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MEMORANDUM

To: Katie Kent, Kris Valdez (Town of Frisco)

From: Toole Design Group

Date: August 21, 2024

Project Name: Frisco Comprehensive and Three Mile Plan

Project #: 7651

Subject: Transportation Assessment Report Draft

Project Background: Transportation in Frisco

As part of the Frisco Comprehensive and Three Mile Plan, the project team has assessed how the existing transportation system can improve and evolve to create a more connected, multimodal environment that accommodates residents and visitors and prepares for future growth. The Plan will determine what Frisco's transportation system can be and will focus on the following topics:

- **Connecting to Trails:** The Town of Frisco offers an accessible regional trail system connecting several critical local and regional locations. This Plan will consider how to connect local multimodal facilities to the regional trail network to create a seamless system of routes and pathways that support active travel.
- **Filling Gaps in the Active Transportation Network:** The Town of Frisco's existing bicycle and pedestrian networks are discontinuous and impede safe and efficient active travel. This Plan will consider how and where to fill gaps, especially in areas outside the downtown core (which includes Galena Street, Main Street and Granite Street), and how to maintain infrastructure over time.
- **Filling Gaps in the Transit Network:** Several barriers currently make it difficult for transit users to connect to Frisco's existing transit system. This Plan will consider strategies for implementing microtransit—a priority for the Town of Frisco—to help fill system gaps.
- **Managing On-Street Parking:** Parking is a distinct land use that poses significant implications for travel behaviors and the overall transportation system. Today, on-street parking is well-defined within Downtown Frisco. However, the Town of Frisco has expressed concerns over current parking restrictions and future management. This Plan will help the Town of Frisco define an approach to guide parking management within Frisco's commercial area.
- **Identifying the Influence of Growth and Change on Transportation:** With plans to redevelop parts of Frisco and add higher-density housing in Downtown Frisco, this Plan will consider how new development can support multimodal travel and how the Town of Frisco can activate key corridors to accommodate increased numbers of travelers with diverse travel needs.
- **Addressing Winter Conditions:** As a mountain town, winter conditions in Frisco can be extreme, making roadway clearing and maintenance challenging. This Plan will consider how people can travel during winter weather events and how they are willing to travel. The Plan's recommendations will correspond to the unique context and character of the Frisco community and will be realistic, actionable and maintainable.

The following transportation assessment evaluates the current conditions of Frisco's transportation environment by first discussing what the Frisco transportation system looks like today, then identifying how people are currently using it, and finally presenting how safe people are when using it. Along with an analysis of available data, the development of this assessment included a review of relevant plans and studies that the Town of Frisco and other agencies have completed. The Town of Frisco's adopted plans and studies provide direction and support for identifying improvements to Frisco's transportation system. Relevant documents include:

- Frisco Community Plan (2019)
- Town of Frisco On-Street Parking Study (2019 Update)
- The Summit Stage Short Range Transit Plan 2021-2025 (2020)
- The Downtown Complete Streets Plan (2021)
- Frisco Trails and Pathways Master Plan (2023)

The Plan's transportation recommendations will be informed by these prior planning efforts and will build upon the Town of Frisco's previous work and goal-setting. In reviewing these documents, six themes relevant to the Comprehensive and Three Mile Plan emerged:

1. Promote walking, biking, and other alternative modes.
2. Increase safety for people of all ages and abilities by creating crossings and facilities that are physically separated from motor vehicle traffic.
3. Connect local active modes facilities with the regional trail network.
4. Improve access to key destinations.
5. Manage parking resources to promote the efficient use of available spaces.
6. Address the first- and last-mile problem.

The following sections of this document touch on completed plans and their key themes.

Transportation Infrastructure

Driving in Frisco

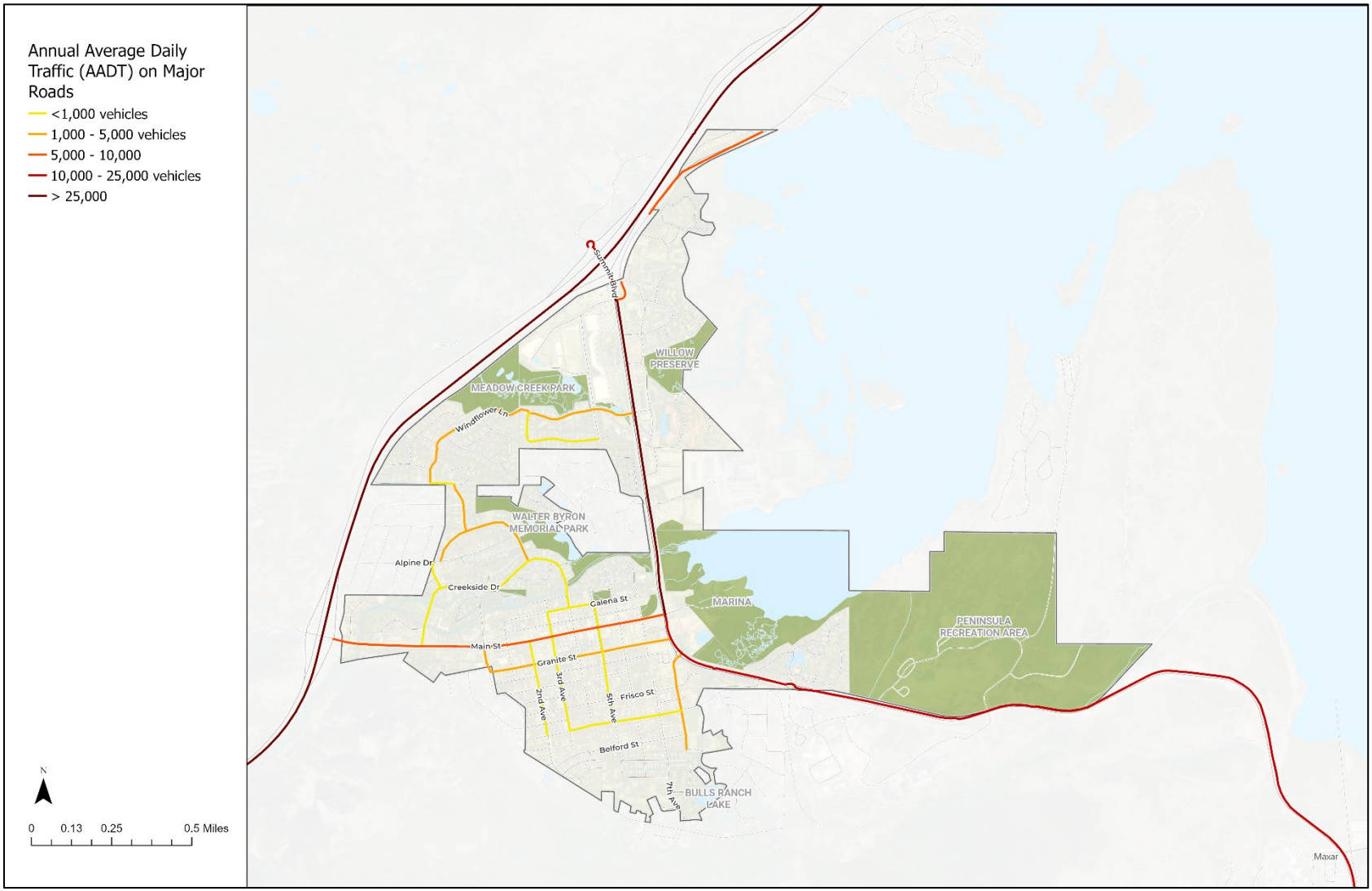
Frisco is bound to the north, east, and west by Interstate 70 (I-70) and Summit Boulevard (CO-9). The Town of Frisco's existing street network comprises two-way roads with a typical grid south of Galena Street and curvilinear streets north of Galena Street. Frisco has several major roadways (collector roads, arterial roads, highways, and interstates). However, only two roads in Frisco, Main Street and Summit Boulevard, directly connect vehicles to I-70. Furthermore, only I-70, Summit Boulevard, and Dillon Dam Road connect vehicles to the rest of the region. As a result, Main Street, Dillon Dam Road, and Summit Boulevard see the highest daily traffic volumes in the Town of Frisco, according to annual average daily traffic (AADT) counts collected by the Colorado Department of Transportation (CDOT) in 2022 (see Figure 1 on the next page).

The Town of Frisco maintains low speeds on all town roadways, including Main Street, with 10- or 20-mph speed limits. The speed limit on Summit Boulevard, a state-owned county road, ranges from 20 to 50 mph (see Table 1).

