

Chapter 3. Existing Conditions

Travel Patterns

Mode Share

Figure 6 shows that most residents in El Paso County travel to work by vehicle, more than the statewide average. Commuting distances to the urban areas can be lengthy, and there are few transit options in the unincorporated areas of the County. Most county residents drive to work, and nearly 10 percent of workers worked from home pre-COVID 19 pandemic.

Commuter Inflow & Outflow

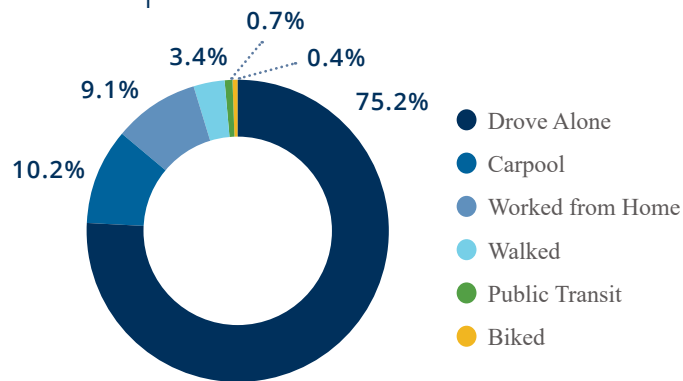
Using the US Census Bureau Longitudinal Employer-Household Dynamics (LEHD) data, travel patterns were calculated for unincorporated El Paso County residents. Inflow and outflow travel-patterns show that unincorporated areas of the County experience a significant outflow, approximately 59,000 of 69,000, daily because of people commuting to the urban areas and city for work.

Where do Residents Commute?

Most unincorporated EPC residents commute to Colorado Springs (51.8%). The next most common job destinations, including cities and census designated places (CDP), for residents include Denver (5.8%), Aurora (2.8%), Cimarron Hills (2.1%), and Fountain (2.0%).

Specific areas within the County have higher concentration of jobs: Northgate, Colorado Springs Airport, and Stratmoor/Downtown Colorado Springs. There are some rural areas that also have higher job concentrations, especially along US 24 and CO 94, due to Schriever SFB.

Figure 6. Commuter Transportation Mode



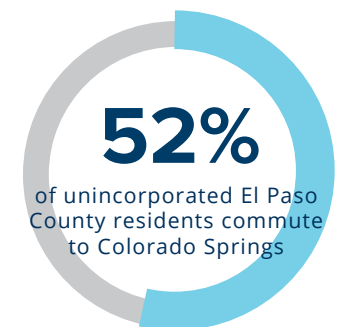
85% use a personal vehicle for driving to work

72% of County residents drive 30 minutes or less

24 minutes is the average commute time for EPC residents

Commuter Inflow/Outflow

22,500 Inflow **59,000** Outflow





Transportation Costs

The Center for Neighborhood Technology (CNT) has developed the housing and transportation index (H+T), a useful metric to assess the true affordability of a community. The H+T affordability index is the percentage of income that a household spends on housing and transportation combined and is used to understand how transportation costs impact communities and how communities can plan for more equitable and affordable options. Transportation, including the costs of vehicle ownership (financing, insuring, licensing, registration, fuel, taxes, and maintenance), is typically the second largest expenditure for households.

In El Paso County, transportation represents 22 percent of residents' expenditures and housing expenditures are, on average, 28 percent of a resident's income (Figure 7). Transportation and housing costs in El Paso County are relatively high. Households spend approximately half of their income on housing and transportation combined, above the threshold of 45 percent, which is considered affordable.

Transportation costs tend to be higher as households are located further away from urban areas. The estimated annual transportation cost is \$12,876 per household. With this amount of income being spent on transportation and housing, residents have less disposable income for other financial demands. The data also reveal higher vehicle ownership in communities farther from the urbanized area. Overall, there are 1.8 vehicles per household in El Paso County.

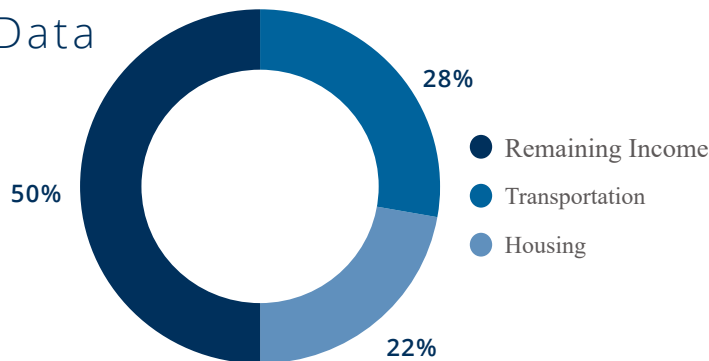
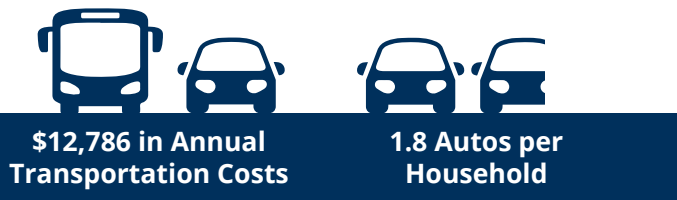
Roadway Network

Roadways generally provide two important functions: access and mobility. Each roadway type is specifically designed to operate with certain characteristics based on the adjacent land uses, level of continuity, transportation modes served, and proximity and connections to other facilities. The functional classification of a roadway describes these characteristics and reflects its role in the network and relationship with adjacent land use. A roadway's functional classification considers attributes such as continuity, connectivity, traffic volumes and speeds, and relationship to adjacent land use. A roadway's classification also forms the basis for access.

