occurs at a specific location.

Exhibit 5 identifies bicycle and pedestrian AADT in 2021 for all reporting locations. Two locations along the Katy Trail and one location along White Rock Creek Trail (all in Dallas) averaged more than 2,000 bicycle and pedestrian traffic counts per day, which was the highest across the region.

Exhibits 6 through 14 identify the total traffic by month for count station locations in each city that collects bicycle and pedestrian traffic data. A significant decrease in bicycling and walking across the region occurred in February 2021. This decrease was the result of a significant snow and ice storm. However, the impact of the storm on counts in the City of Dallas was less severe, indicating several trails in Dallas may be used by people for everyday trips.



Data collection along the Trinity Trails near Kelly Field in Fort Worth.

### Exhibit 5:

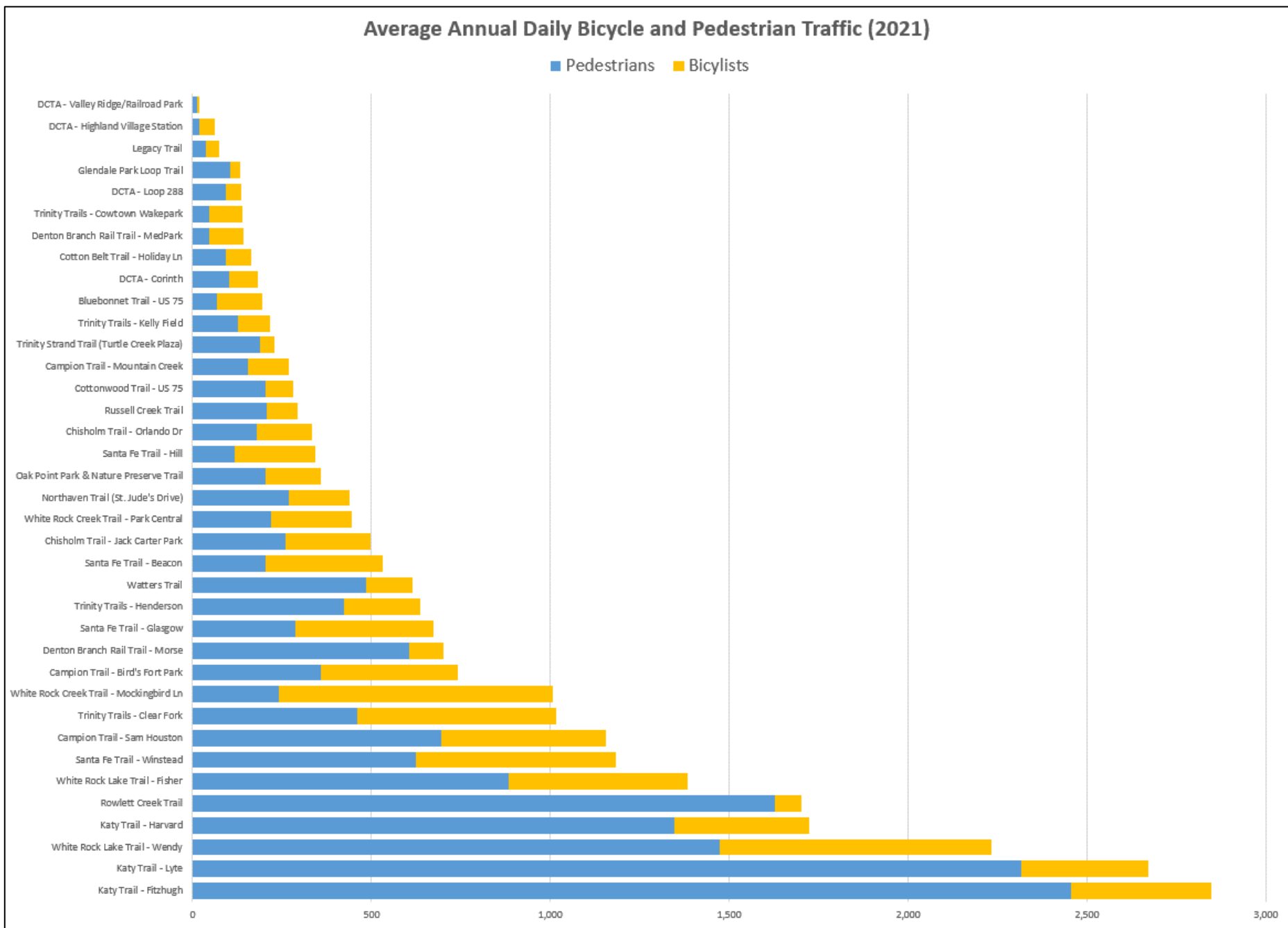
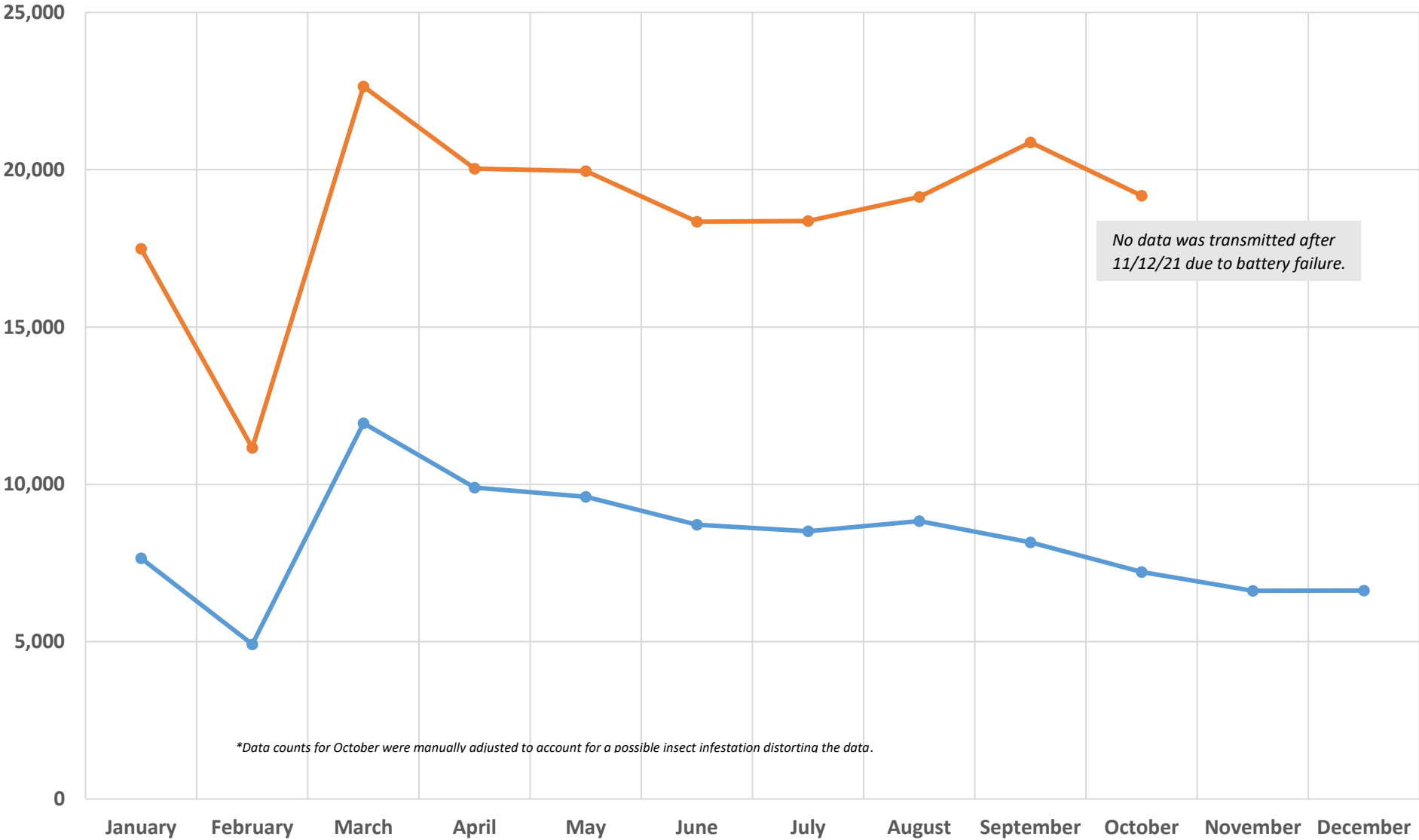