Table 1: Operational Characteristics of Frisco Roads, Source: CDOT (2022)

ROADWAY	LOCATION	AADT	SPEED LIMIT
Main Street	I-70 to Summit Boulevard	7,300	20 MPH
Dillon Dam Road	Summit Boulevard to Lakeview Terrace	6,300	20 MPH
Summit Boulevard	I-70 Overpass	25,000	20-35 MPH
	I-70 Overpass to Main Street	26,000	35 MPH
	Main Street to Granite Street	24,000	35 MPH
	Granite Street to Eastern Frisco Boundary	23,000	35-50 MPH

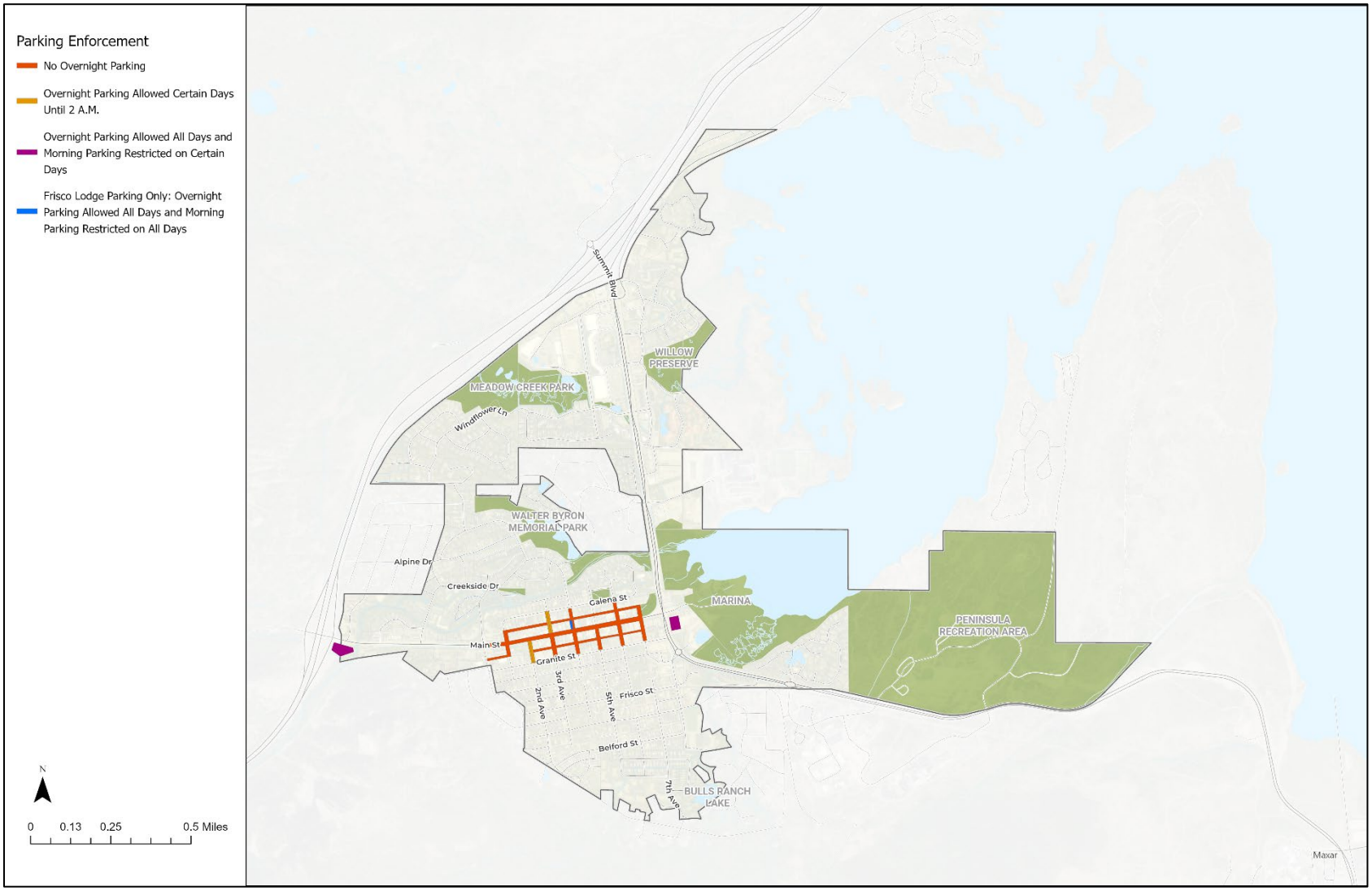
Figure 1: AADT on Major Roads, Source: CDOT (2022)



Parking in Frisco

This assessment reviewed existing parking enforcement data (see Figure 2) and the parking analysis completed as part of the *2019 Community Plan*. The *2019 Community Plan* found that while the Town of Frisco does not have a pressing issue with parking capacity, there are consistent challenges with parking distribution and turnover of parking spots in the downtown core. Since completing the *2019 Community Plan*, the Town of Frisco has moved forward with recommendations to implement time limit enforcement on Main Street to support more frequent parking spot turnover. The Town of Frisco has also added overnight parking on 2nd Avenue and 3rd Avenue, and overnight parking for Frisco Lodge patrons on 4th Avenue. Based on information gleaned from the *2019 Community Plan* compiled with a review of Frisco's existing parking locations and minimums, there is an opportunity to revisit solutions to managing on-street parking in the downtown core. Identifying an approach to parking management will be particularly important as the Town of Frisco works to expand its active transportation network, which may include relocating and reallocating on-street parking.

Figure 2: Frisco Parking Enforcement, Source: Town of Frisco (2024)