Traffic Volumes

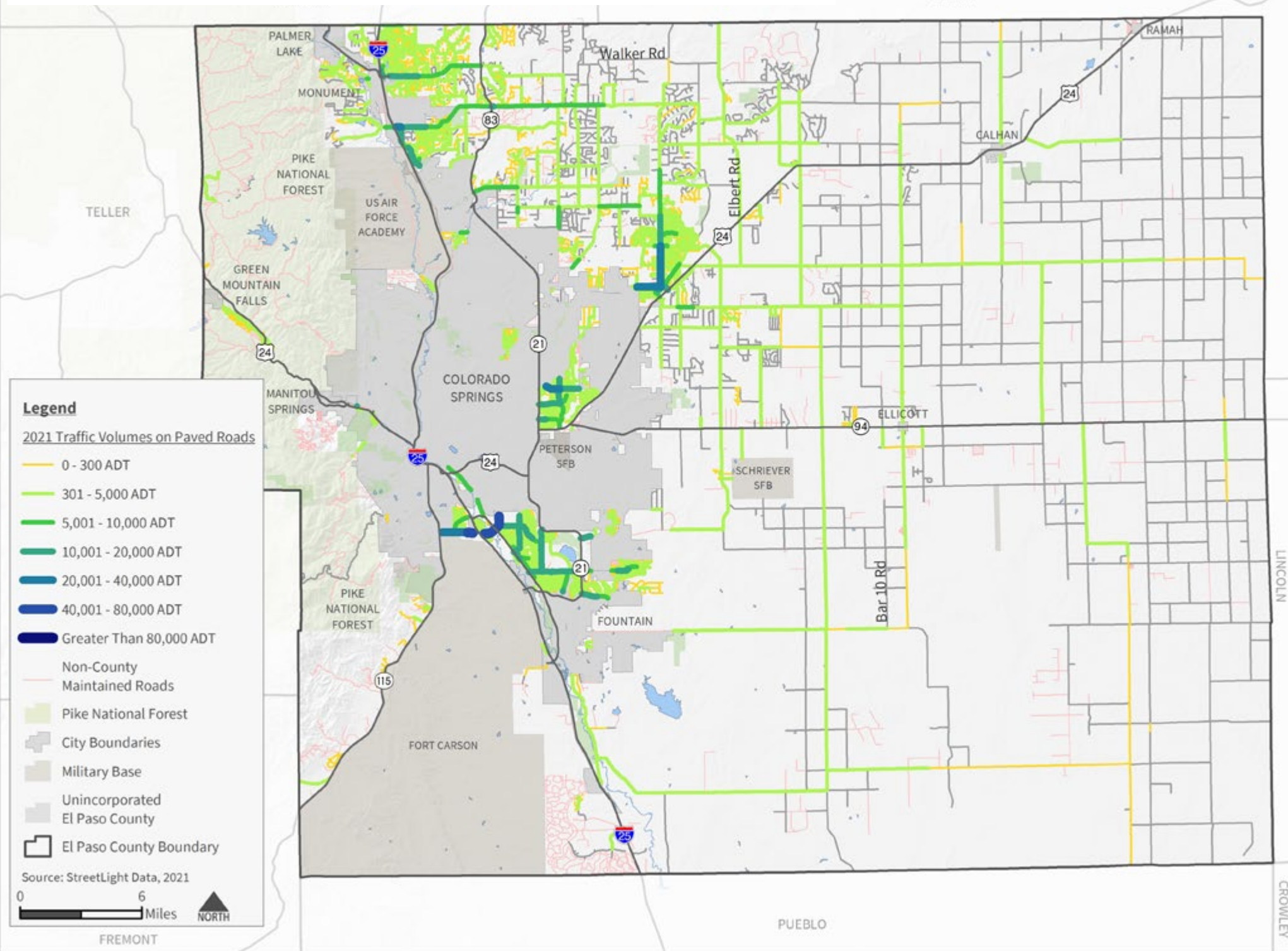
Traffic counts, which can be reported as annual average daily traffic (AADT), are a transportation planning tool that provides insight such as travel patterns, roadway performance, and peak hours of travel. Figure 8 shows the existing traffic volumes on the El Paso County road network in 2021.

Figure 7. El Paso County H+T Data



Source: CNT H+T Affordability Index

Figure 8. Existing Traffic Volumes (Paved Roads)



Levels of Congestion

Estimated existing traffic volumes were compared to planning level roadway capacity thresholds to predict levels of congestion and identify the potential need for additional capacity. Roadway capacity is defined as the maximum traffic volume that a road can carry at a desired level of service. Capacities tend to vary by number of lanes and by roadway functional classification. **Figure 9** provides a visual representation of congestion and a brief description of roadway capacity levels - uncongested, congesting, near congesting, and congested.

Figure 9. Levels of Congestion

When evaluating levels of congestion, daily traffic volumes are compared to approximate roadway capacities. When traffic volumes are significantly less than capacity, the condition is uncongested. As volumes increase, the level of congestion increases until the roadway is at or over its capacity and reaches the level of “congested.”

It is important to note that roadway capacity thresholds are generalized and intended to provide planning-level evaluation of roadway congestion and needs. When a specific roadway improvement project is being considered and developed, a traffic analysis should be performed at a detailed level with consideration for characteristics such as peak hour intersection turning movements, intersection turn lanes, and the mix of vehicle types.

Figure 10 shows the level of service based on volume to capacity ratios for existing volumes.