Exhibit 6:

# Allen Total Traffic by Month (2021)

● Cottonwood Trail - US 75\*    ● Watters Trail



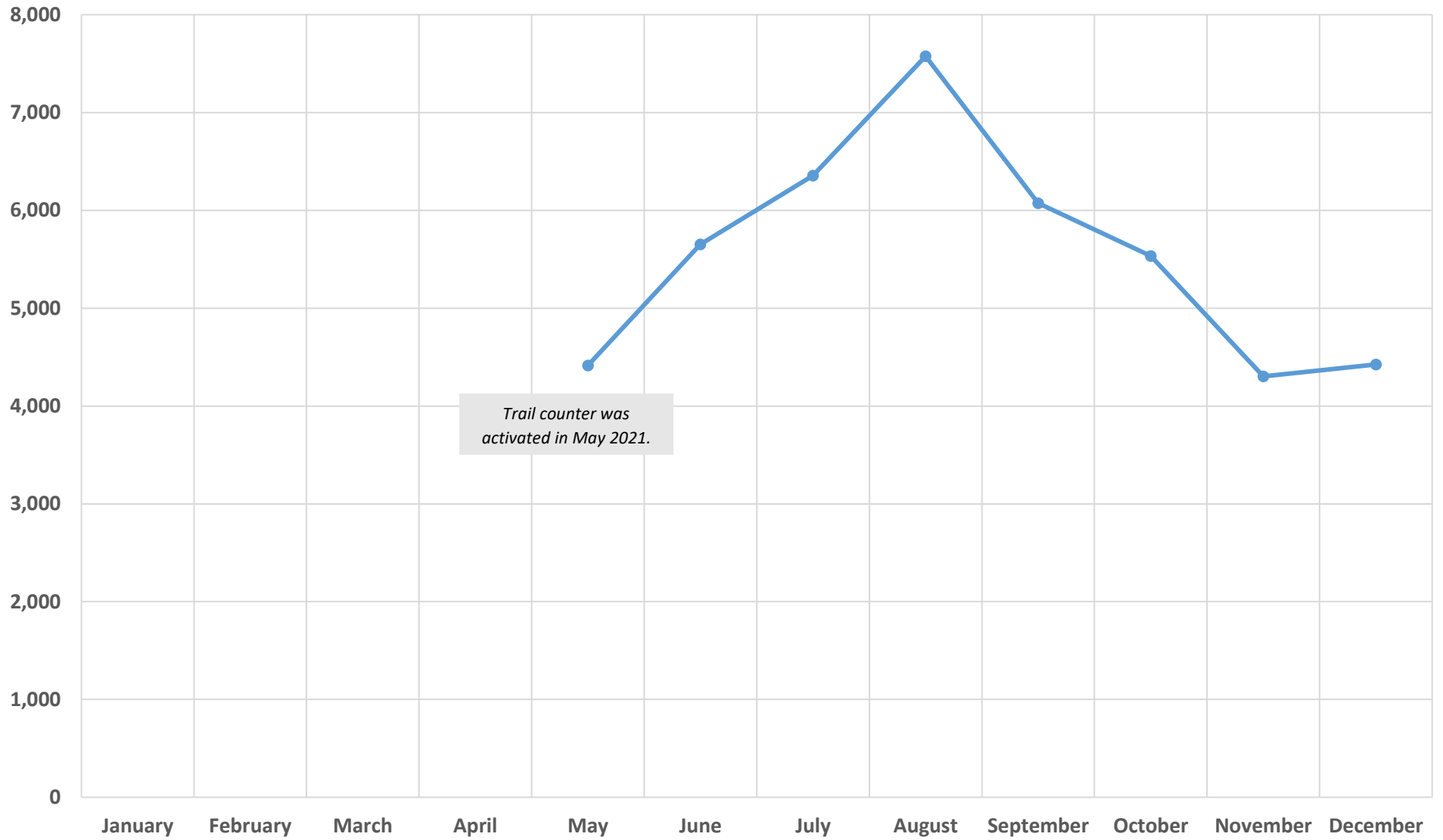
No data was transmitted after 11/12/21 due to battery failure.

\*Data counts for October were manually adjusted to account for a possible insect infestation distorting the data.