Walking and Bicycling in Frisco

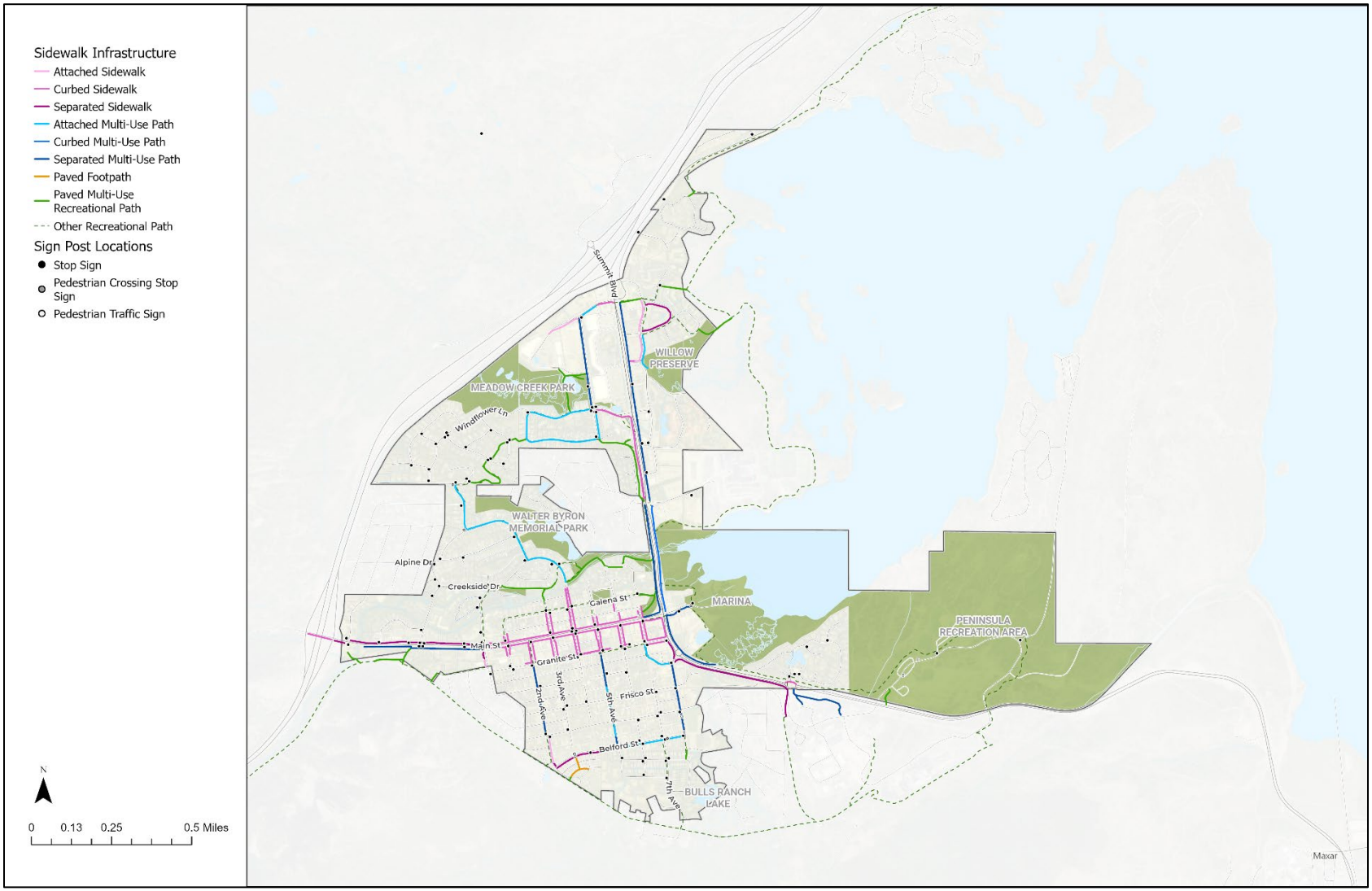
Pedestrian Network and Conditions

The Town of Frisco's paved, dedicated sidewalks (see Figure 3) exist primarily in Downtown Frisco (excluding Galena Street) and on Summit Boulevard. Outside of downtown, much of Frisco's walkway network includes non-ADA (Americans with Disabilities Act) compliant gravel areas at the roadway edge where people can walk or bike out of the direct travel path of vehicular traffic. Frisco roads provide less safety and comfort for pedestrians because of the lack of formalized sidewalks and defined curb lines in residential areas. In addition, the gravel areas do not meet ADA requirements for pedestrian-accessible routes in public right-of-way. While the paved sidewalk network is generally deficient, it is supplemented by and connects to local multi-use paths and regional trails. For example, Summit Boulevard within the Frisco boundary has continuous pedestrian facilities on at least one side of the road. However, pedestrians often do not have a direct path and must cross the corridor several times to remain on dedicated paths. This is true for the entire pedestrian network in Frisco. Additionally, gaps in sidewalk infrastructure are common near key destinations and amenities such as Safeway, Walmart, and the Frisco Transit Center.

The analysis of the pedestrian network also included a review of existing signage that supports safe pedestrian travel. Because available data only includes sign post locations and does not identify all pedestrian crossing opportunities or crosswalks, the project team cannot make definitive statements about gaps in pedestrian crossing infrastructure at this time. However, the project team will use data presented in Figure 3 to pinpoint where controlled intersections exist and where they are missing to determine how the Town of Frisco can improve pedestrian access and expand the number of comfortable crossing opportunities.

The Town of Frisco plans to address some of the existing discontinuity in pedestrian infrastructure. Projects planned for the near future include adding sidewalks to Summit Boulevard near Walmart and building a pedestrian connection across I-70. Additionally, a 2026 project will construct sidewalks and a shared-use path along Granite Street.

Figure 3: Existing Pedestrian Infrastructure and Connections, Source: Town of Frisco (2024)

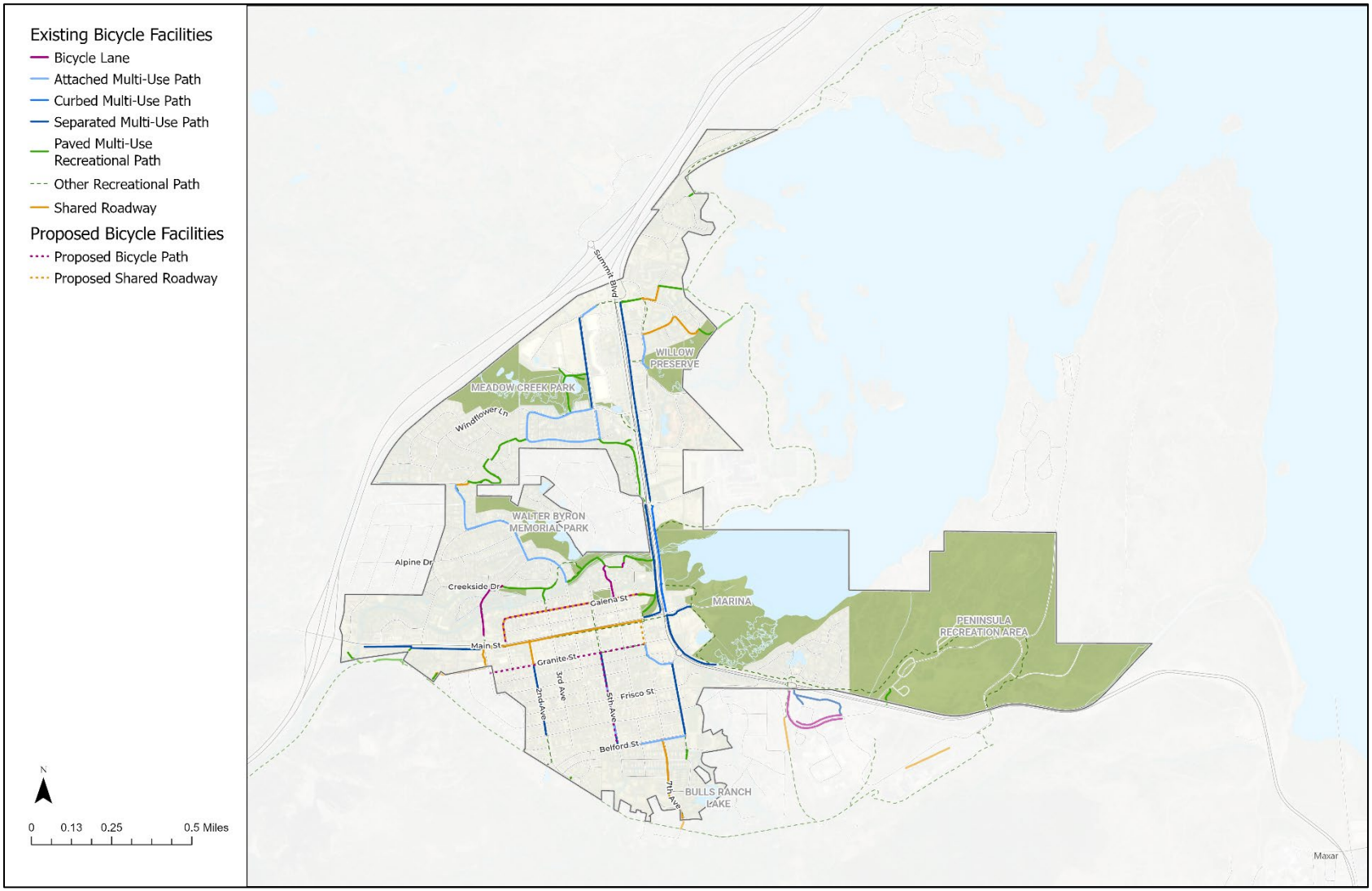


Bicycle Network and Conditions

In recent years, the Town of Frisco has made progress in developing the bicycle network to connect with off-road paths and regional trails, especially on the north side. However, dedicated bicycle facilities remain limited within Frisco, resulting in an incomplete network for accommodating people of all ages and abilities (see Figure 4). Although the Town of Frisco has planned to implement dedicated bikeways on Galena Street and Granite Street, today, only shared roadways exist in the downtown area, and there are no dedicated east-west bikeways south of Creekside Drive other than the multi-use path on Belford Street. Many participants in the *2017 Trails Master Plan* noted that many bicyclists ride on the sidewalk instead of in the road, and feedback from the public during the *2023 Trails and Pathways Plan* further suggests a need to better separate bicyclists and pedestrians from vehicular traffic.

Bicyclists and pedestrians in Frisco face added challenges when traveling across Summit Boulevard to the marina and peninsula. In 2021, CDOT completed significant enhancements on Summit Boulevard, including new roundabouts, a realigned recreation path, and a new pedestrian underpass between the Peninsula Recreation Area and the County Commons on the south side of Frisco. However, the corridor continues to be a significant barrier for active transportation movement, with few safe crossings connecting active transportation travelers to recreation opportunities and trail routes on the east side, along with many visibility issues, particularly at roundabouts.