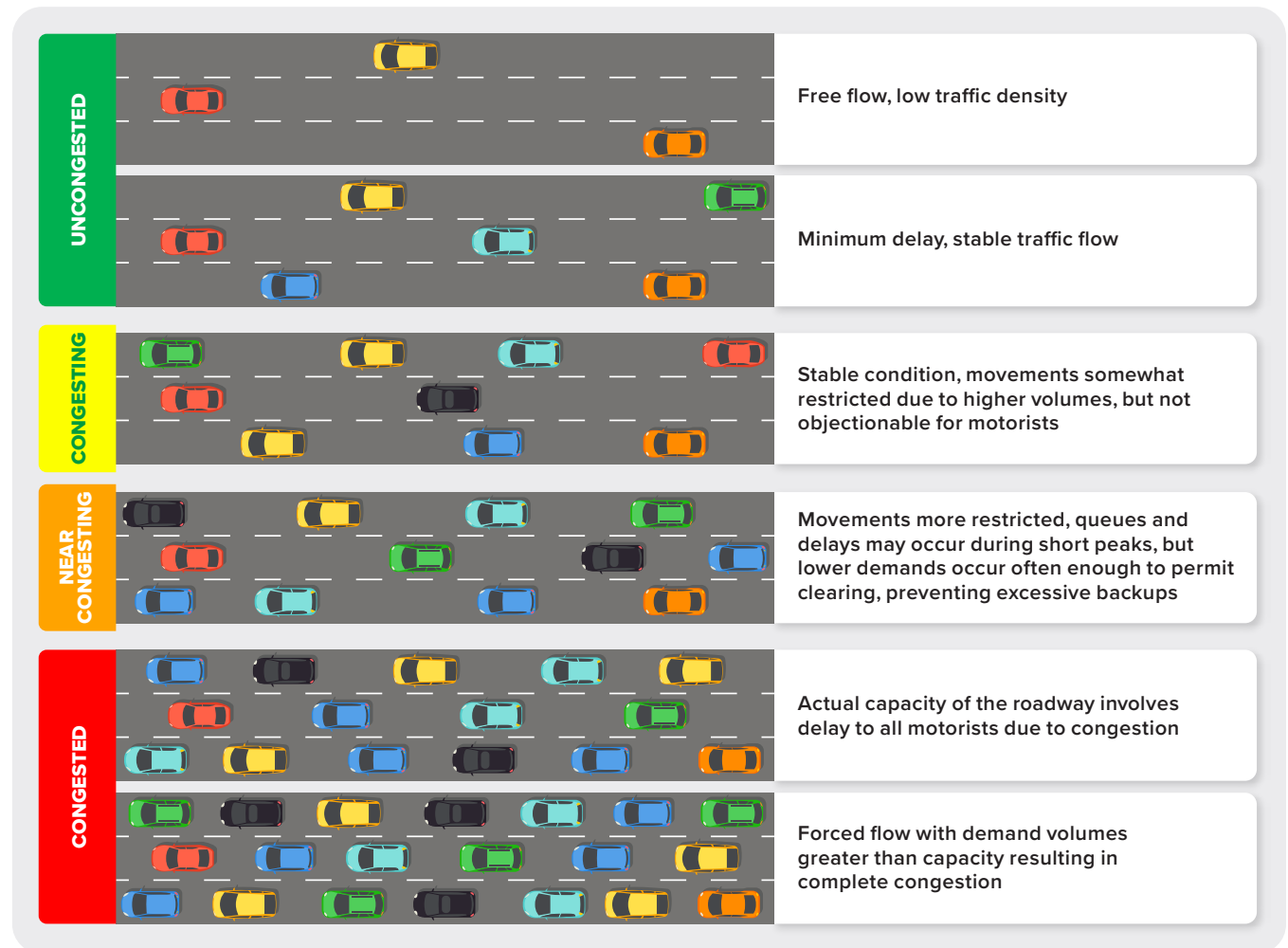


Figure 10. Level of Service for Existing Unincorporated EPC Roads

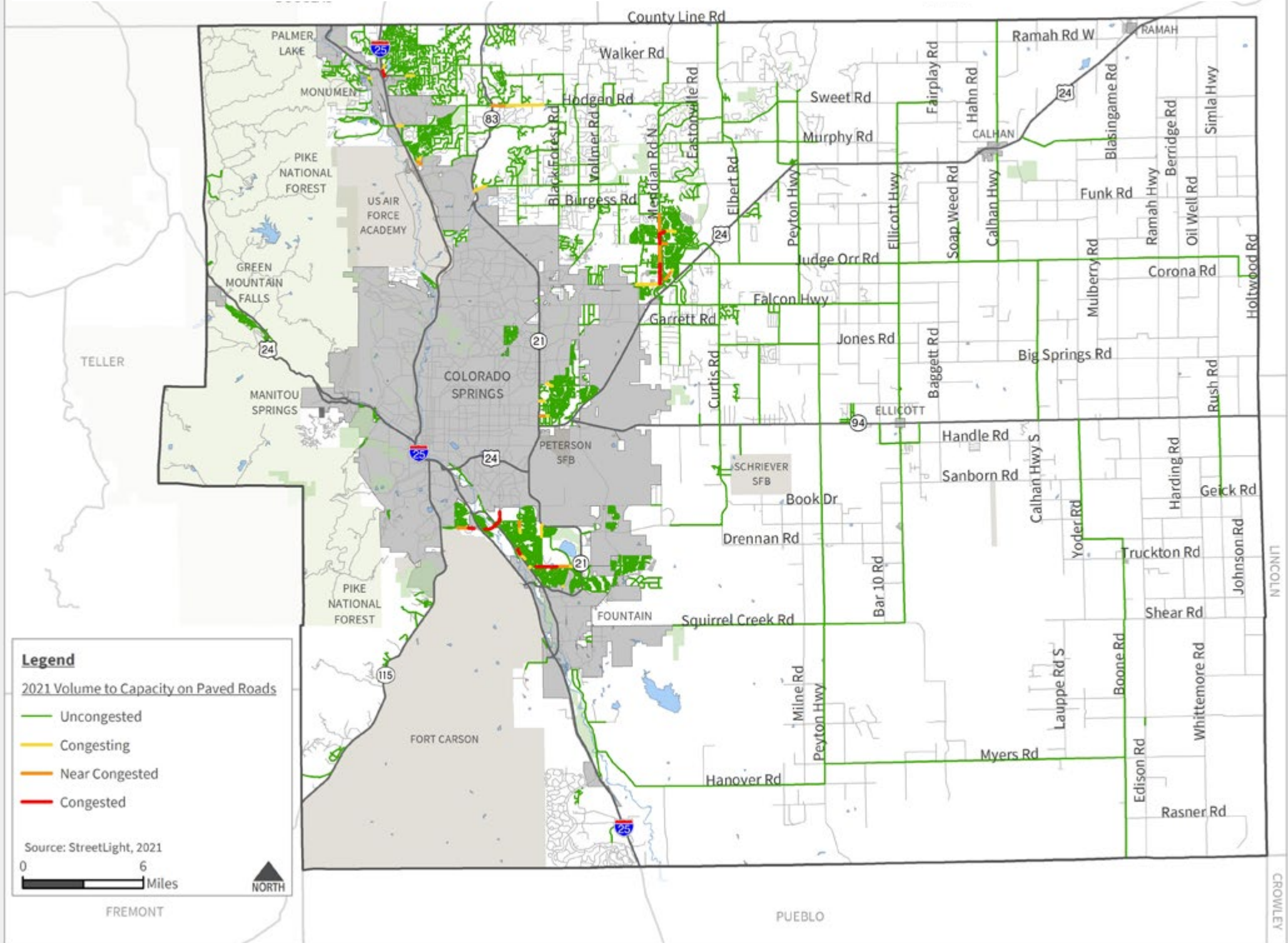
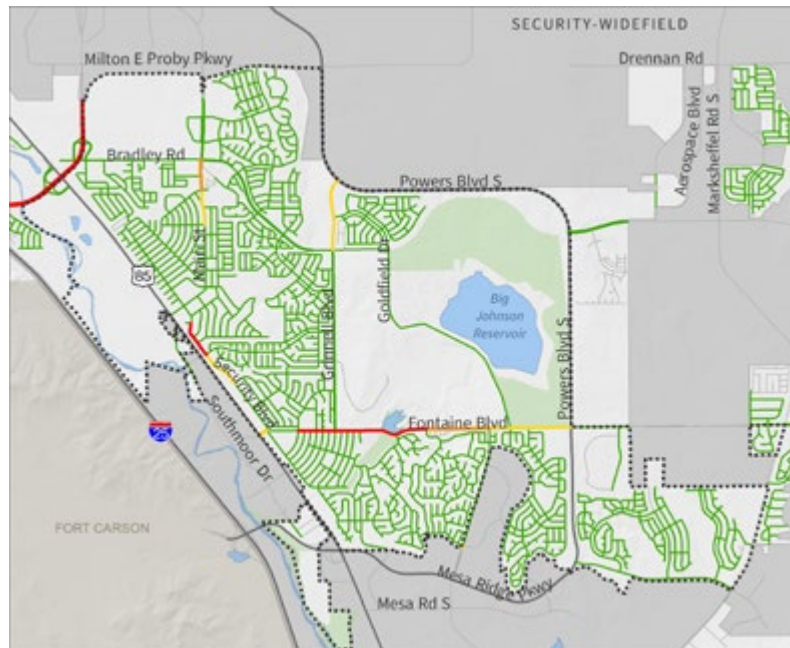




Figure 10, continued, Levels of Service for Existing Unincorporated EPC Roads focus areas:

- Gleneagle (upper left)
- Falcon (upper right)
- Security-Widefield (lower left)
- Cimarron Hills (lower right)