**Exhibit 7:**

**Corinth**  
Total Traffic by Month (2021)

—●— DCTA - Corinth



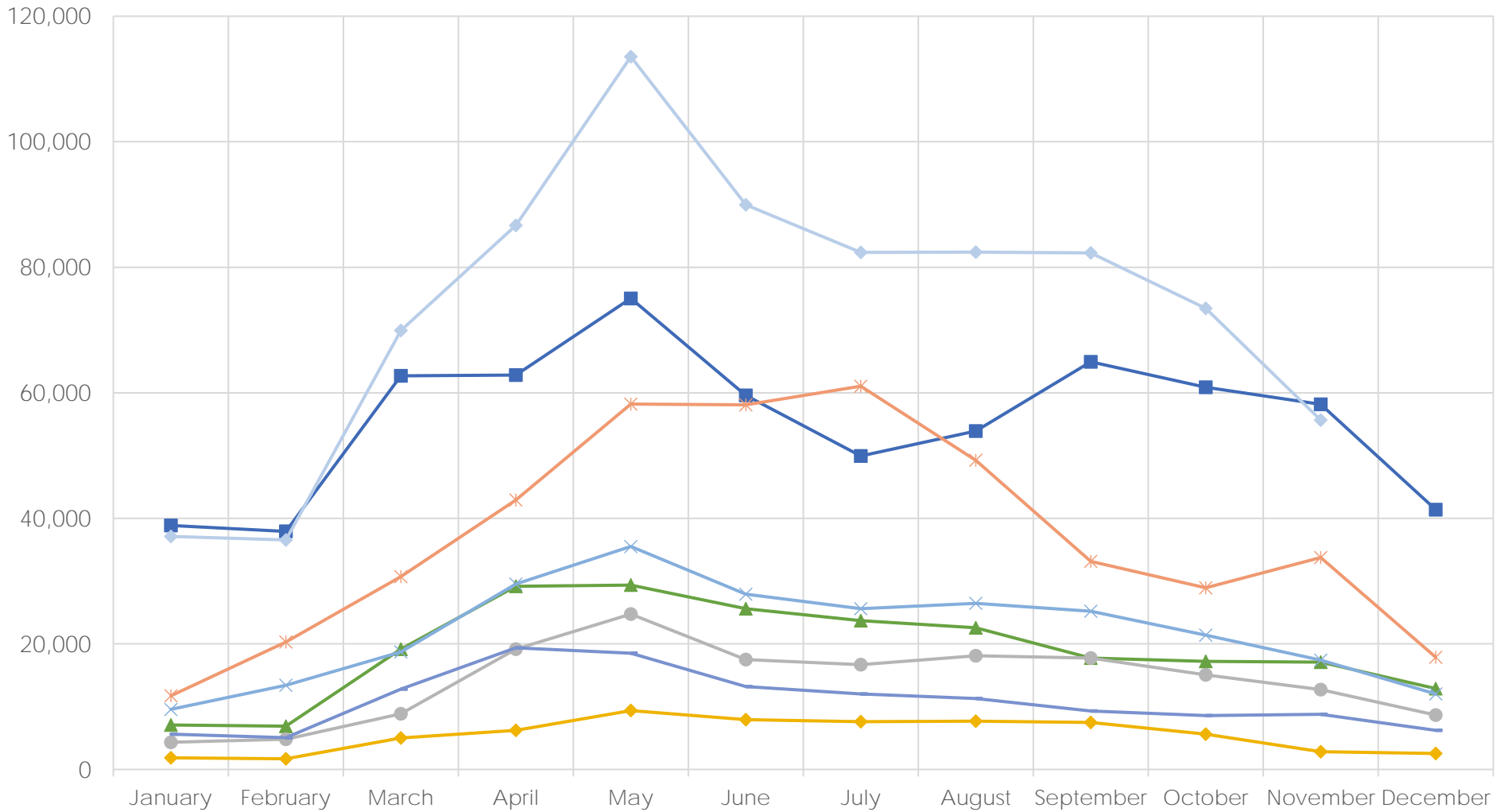
*Trail counter was activated in May 2021.*



**Exhibit 8:**

Dallas  
Total Traffic by Month (2021)

- ◆ Glendale Park South Loop Trail
- ▲ Northhaven Trail (St. Jude's Drive)
- \* Santa Fe Trail - Glasgow
- ◆ White Rock Lake Trail - Wendy
- Katy Trail - Harvard
- × Santa Fe Trail - Beacon
- Trinity Strand Trail (Turtle Creek Plaza)



**Exhibit 9:**

**Denton**  
Total Traffic by Month (2021)

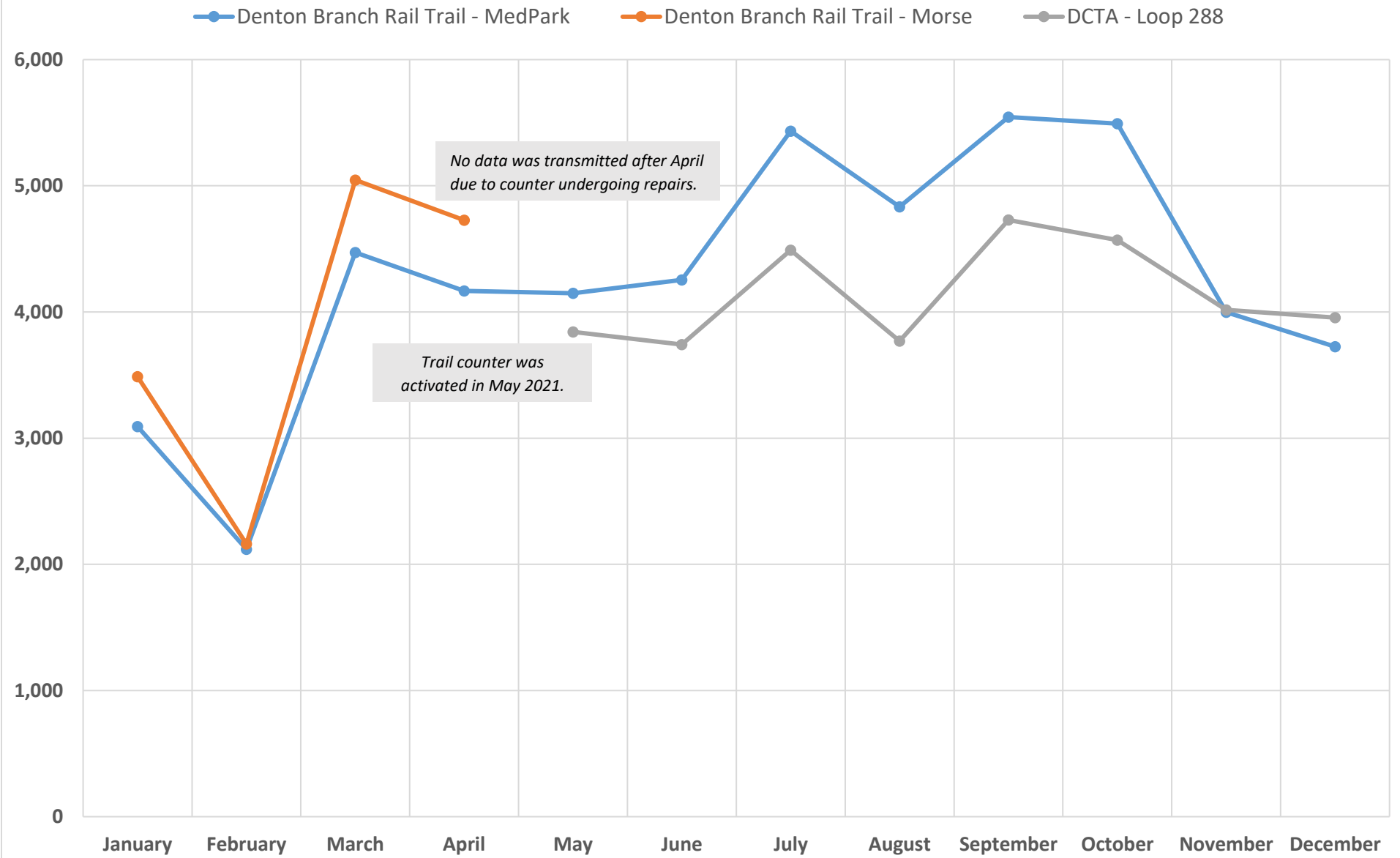


Exhibit 10:

# Fort Worth Total Traffic by Month (2021)

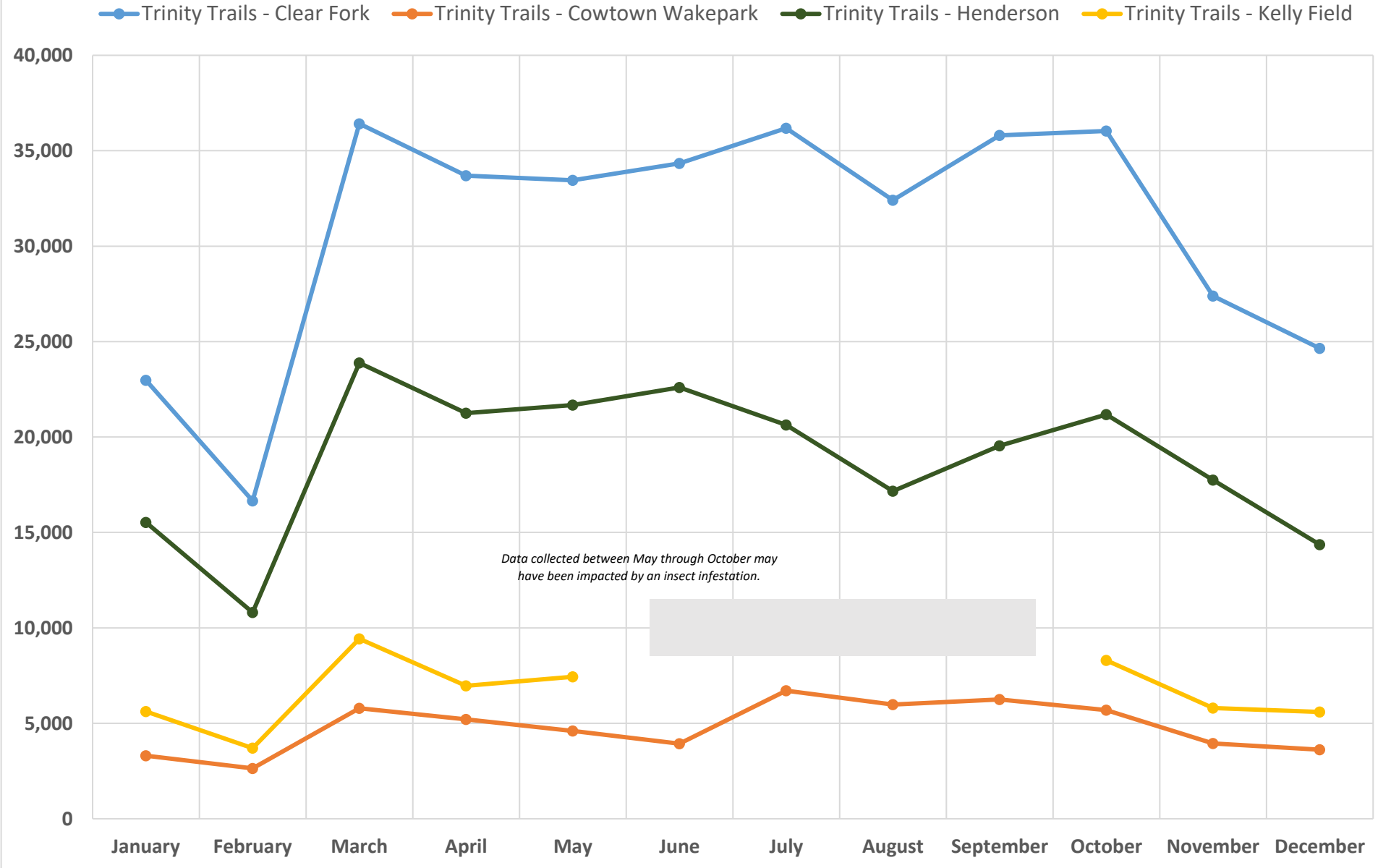
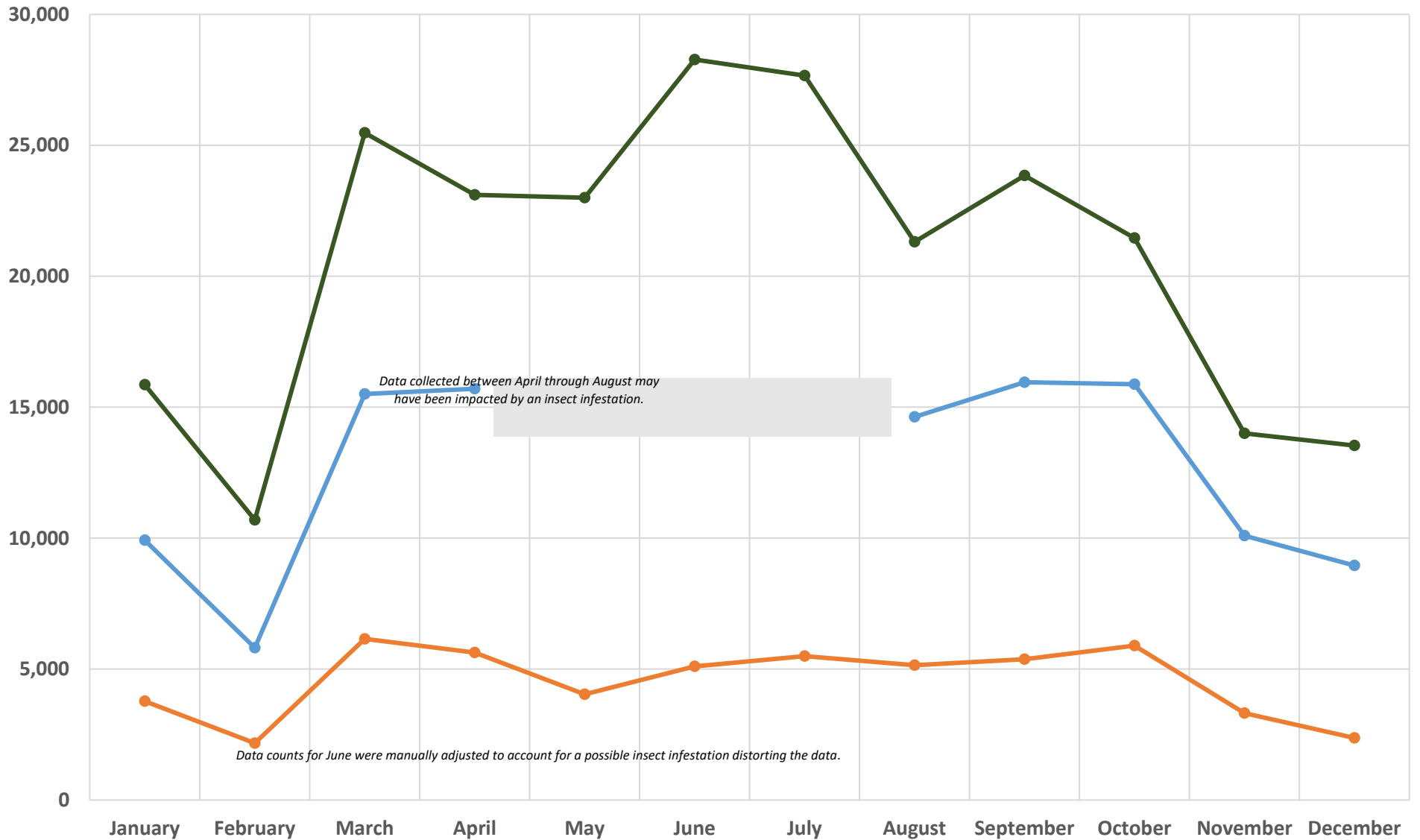