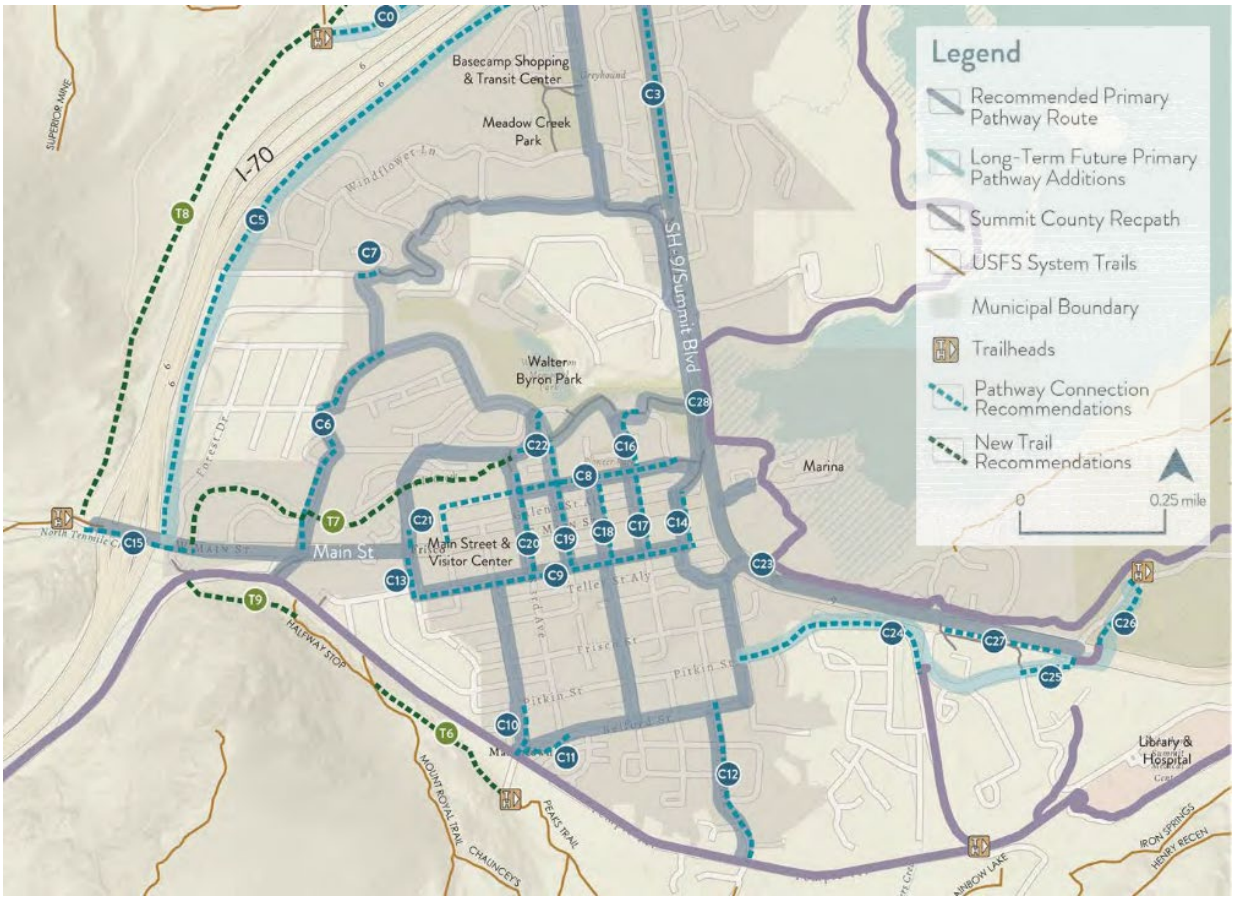
Figure 4: Existing and Proposed Bicycle Infrastructure and Connections, Source: Town of Frisco (2024) and Summit County Open Data (2024)



Future Trail Network and Connections

The 2023 Trails and Pathways Master Plan included recommendations for pathway (pedestrian and bicyclist) routes and new trails. As illustrated by Figure 5 (taken from the 2023 Trails and Pathways Master Plan document), recommended pathway routes and connections fill existing north-south active transportation gaps in the downtown area, east-west active transportation gaps in south Frisco, and active transportation gaps near significant destinations, like grocery stores and shopping in north Frisco. However, the *2023 Trails and Pathways Master Plan* recommendations focus on downtown and regional trail connectivity. An opportunity exists to revisit proposed trail connections to ensure all of Frisco is considered for active transportation system improvements and expansion.

Figure 5: Proposed Trails and Pathway Connections, Source: Trails and Pathways Master Plan (2023)



Riding the Bus in Frisco

Summit Stage, Summit County's free public transportation system, and CDOT's statewide bus service transports users between mountain towns along I-70. Four Summit Stage routes (the Breckenridge, Silverthorne, Copper Mountain, and Lake County Commuter routes) and two CDOT routes (the Bustang West Line and Pegasus shuttle), operate within Frisco (see Figure 6). Existing transit routes in Frisco do not necessarily provide comprehensive or convenient circulation, especially for shorter trips and trips within Frisco. Before 2024, the limited service area and the hour-long headways of the fixed routes were perpetuated by the significant driver shortage, which is explained in the *Summit Stage Short Range Transit Plan 2021-2025*. At the time of the Transit Plan's publication in 2020, Summit Stage had been contending with a driver shortage for at least three years, resulting in numerous service cuts and drops in ridership. While the shortage persisted through 2021, Summit Stage deployed strategies recommended by the *Short Range Transit Plan*, including expanding local recruiting and increasing driver referral rewards, driver wages, and subsidized housing opportunities. As of Spring 2024, Summit Stage had hired enough drivers to reduce headways from one-hour to 30 minutes on the Breckenridge, Silverthorne, and Copper Mountain routes at various times during the day.

Despite improvements made by Summit Stage in the past year, bus service remains relatively infrequent and there are no stops within residential neighborhoods. These shortcomings pose many challenges to access and convenience for transit users, makes it difficult to rely on the bus system as a means of commuting, and indicates an increasing need to provide local, on-demand service that increases flexibility and accessibility for the entire Frisco community (see Figure 7). The Town of Frisco hopes to prioritize microtransit as a solution, which would provide on-demand, point-to-point transit service across Frisco, especially to hard-to-serve areas such as Blue River or Summit Cove. The *Short Range Transit Plan* studies the feasibility of implementing microtransit in the region to fill gaps in the current transit system. In 2024, Summit Stage is moving forward with a project that will advance strategies for integrating microtransit operations across the region. However, the project team will look more holistically at how introducing microtransit at the local level could change and potentially replace Frisco's existing transit system.

Frisco and the First and Last Mile Problem

Like many municipalities, the Town of Frisco struggles with addressing first- and last-mile travel. While transit might cover the core of riders' trips, in many cases, the first and last legs of transit trips must be completed using other modes of transportation. Without accessible bus stops or stops with appropriate amenities to enable multimodal trips, bus service in Frisco is not a viable option for travel for most travelers. Introducing microtransit in Frisco is one solution to the first- and last-mile problem, as it would provide transit users point-to-point access to bus stops. Encouraging active and shared modes of travel can also benefit the Frisco transit system. This includes building more protected and direct active transportation routes to bus stops and stations, offering bikeshare and expanding rentable micromobility, and offering active modes facilities and accommodations at bus stops such as bicycle storage, lockers, and seating areas.

Figure 6: Summit Stage and Bustang Routes, Stops, and Stations, Source: CDOT Bustang Map (2024) and Summit Stage Routes and Stops (2024)