Legend

2021 Volume to Capacity on Paved Roads

- Uncongested
- Congesting
- Near Congested
- Congested

Source: StreetLight, 2021

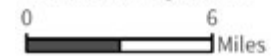
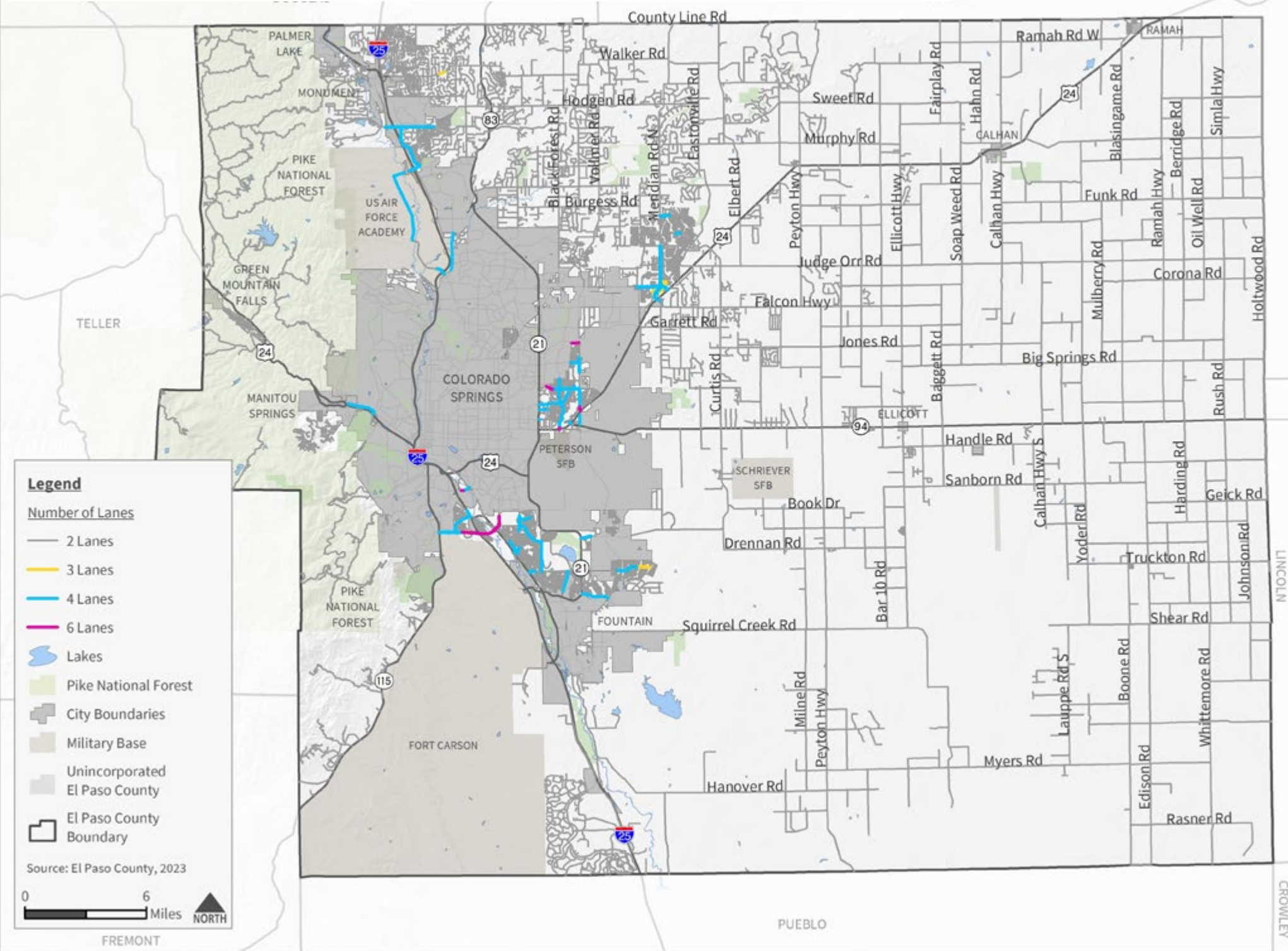


Figure 11. Existing Number of Lanes



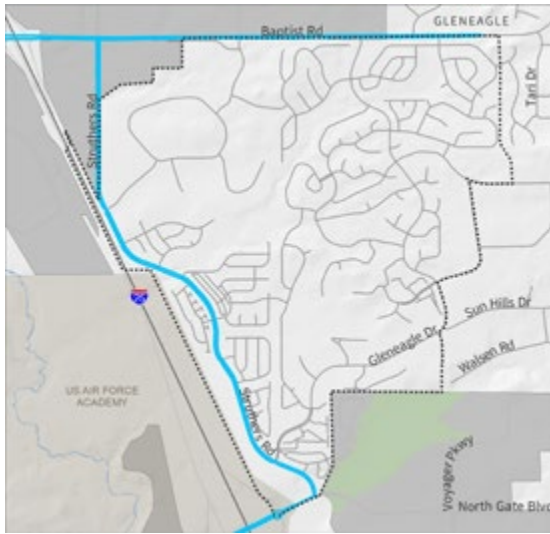
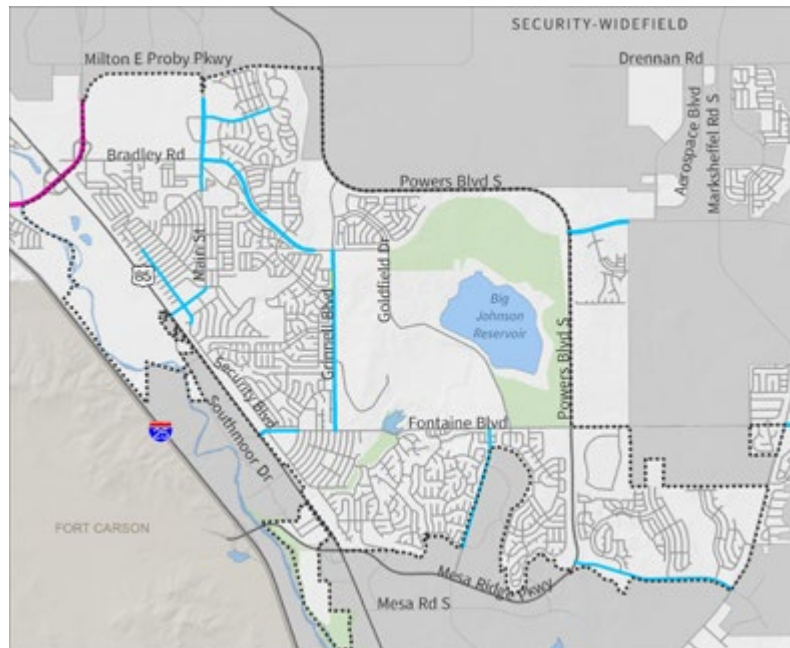


Figure 11, continued, Existing Number of Lanes focus areas:
 Gleneagle (upper left)
 Falcon (upper right)
 Security-Widefield (lower left)
 Cimarron Hills (lower right)



Legend

Number of Lanes

- 2 Lanes
- 3 Lanes
- 4 Lanes
- 6 Lanes

Lakes
 Pike National Forest
 City Boundaries
 Military Base
 Unincorporated El Paso County
 El Paso County Boundary

Source: El Paso County, 2023

0 6 Miles NORTH

Figure 12. Existing Traffic Volumes (Gravel Roads)

Gravel Road Analysis

For calculating daily traffic volumes, Streetlight Data 2021 AADT was used as the traffic count resource, with a few local roads adjusted based on available traffic count data.

All gravel roads were analyzed using the 300 ADT threshold. About 29 miles (or 2.7 percent) of the existing network have paving needs and about 56 miles (or 5.3 percent) are approaching 500 ADT threshold (**Table 1**). The existing traffic volumes for gravel roads is shown on **Figure 12**.