Exhibit 11:

# Irving

## Total Traffic by Month (2021)

● Campion Trail - Bird's Fort Park    ● Campion Trail - Mountain Creek    ● Campion Trail - Sam Houston\*



\*



**Exhibit 12:**

**Lewisville**  
Total Traffic by Month (2021)

—●— DCTA - Highland Village Station      —●— DCTA - Valley Ridge/Railroad Park

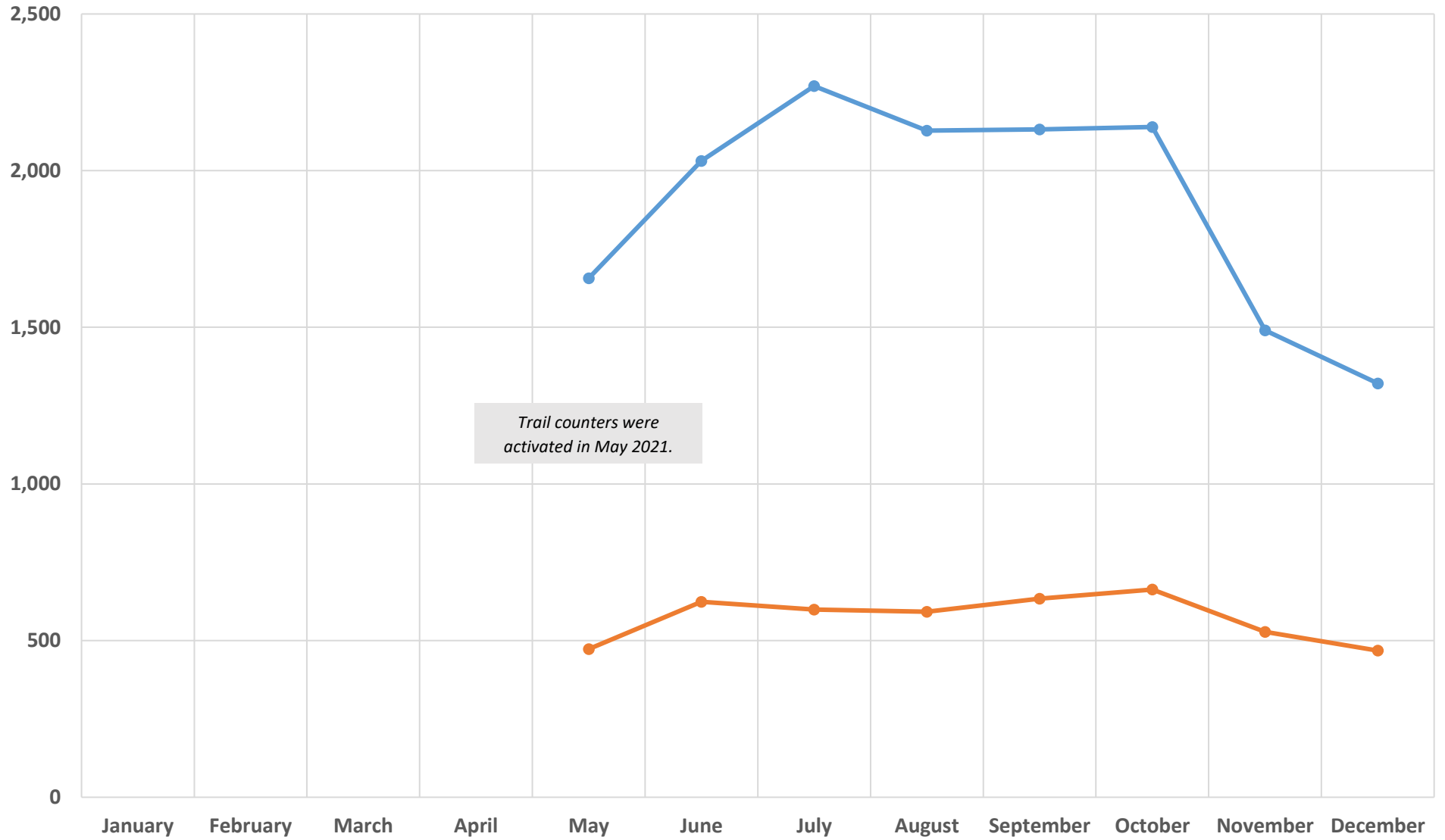


Exhibit 13:

### North Richland Hills Total Traffic by Month (2021)

● Cotton Belt Trail - Holiday Ln

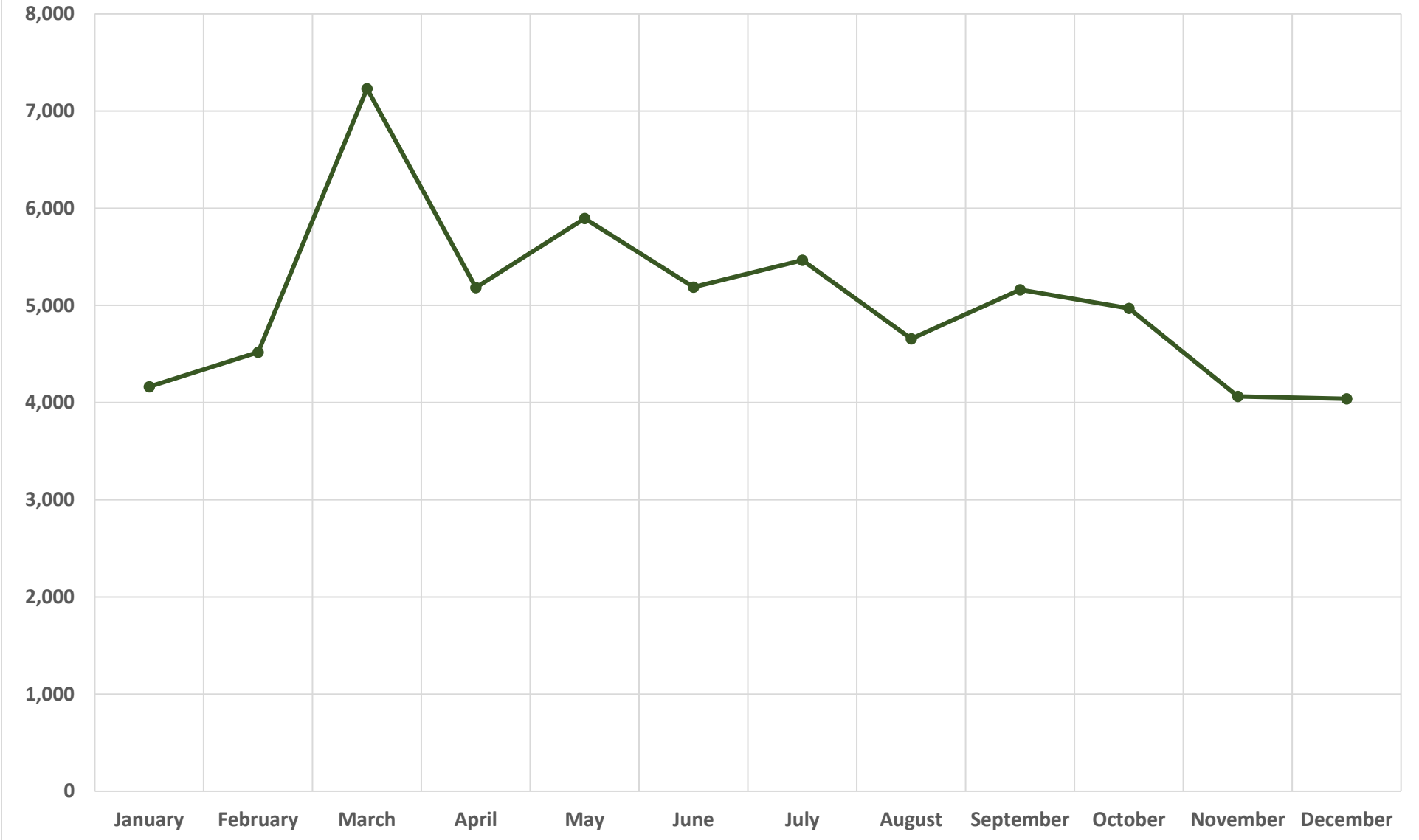
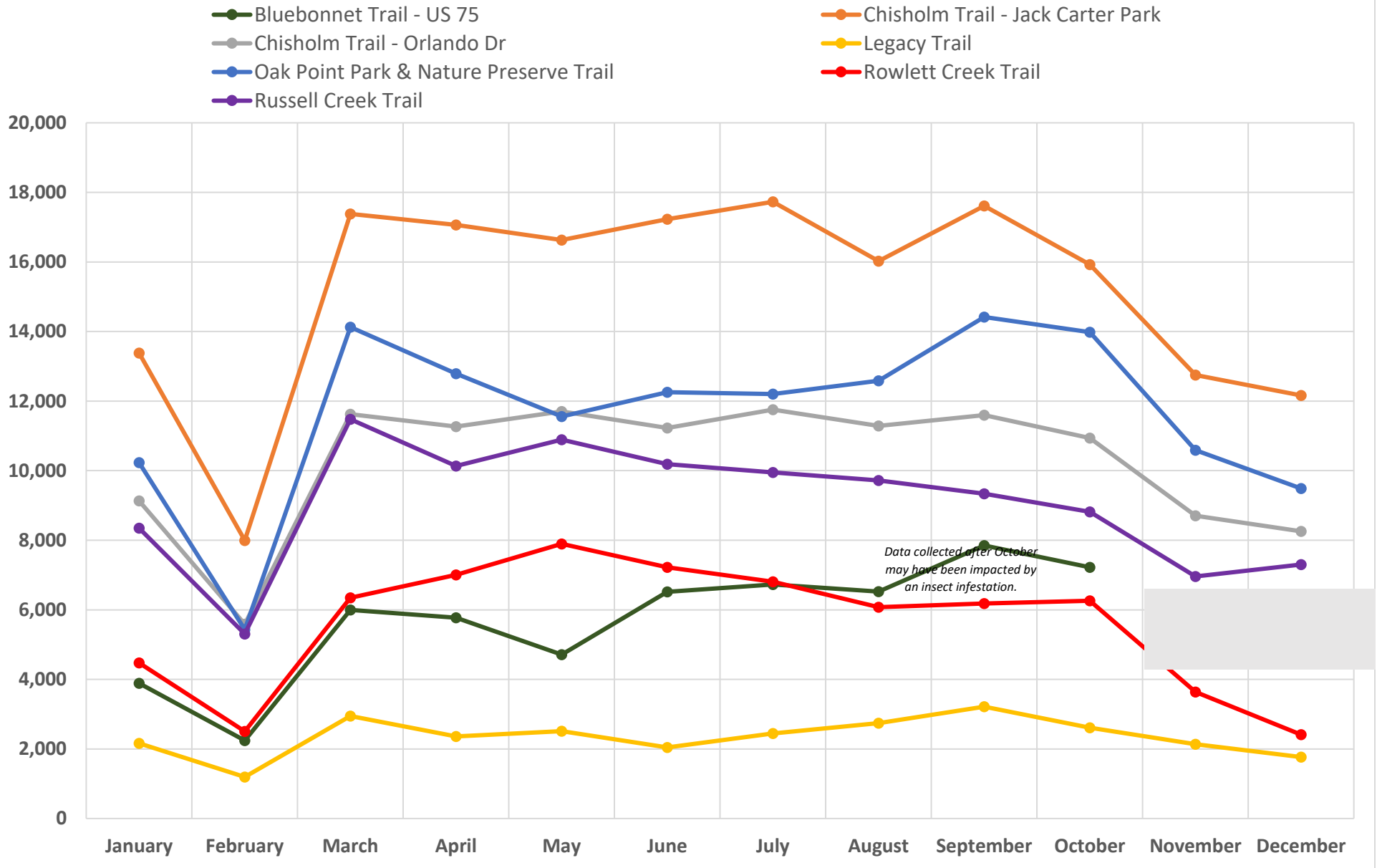


Exhibit 14:

# Plano Total Traffic by Month (2021)



## Sample Week Data

The week of September 12, 2021, as shown in Exhibits 15-17, is a representative snapshot of weekly travel patterns. The highest total traffic counts recorded this week for count stations in the region was on Sunday, September 12<sup>th</sup> with over 23,000 bicycle and pedestrian counts, and Tuesday, September 14<sup>th</sup> with over 17,000 counts. All 30 count stations registered a total of over 120,000 counts of people walking and bicycling past the count locations on these select trails in one week.