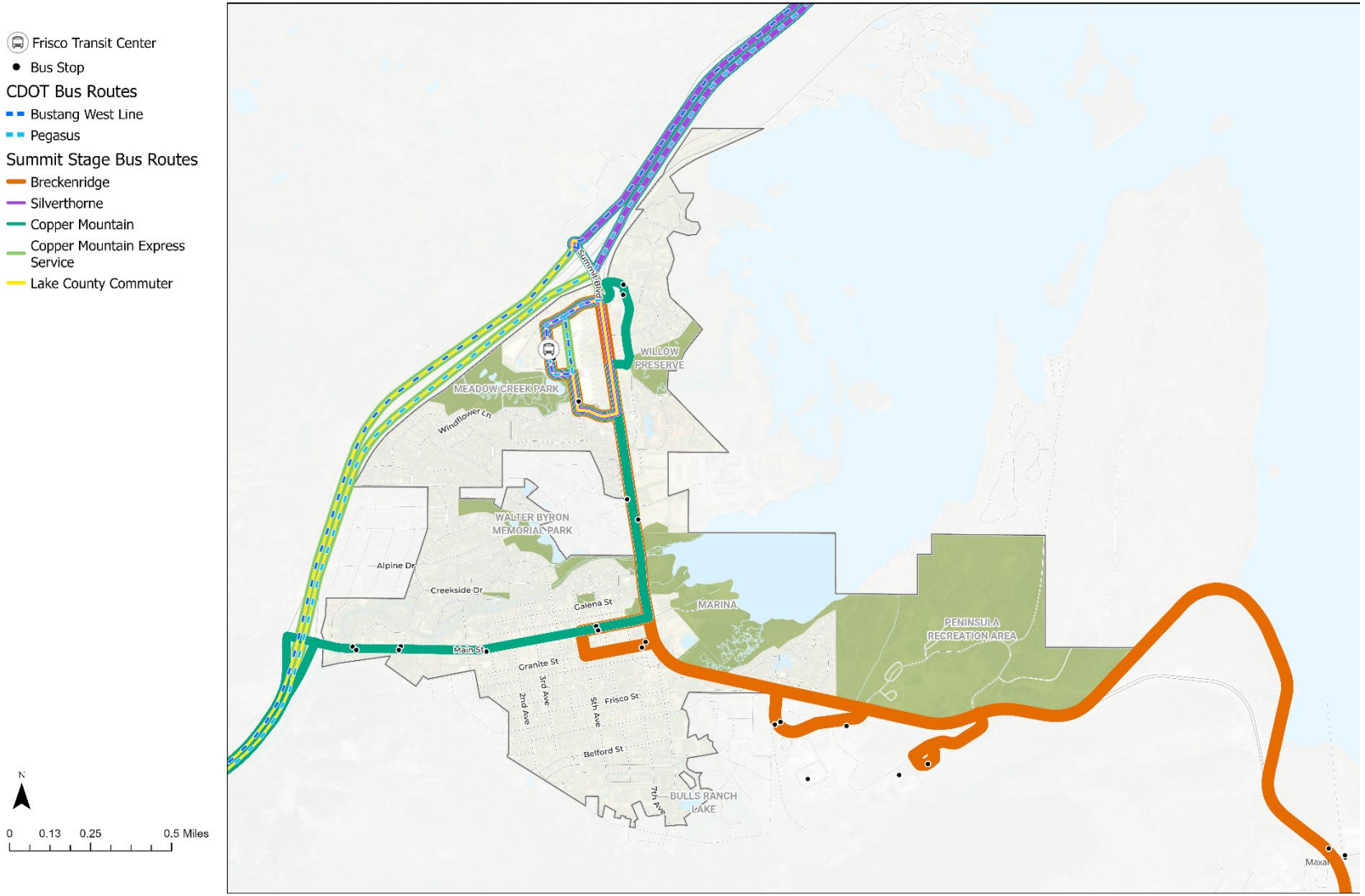
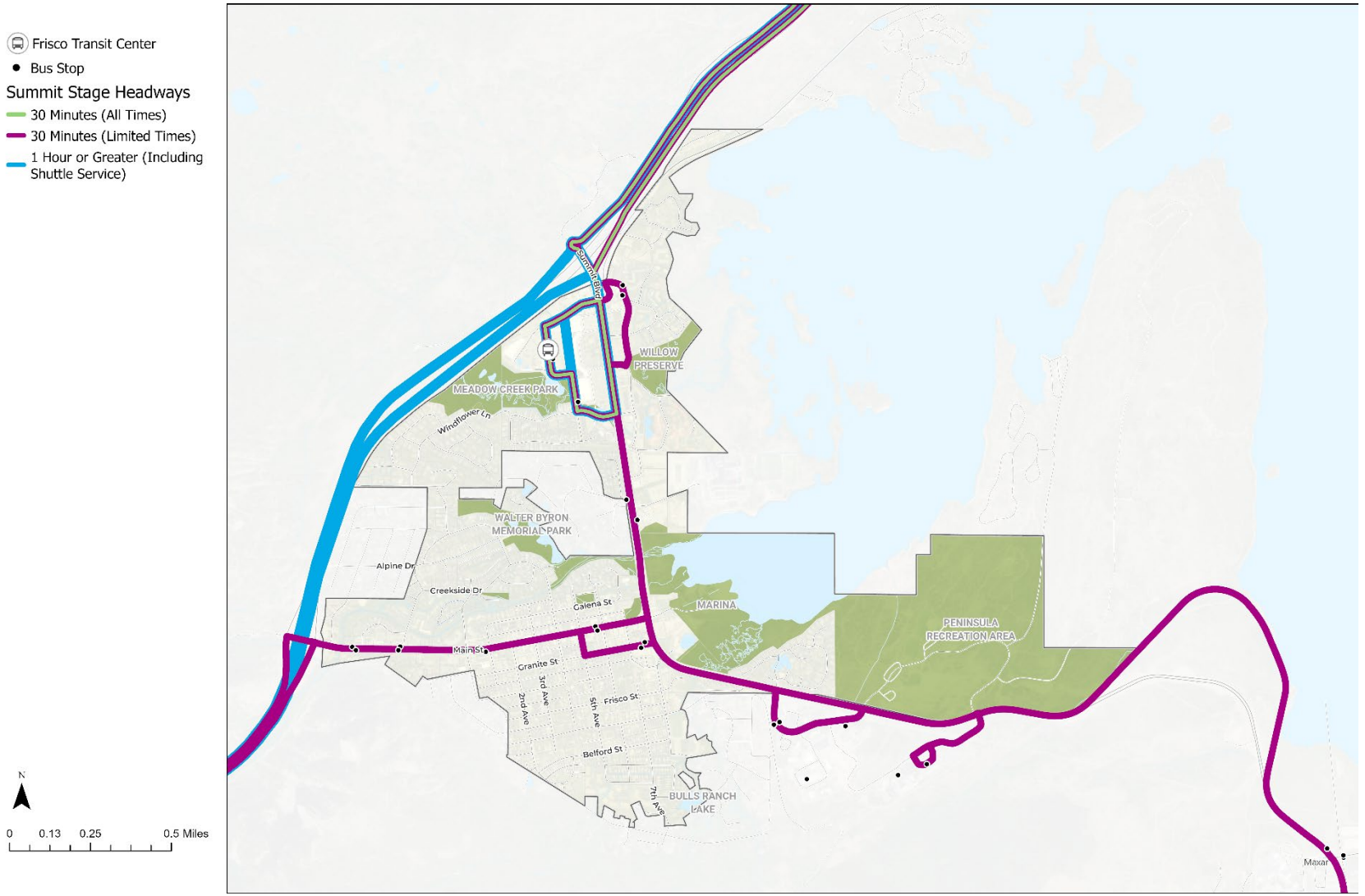


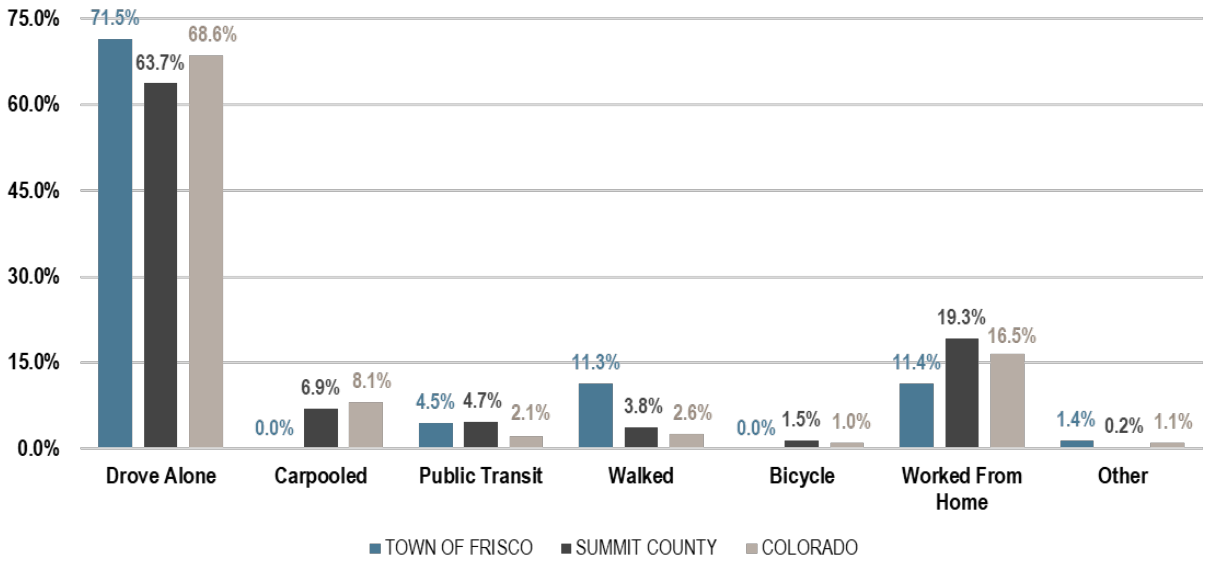
Figure 7 Summit Stage Headways, Source: Summit Stage Routes and Stops (2024)



Commute Trends

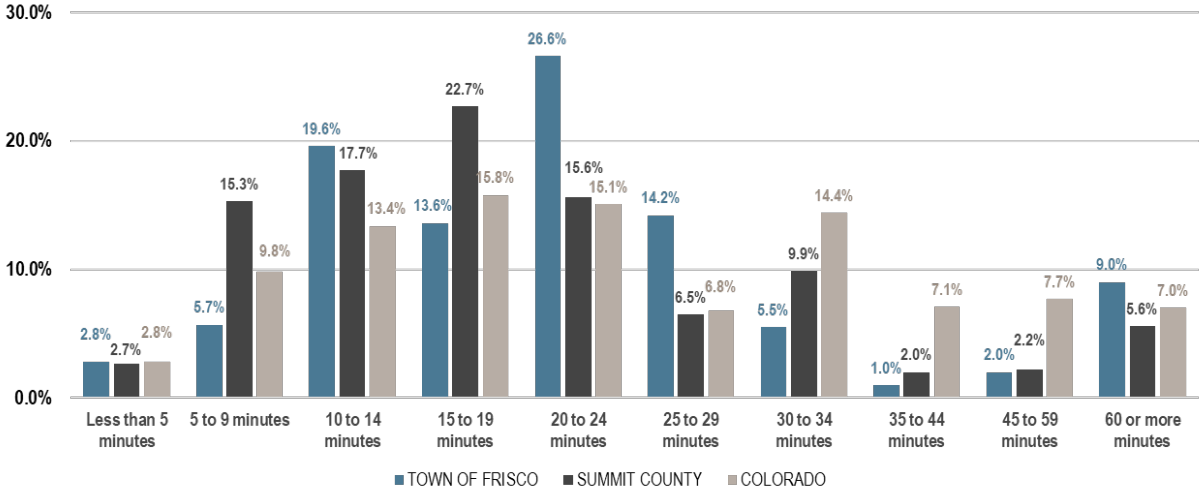
Frisco residents are more likely to drive to work (71.5 percent) when compared to Summit County residents and Colorado residents. However, Frisco residents are also far more likely to commute by walking, with 7.5 percent more residents who commute by walking than Summit County residents and 8.7 percent more residents than Colorado residents. No Frisco residents reported commuting by carpooling or biking (see Figure 8).