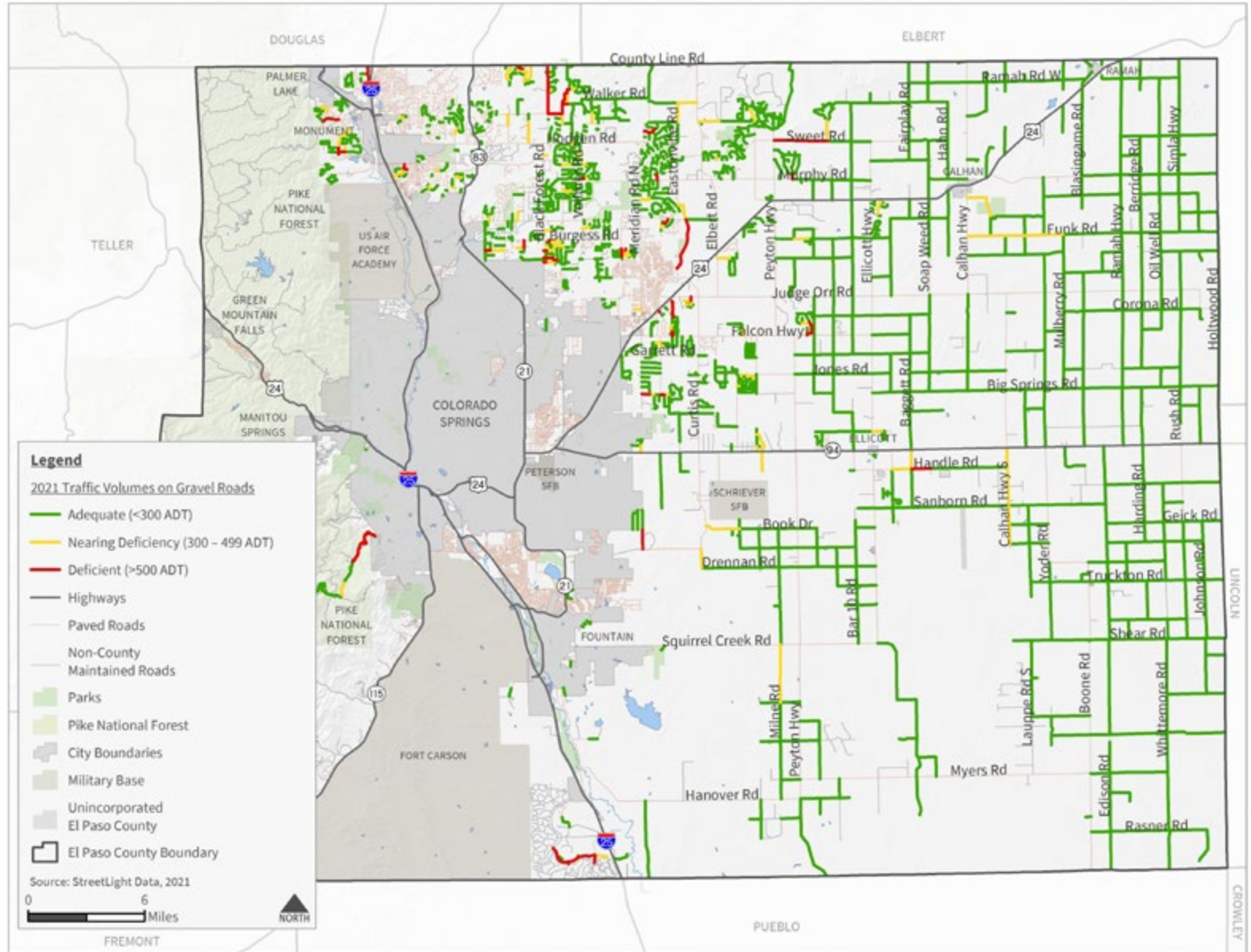


Table 1: Gravel Roads Level of Service

Gravel Roads (2021)		
Adequate <300 ADT	962 mi	92%
Nearing Deficiency 300 to 499 ADT	56 mi	5.3%
Deficient >500 ADT	29 mi	2.7%



Multimodal Transportation

Bicycle Facilities

El Paso County has a well-established network of off-street trails that include federal, state, and local trails. Numerous major regional trails in unincorporated areas of the County include Bear Creek Regional Trail, Fox Run Regional Trail, Fountain Creek Regional Trail, New Santa Fe Regional Trail, Palmer Divide Regional Trail, Rock Island Regional Trail, and Ute Pass Regional Trails and others. Other smaller but relevant trails include Crews Gulch Trail, Homestead Ranch Trail, and Cathedral Pines Trail. Ten trailheads are distributed throughout the region with five for New Santa Fe Regional Trail, two for Fountain Creek Regional Trail, and one each for Rock Island Regional Trail, Palmer Divide Regional Trail, and Ute Pass Regional Trail.

In addition to the off-street trails, there is an on-street bicycle route network within El Paso County. On-street bicycle facilities that are disjointed, not continuous, or with high traffic and speed environments can create a high stress condition for bicyclist and result in lower bikeability for a community; thus, areas with several high stress routes may have a low Bike Score. [Bike Score](#) is a quantitative measure that assesses the bikeability of a community based on four components: presence of bike lanes, topography, connectivity to major destinations, and bicycle mode share for commuting (Bike Score Methodology).

Bike lane or trail conditions, interactions with traffic, or facility type can impact who chooses to ride bikes. The general population can be classified into four types of cyclists based on their attitudes toward cycling: "Strong &

Fearless," "Enthusied & Confident," "Interested but Concerned," and "No Way, No How." The primary factors that decide into which of the four categories an individual falls include comfort level with various bicycle facility types and traffic levels and degree of experience with cycling (Revisiting the Four Types of Cyclists).

[Level of Traffic Stress \(LTS\)](#) provides an additional measure of the comfort level associated with cycling on specific on street facilities. A measure of LTS uses roadway characteristics, including traffic speeds and volumes, number of thru lanes, and, if applicable, bike lane width, to calculate a grade on a scale of 1 to 4. Providing low-stress alternatives to streets with high speeds and traffic volumes is a vital attribute of a bicycle network that attracts a range of ages and abilities, including those who are "Interested but Concerned" in bicycling. Currently, El Paso County's network of low-stress streets is in urbanized areas and spread sporadically throughout the County with minimal continuity. Most of the County's arterials have speeds and/or volumes too high to provide comfortable cycling conditions without improvements. Most arterials in the County received an LTS score of 4.

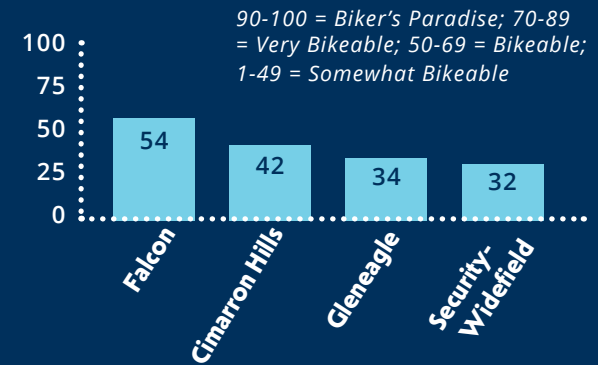
Arterials with high LTS are not uncommon since traffic volume and speed are major components in determining the level of traffic stress, and very few arterial streets in El Paso County have bicycle facilities. Because trails are separated from vehicular traffic, all trails in the County can be classified as low stress (LTS 1).

Additionally, although not analyzed, the local streets in El Paso County generally carry low traffic volumes with low speeds and can also be considered a part of the existing low-stress network. Roads with shoulders greater than 4 feet were classified as multiuse facilities. The low stress network for bicycling and walking is shown on [Figure 13](#).



135 miles of trails
400 miles of roadway bike facilities

Bike Scores for Urbanized Communities



Types of Bikers in the General Population

Strong & Fearless: 4 - 7%



includes everyday bicycle commuters and most elite athletes. Will ride in almost any condition

Enthusied & Confident: 5 - 9%



are comfortable in most conditions but prefer to use designated bicycle facilities rather than mixing with vehicle traffic.