The Clearfork Food Park in Fort Worth registered the highest number of bicycle and pedestrian traffic counts in Tarrant County.



Exhibit 15:

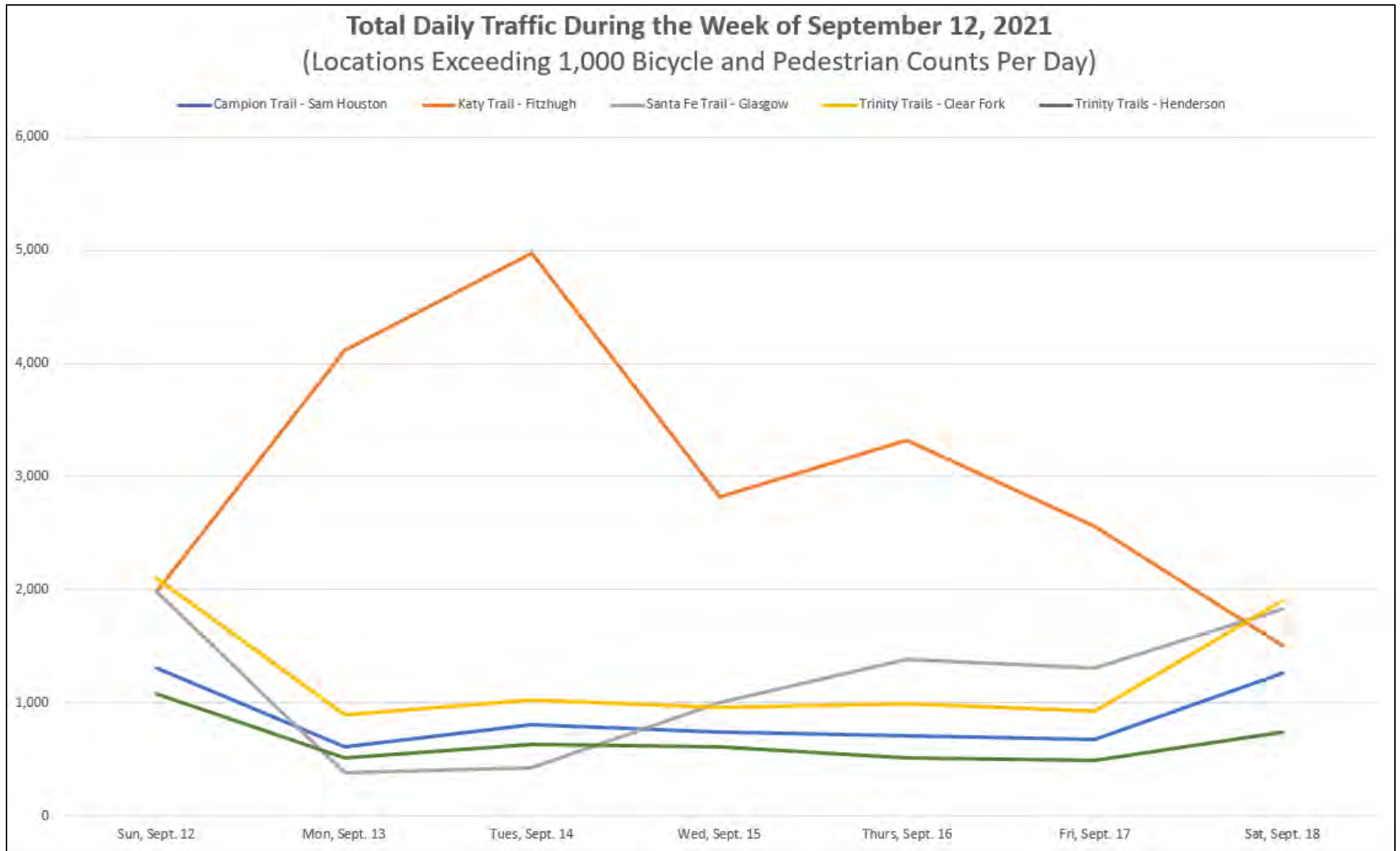


Exhibit 16:

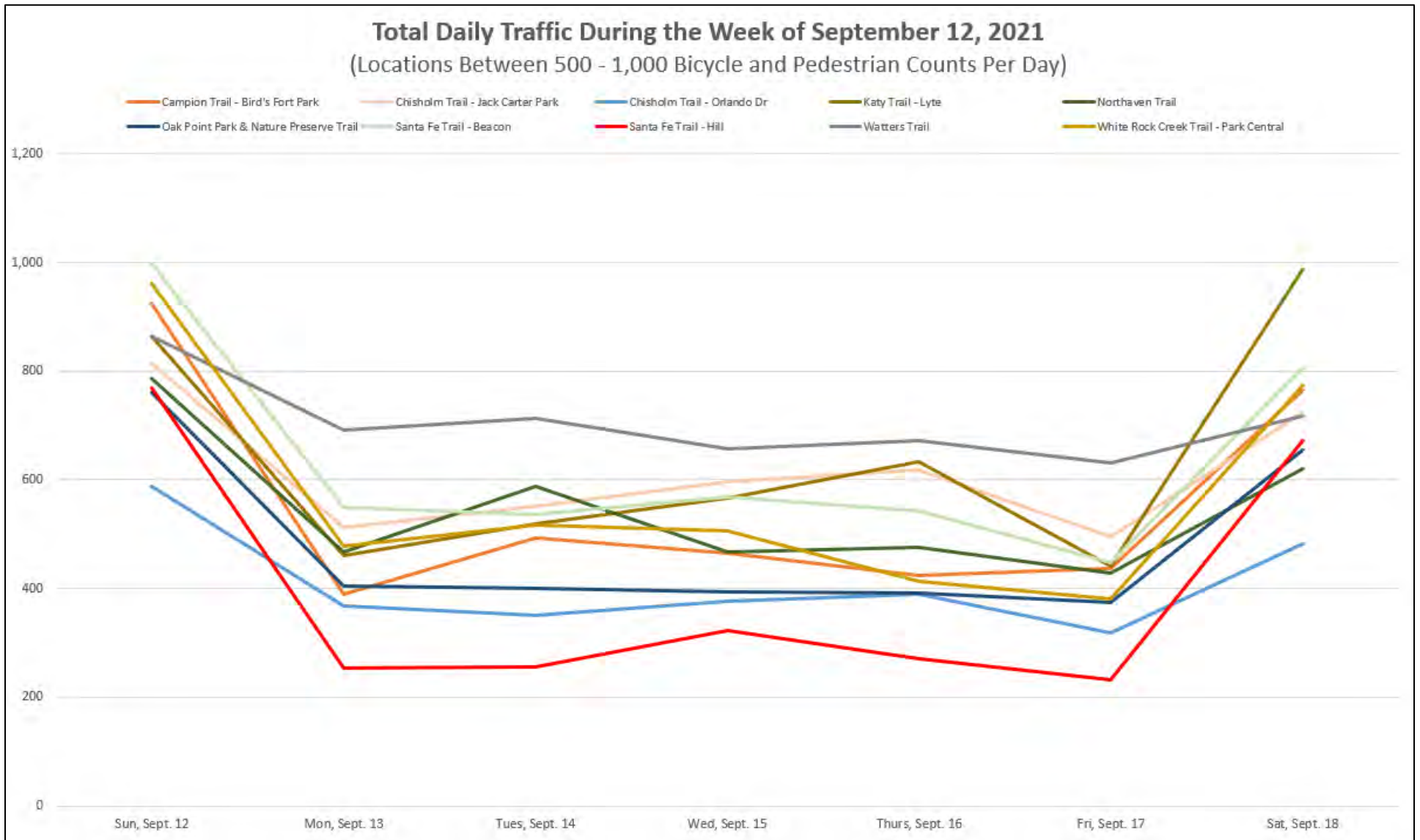
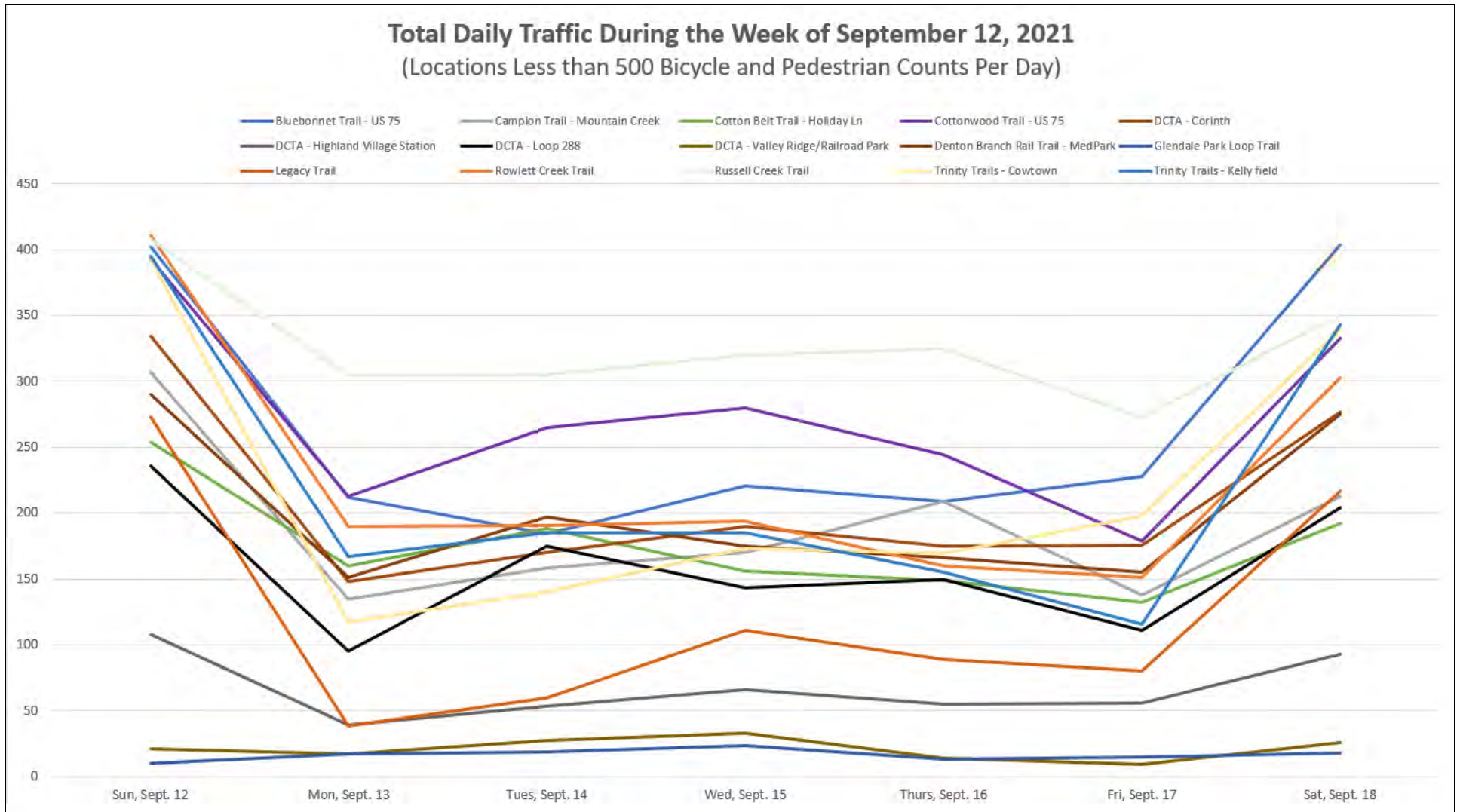


Exhibit 17:



## Summary

From January 1, 2021 through December 31, 2021, over 9.3 million bicycle and pedestrian traffic counts were recorded at the 30 count locations.

## Limitations of Data

The amount of bicycle and pedestrian traffic registered by counting equipment presented in this report does not represent unique individuals. Similar to motor vehicle counts, the equipment counts the number of times bicyclists and pedestrians pass by each count station. The technology used by the count equipment, primarily the passive-infrared sensor, is unable to distinguish the number of pedestrians who may walk side-by-side and in large groups. Therefore, the data in this report should be interpreted as conservative. NCTCOG validated the accuracy of NCTCOG-owned count stations in 2020 and developed a unique correction factor for each mode at each location. NCTCOG staff observed the count stations for four hours and compared the manually recorded data to that collected by the equipment. Results from the validation process found pedestrians to have a higher error rate (ranging from 2 to 34 percent) than bicyclists (ranging from 1 to 10 percent). Correction factors were applied to the following count stations:

1. Chisholm Trail – Jack Carter Park
2. Chisholm Trail – Orlando Drive
3. Denton Branch Rail Trail – MedPark Station
4. Trinity Trails – Henderson Str
5. Trinity Trails – Clear Fork Food Park
6. Trinity Trails – Kelly Field
7. Trinity Trails – Cowtown Wakepark
8. Cotton Belt Trail – Holiday Lane