Figure 8: Means of Transportation to Work, Town of Frisco, Summit County, and Colorado, Source: U.S. Census, ACS 5-Year Estimates (2022)



Because Frisco is only 1.77 square-miles, higher rates of pedestrian commuters might be expected. Compared to Summit County and Colorado residents (see Figure 9), Frisco residents are more likely to have commutes ranging from 10 to 14 minutes and 20 to 29 minutes long. A greater percentage of Frisco residents also have the longest commutes, with 9.0 percent of commuters traveling 60 minutes or more to reach work.

Figure 9: Travel Time to Work in Frisco, Source: U.S. Census, ACS 5-Year Estimates (2022)



This assessment also considered travel times broken down by mode. The following bulleted list includes notable takeaways from Table 2 (takeaways highlighted in the table):

- Drivers and pedestrians make up all 10- to 14-minute commutes, which account for 19.6 percent of all driving commutes and 89.4 percent of all walking commutes.
- Drivers and transit users make up all 20 to 24-minute commutes, which account for 30.3 percent of all driving commutes and 42.1 percent of all transit commutes.
- Drivers and transit users make up all 30 to 34-minute commutes, which account for 2.0 percent of all driving commutes and 44.7 percent of all transit commutes.
- Drivers alone make up all commutes between 25 to 29 minutes and 35 minutes or longer.

Please note that because the U.S. Census recorded no bicycle commute trips, Table 2 only includes driving, walking, and transit commutes.

Overall, transit users tend to commute to destinations outside of Frisco, whereas pedestrians most likely commute within Frisco. Commute trends indicate an opportunity for mode shift from driving to walking and bicycling amongst shorter commutes of 30 minutes or less. There also appears to be an opportunity to identify ways in which the transit system could better support local commutes and regional commutes longer than 35 minutes.

Table 2: Means of Transportation to Work by Travel Time, Source: U.S. Census, ACS 5-Year Estimates (2022)

	Driving Trips		Walking Trips		Transit Trips	
	TOTAL	% OF ALL DRIVING TRIPS	TOTAL	% OF ALL WALKING TRIPS	TOTAL	% OF ALL TRANSIT TRIPS
Less than 10 minutes	107	9.0%	20	10.6%	0	0.0%
10 to 14 minutes	122	10.2%	168	89.4%	0	0.0%
15 to 19 minutes	192	16.1%	0	0.0%	10	13.2%
20 to 24 minutes	362	30.3%	0	0.0%	32	42.1%
25 to 29 minutes	210	17.6%	0	0.0%	0	0.0%
30 to 34 minutes	24	2.0%	0	0.0%	34	44.7%
35 to 44 minutes	15	1.3%	0	0.0%	0	0.0%
45 to 59 minutes	29	2.4%	0	0.0%	0	0.0%
60 minutes or more	133	11.1%	0	0.0%	0	0.0%

Travel Patterns

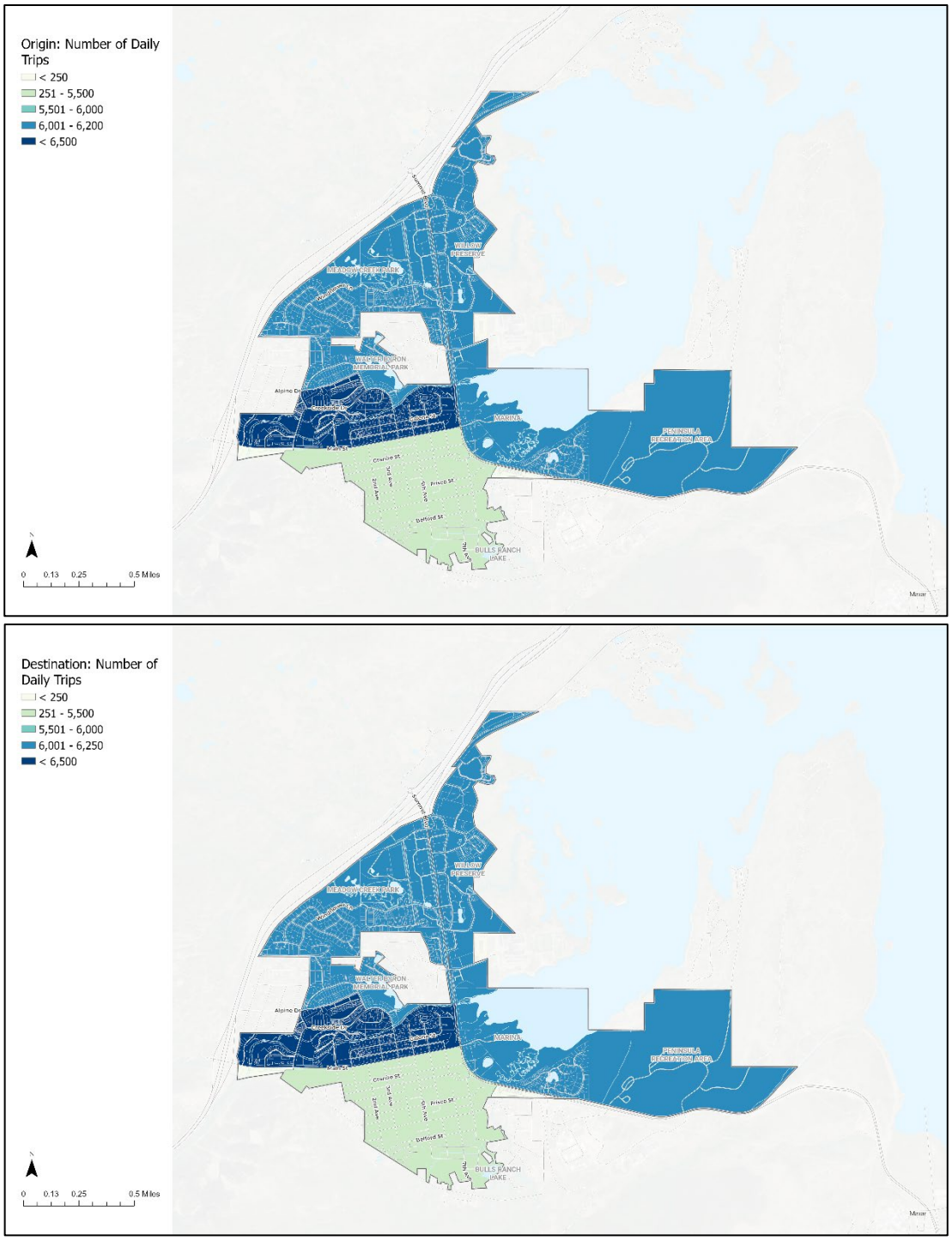
To better understand how people travel within and around Frisco, this assessment reviewed travel data generated by the platform *Replica*. Data provided by Replica for this study includes characteristics of daily trips beginning and ending in Frisco. Replica is a visualization tool that offers a synthetically generated representation of the activities and movement of residents and visitors in a metropolitan area for a representative week during a given season. Replica represents movement by combining data from three primary sources: *public use population census data, proprietary locational data from telecommunications and other IT infrastructure in the region, and field observations data from customer public agencies (ground truth)*. This data, paired with local understanding, can help the Town of Frisco better understand how people move.

The results on the following pages include Replica data from Spring 2023 and illustrate trips originating and ending in the study area by mode used. The analysis used block groups as the geographical breakdown. Data on transit trips in Frisco is unavailable via Replica. Please find information on the Frisco transit environment on page 12. ***Note that the trip pattern data presented is modeled and helpful for identifying trends. However, these results should only be used to support other analyses and known conditions, and not taken at face value.***

All Origin and Destination Trips

The Replica platform indicates that 24,210 trips began in Frisco and ended in or outside of Frisco and 24,372 trips ended in Frisco and began in or outside of Frisco per day (Figure 10). The locations of most origin trips in Frisco correspond with destination trips in Frisco, with the block group immediately north of Main Street being the most popular origin and destination area, followed by north Frisco and east of Summit Boulevard.