Interested but Concerned: 51 - 56%



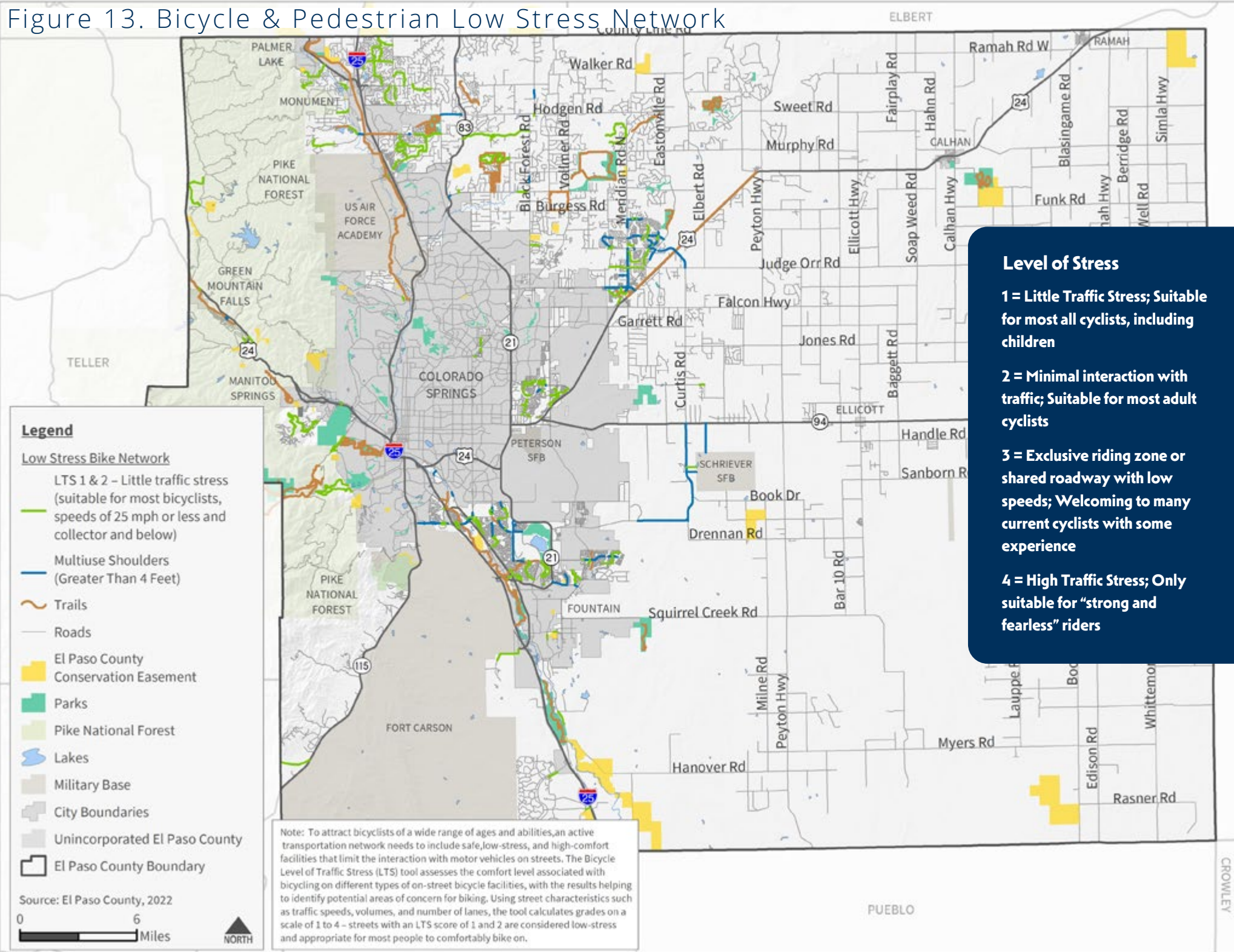
would like to bicycle more but have significant safety concerns and are hesitant to share the road with vehicles

No Way, No How: 31 - 37%



will not bike under any condition

Figure 13. Bicycle & Pedestrian Low Stress Network



Pedestrian Facilities

Pedestrians in El Paso County use sidewalks or off-street trails in urban areas and multiuse shoulders in rural areas. The comfort of the 540 miles of sidewalks in unincorporated El Paso County can be measured via a [Walk Score](#), a metric for multimodal accessibility, including proximity, comfort, and ease of travel to nearby destinations (walkScore). Missing sidewalks or sidewalks in poor or substandard condition can reduce the Walk Score of a community and can limit the ease of mobility of pedestrians, including persons with disabilities.

Examples of sidewalk deficiencies include missing sidewalks, missing accessible curb ramps at street crossings, poor sidewalk condition, missing or inadequate crossings, narrow widths, and/or lack of buffer between sidewalk and street. Identified sidewalk gaps provide an opportunity for improvement in critical areas of communities, such as near employment centers, schools, and commercial locations. Origin and destination trip data presented previously in this report supports the improvement of facilities where there is high demand of trips and missing facilities. Commercial and employment locations on Powers Blvd in Cimarron Hills, Meridian Rd in Falcon, and Woodmoor Dr/Misty Acres Blvd east of Monument are examples of locations for potential improvements.



540 miles

of sidewalks in unincorporated El Paso County. Most of these sidewalks as attached facilities.

375 miles

of missing sidewalks in Gleneagle, Cimarron Hills, Security-Widefield, Falcon, and near Monument.

Approximately 84 miles

of sidewalks are detached from the curb. Little separation between vehicles and pedestrians on 85 percent of sidewalks.





Transit

Mountain Metropolitan Transit

The main transit service provider in El Paso County is MMT, which provides fixed-route transit and paratransit service (Metro Mobility ADA) for the region. MMT is the primary source of public transportation services within the urbanized area of El Paso County. In addition to bus routes within the City of Colorado Springs, MMT provides service west to Manitou Springs, north to the Chapel Hills Mall, and south into the unincorporated area of Widefield. The City of Fountain also provides fixed-route bus service with one route covering the majority of the city at a 45-minute frequency. **Figure 14** illustrates existing transit services in El Paso County.

Interregional Services – Bustang and Bustang Outrider

Interregional services include CDOT Bustang and Bustang Outrider. CDOT’s Bustang South Line provides regional service between Colorado Springs and Denver daily, year-round (except major holidays). Current scheduled service provides six round trips in each direction on weekdays, with a focus on peak hour travel, and two round trips on the weekends. CDOT’s Bustang Denver Tech Center (DTC) Line provides regional service between Colorado Springs and the Denver Tech Center only weekdays, year-round (except major holidays). Current scheduled service provides two round trips, leaving Colorado Springs in the morning and returning late afternoon from the DTC area. CDOT’s Outrider service operates between Lamar, Pueblo, and Colorado Springs daily, year-round (except major holidays). Current scheduled service provides one roundtrip departing early morning from Lamar and departing early afternoon for the return trip to Pueblo and Lamar.

Bustang South Line ridership dropped significantly during the COVID-19 pandemic. Given the nature of the service, many South Line riders were commuters and commuter travel patterns are currently at 32 percent of pre-pandemic levels. Outrider ridership has returned to pre-pandemic levels; it is currently at 102 percent, when measured quarterly.

Overview of MMT Operations

32 routes, approximately 6 am to 9pm, during the weekday and with some reductions during the weekend.