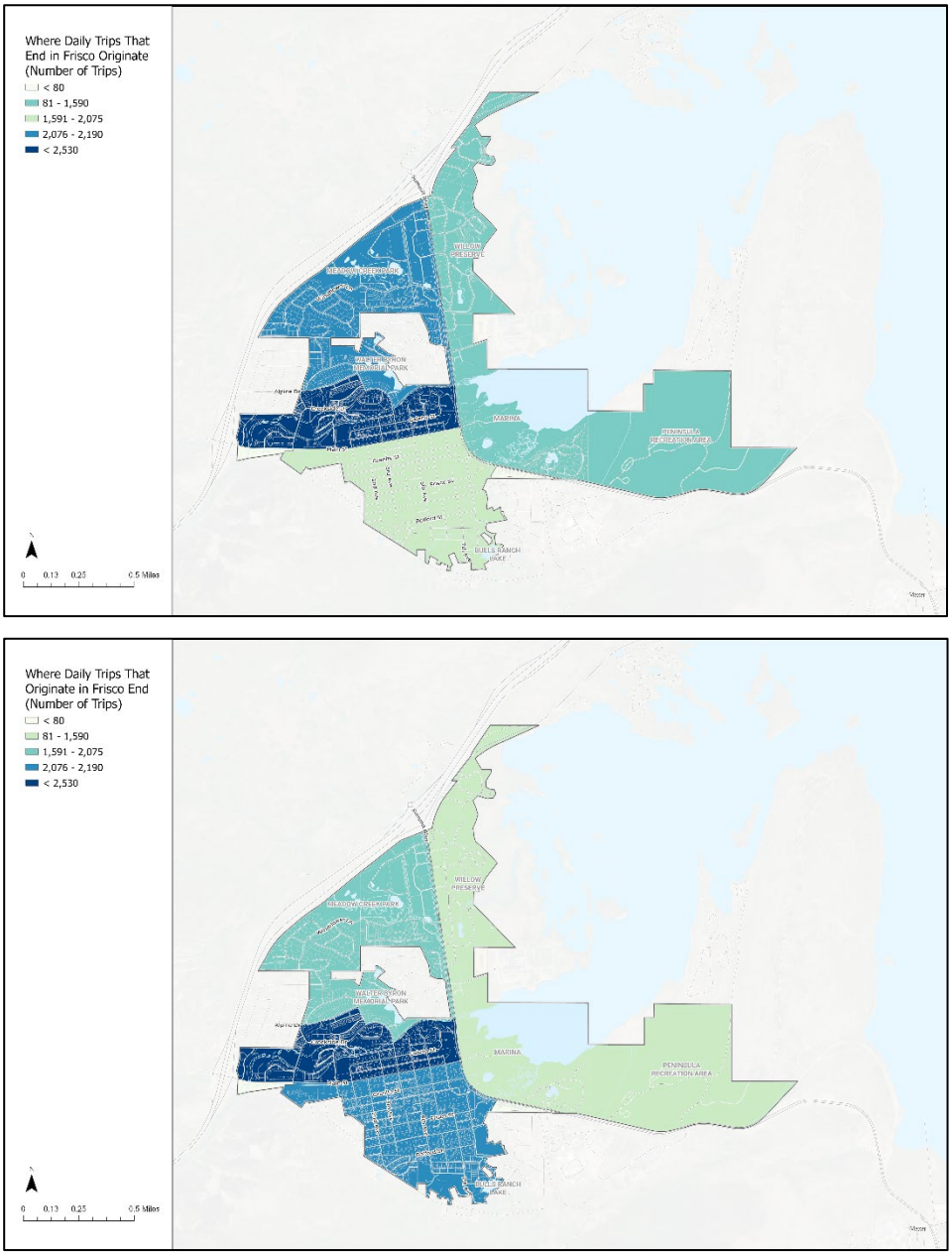
Figure 10: Number of Daily Trips Originating and Ending in Frisco, Source: Replica (2023)



Daily Trips That Both Begin and End in Frisco

Looking at Frisco-only trips, the Replica platform indicates that 8,297 trips both begin in Frisco and end in Frisco, which account for approximately 35 percent of all daily trips depicted in Figure 10. Most trips that begin in Frisco end between Alpine Drive and Bills Ranch Lake, including Downtown Frisco, the retail and mixed-use hub, and south Frisco, which is dominated by residential housing. The highest concentration of trips that end in Frisco originates between Alpine Drive and Main Street. However, while Frisco-based trips often end on the south side, they typically begin in north Frisco, between Alpine Drive and the I-70 ramp, where many key destinations, housing options, and larger box and grocery stores exist. Unlike all daily trips represented in Figure 10, there is an evident pattern of movement amongst Frisco-based trips, with trips beginning north of Main Street and the east, and moving south and west to end downtown and in south Frisco (see Figure 11).

Figure 11: Number of Daily Trips That Both Begin and End in Frisco, Source: Replica (2023)

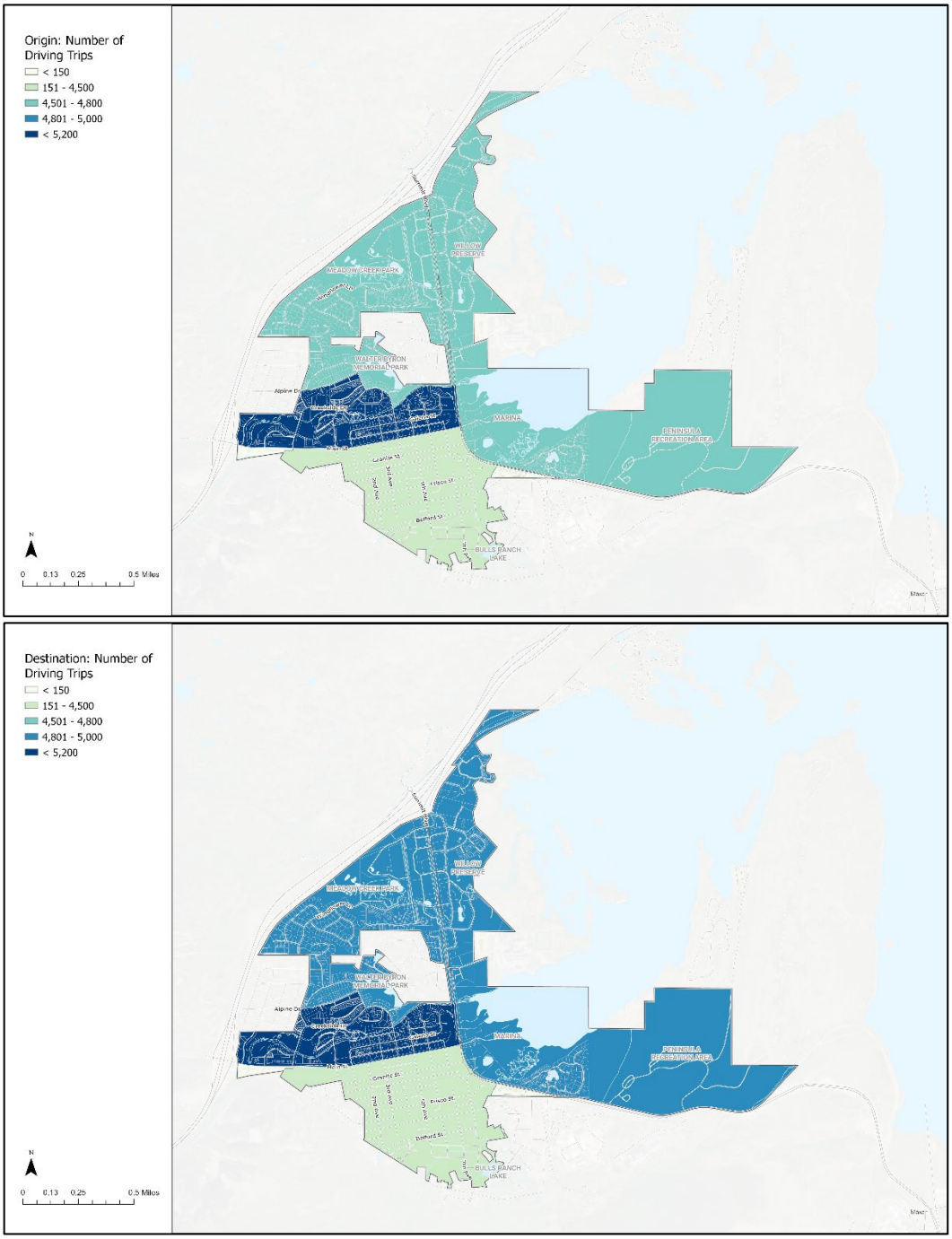


Results from Replica presented on the following pages use data from Figure 10, which includes trips beginning and ending both in and outside of Frisco.