10,500 Pre-COVID 19 Boardings per Weekday

5,800 2021 Boardings per Weekday

4,800 2022 Boardings per Weekday

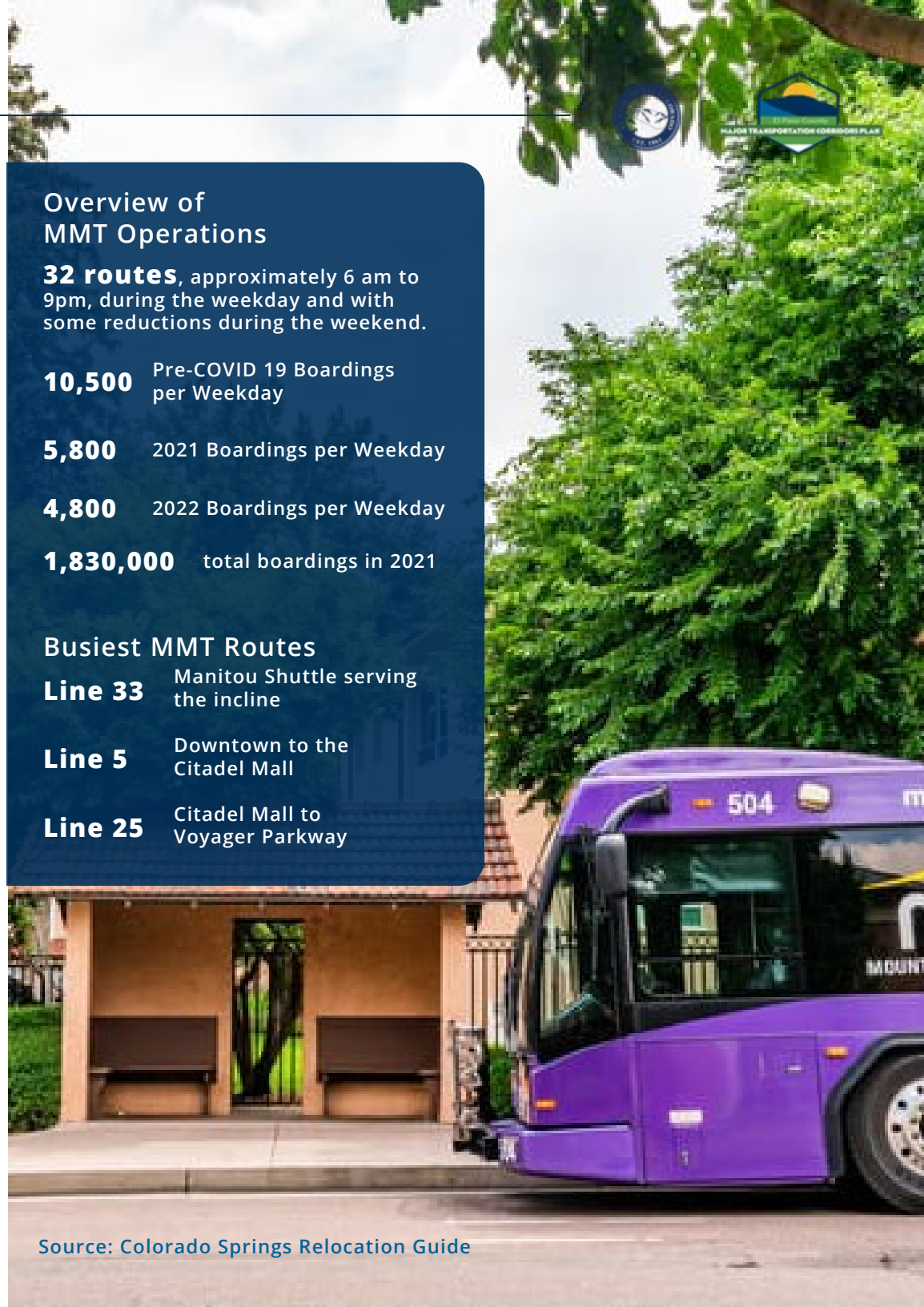
1,830,000 total boardings in 2021

Busiest MMT Routes

Line 33 Manitou Shuttle serving the incline

Line 5 Downtown to the Citadel Mall

Line 25 Citadel Mall to Voyager Parkway

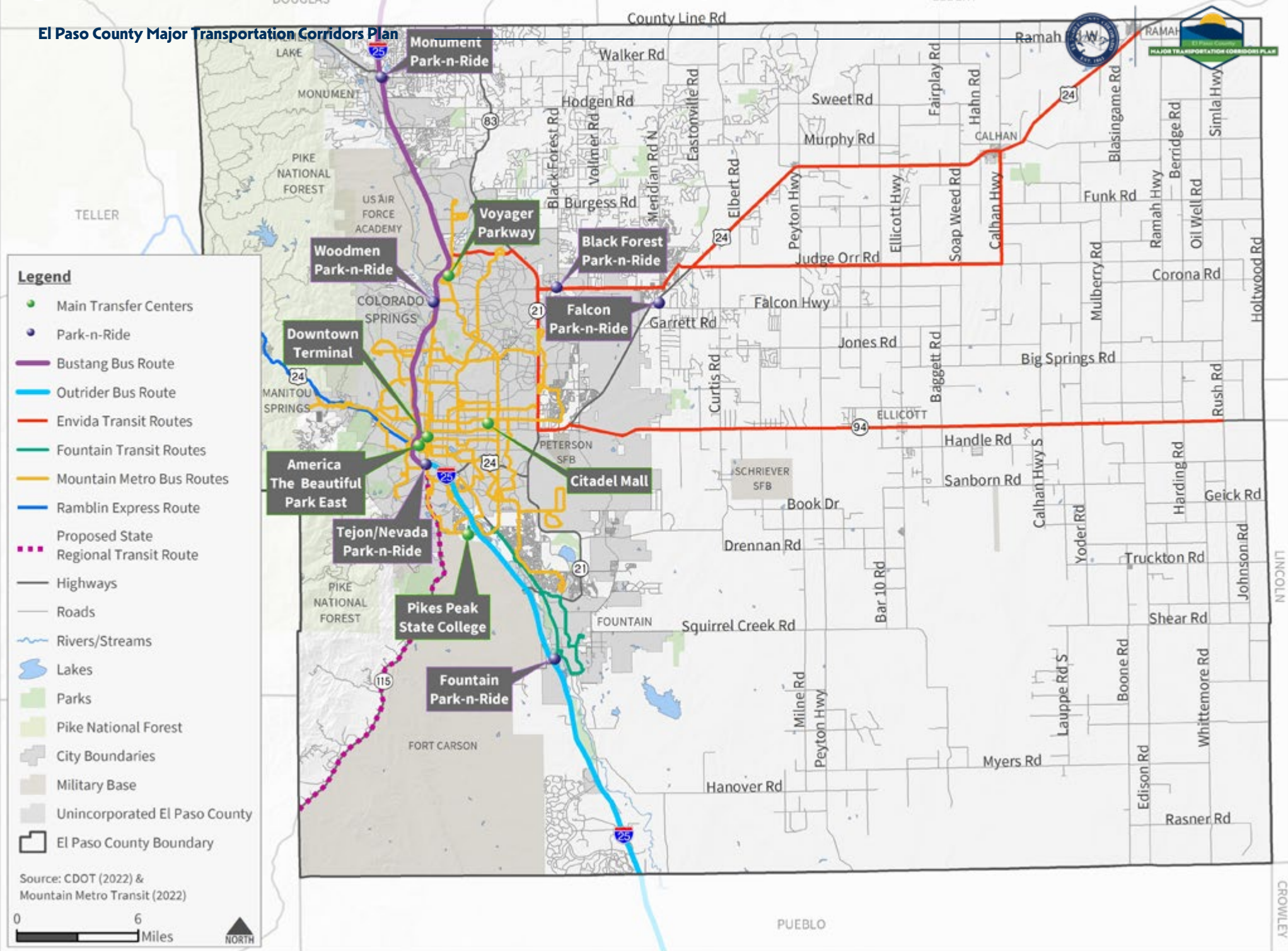




Other Transit Services

- Four park-n-rides have bus service (Bustang/Outrider and MMT) and two park-n-rides (Black Forest and Falcon) on the northeast side of the county provide carpool and vanpool parking.
- Mountain Metro Rides offers free ride matching services through a carpool and schoolpool program, designed to match people who want to share a ride. People can also subscribe to a vanpool program where MMT will provide the van and passengers pay a monthly subscription.
- Pikes Peak Cog Railway is the only passenger rail line in service within El Paso County, providing a recreational service from Manitou Springs to Pikes Peak. The line is 9 miles long.
- Front Range Passenger Rail is being studied to eventually provide regional passenger rail service from Fort Collins to Pueblo. All current alternative alignments parallel I-25 within El Paso County and include a stop in Colorado Springs.
- Mountain Metro Mobility provides demand-response service for individuals with mobility needs that prevent them from using the fixed-route bus system. Per ADA requirements, Mountain Metro must “provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each side of each fixed route.” Riders must qualify for the service based on the criteria set by ADA. Mountain Metro Mobility is available during the same days/ hours as the local fixed-route system.
- Human Services: Envida MOVES is a transportation service that uses Area Agency on Aging (AAA) Medicaid, and grant funding to provide rides for people with disabilities, older adults, and the economically disadvantaged within El Paso County. Envida service in eastern El Paso County is open to the public, providing service along US 24 and CO 94 four days a week to Calhan, Ramah, Ellicott, Yoder, and Rush. The service connects with in-town transit providing rural residents access to services in Colorado Springs. Within Colorado Springs, Envida service is available only to people unable to access Mountain Metro Mobility services or people that cannot use MMT’s public transit. The service regularly transports older adults under the Older Americans Act.

Figure 14. Transit Services within El Paso County





Crash History

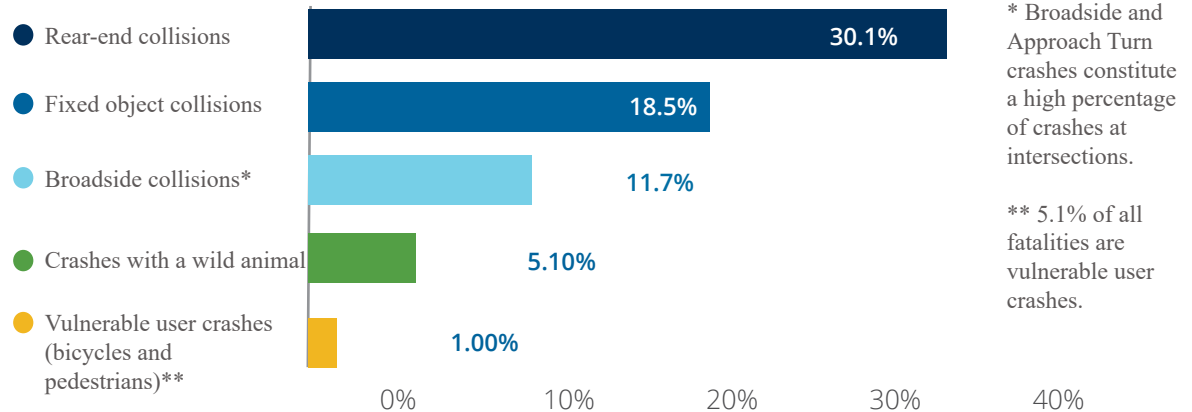
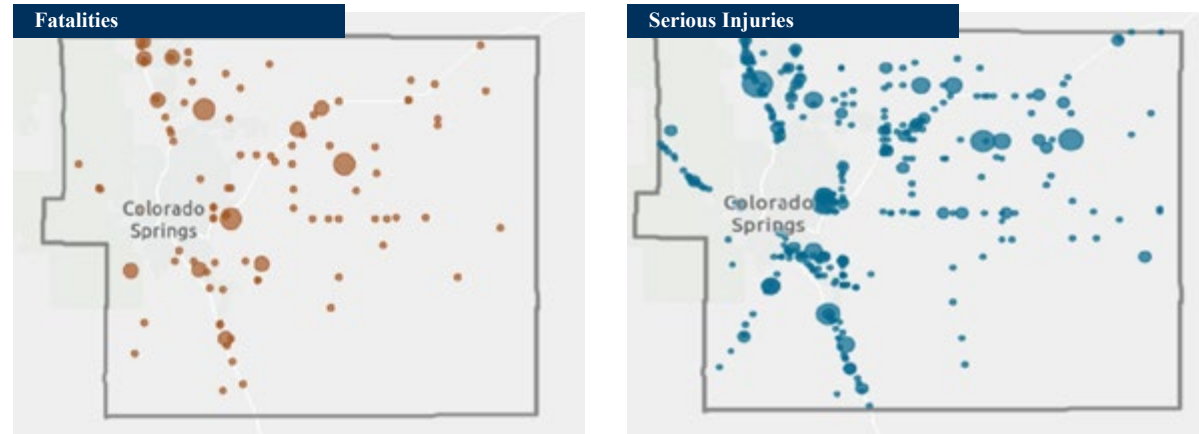
Roadway safety can be characterized by the ability of a person to travel along a roadway network freely without injury or death. It is usually assessed through a qualitative and quantitative evaluation of crash histories by mode of travel. This evaluation sheds light on crucial information such as locations with an overrepresentation of crashes, crash types and crash severity issues. Under programs such as Vision Zero, severity concerns are often subject to formal safety evaluations such as Road Safety Audits (RSA) after the initial identifications of areas of concern.

In early 2023, El Paso County adopted an updated [Road Safety Plan](#) along with Vision Zero/Towards Zero Deaths strategies to reduce road related fatalities. The plan's analysis identified data trends in fatalities and serious injuries, including locations and crash types.

Figure 15 shows the fatalities and serious injuries crash density maps from the Road Safety Plan's analysis of crash data (2015-2019). Data analysis provides insights into the corridors with safety issues and possible correlation with high-speed segments of major arterials and expressways. Speed related involvement, intersection design, lane departure and restraints not used by occupants are the four major factors contributing to injury severity.

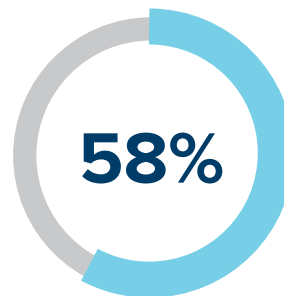
High severity crashes include crashes involving Killed and Severely Injured (KSI) crashes. Overturning and fixed object tend to be of more concern in rural areas; broadside KSI crashes are more common in urban areas. Further analysis of the Pikes Peak Area Council of Governments (PPACG) crash data revealed that almost 23 percent of all KSI crashes happen at nighttime at unlighted locations, and more than 35 percent of all KSI

Figure 15. Fatalities and Serious Injuries



* Broadside and Approach Turn crashes constitute a high percentage of crashes at intersections.

** 5.1% of all fatalities are vulnerable user crashes.



of fatalities and serious injuries of unincorporated areas were located in principal arterials and expressways.

>11,000

traffic crashes were reported on streets and highways within the County (2015-2019)

4,101

crashes reporting injuries or fatalities



crashes happen at intersections. Elimination of KSI crashes is a priority for the County and for potentially establishing an approach to eliminate traffic fatalities and severe injuries. In addition, identifying crashes involving vulnerable users (pedestrians and bicyclists) is key to creating a safer, more equitable transportation system. There were 273 vulnerable user crashes in El Paso County between 2015 and 2019, of which 59 crashes involved a pedestrian, 48 involved an injury, and there were 4 pedestrian fatalities. Similarly, 51 crashes involved a bicyclist, of which 39 involved an injury and 1 was a fatal crash. There is a higher concentration of crashes in urban areas, as there is also more population and multimodal users. **Figure 16** compares the frequency of bicycle and pedestrian crashes by incorporated and unincorporated areas of the County. The number of bicycle and pedestrians crashes is significantly lower in unincorporated areas.

Vision Zero/Toward Zero Deaths includes strategies and safety approaches that seeks to eliminate all traffic fatalities and severe injuries through a safe systems approach, while increasing safe, healthy, equitable mobility for all road users. After completing further analysis in four emphasis areas (unrestrained occupants, intersection related, lane departure, and speeding), the County incorporated a Best Practices Toolkit into the Road Safety Plan, which also incorporates the application of the five Es of transportation planning — Engineering, Education, Encouragement, Evaluation, and Enforcement — into the project planning process.

Figure 16. Bicyclist/Pedestrian Fatalities and Serious Injuries - Incorporated and Unincorporated El Paso County (2015-2019)