Origin and Destination Trips: Driving

The Replica platform indicates that 18,602 driving trips began in Frisco and 19,237 driving trips ended in Frisco. Most driving trips originated throughout the central and northeast sections of Frisco. While driving trip destinations indicate similar travel patterns, far more driving trips, approximately 600, ended in the north and east compared to origin trips (see Figure 12).

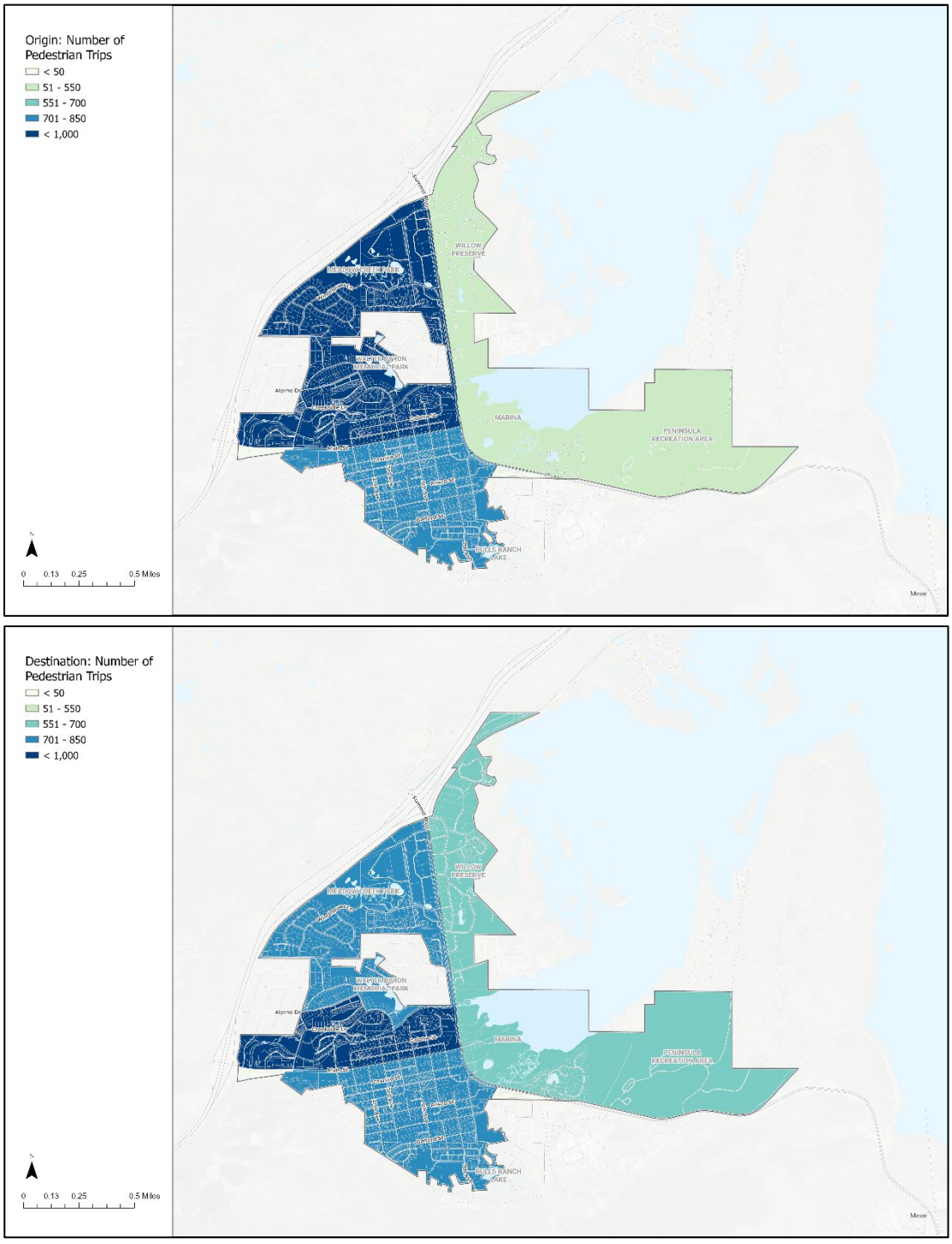
Figure 12: Number of Driving Trips Originating and Ending in Frisco, Source: Replica (2023)



Origin and Destination Trips: Pedestrian

The Replica platform indicates that 3,064 pedestrian trips began in Frisco and 3,123 pedestrian trips ended in Frisco. Most pedestrian trips originated north of Main Street, followed by the southern section of the Town of Frisco. Most pedestrian trips ended in the same areas. However, fewer trips ended on the north side of Frisco, and more trips ended in the block groups surrounding Frisco Bay to the east (see Figure 13).

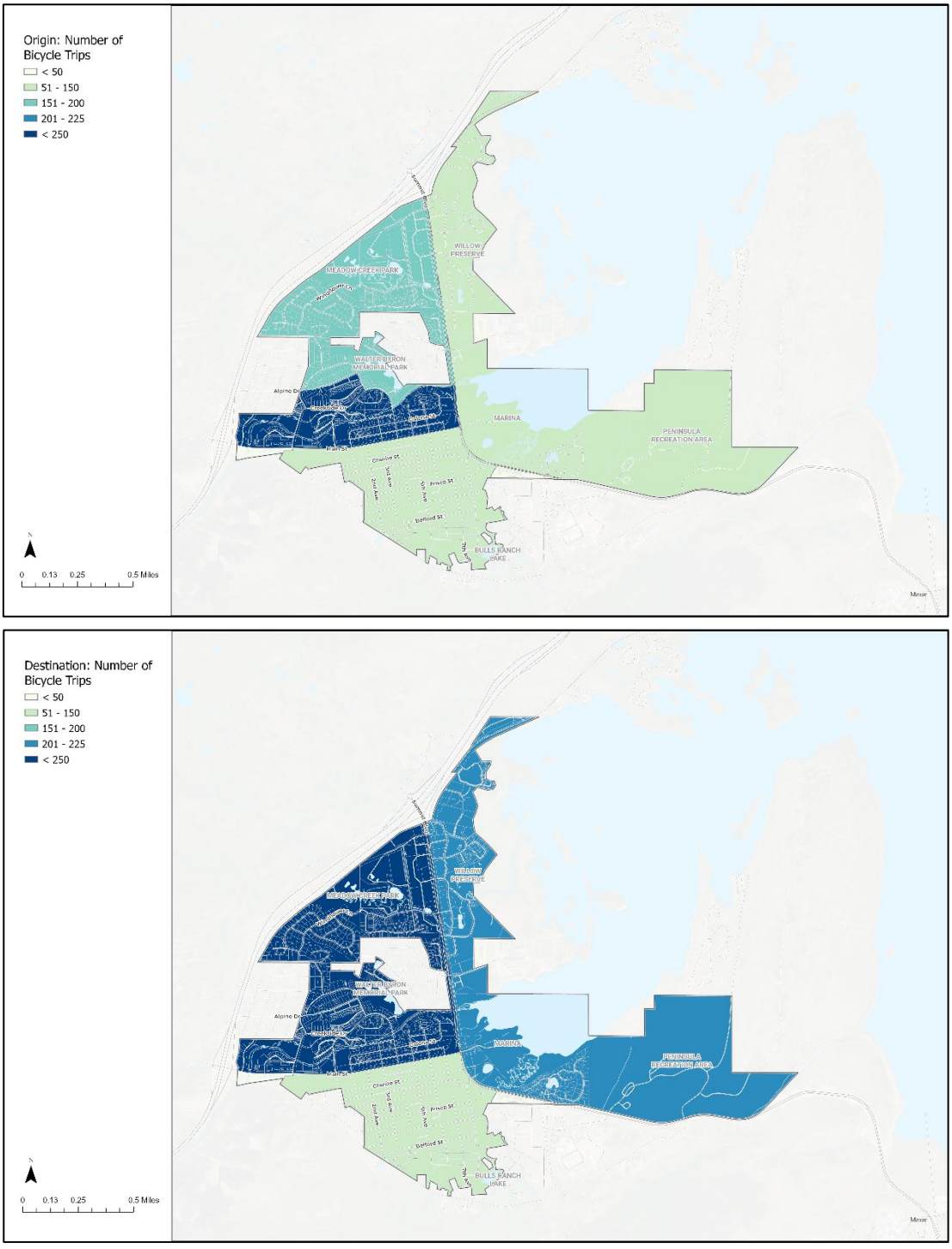
Figure 13: Number of Pedestrian Trips Originating and Ending in Frisco, Source: Replica (2023)



Origin and Destination Trips: Bicycle

The Replica platform indicated that 709 bicycle trips began in Frisco and 815 bicycle trips ended in Frisco**.** Most bicycle trips originated between Alpine Drive and Main Street, with few bicycle trips beginning elsewhere in Frisco. However, bicycle trip destinations are far more widely spread. Approximately 100 more bicycle trips ended on the north and east sides of Frisco compared to bicycle trips that began in Frisco (see Figure 14).

Figure 14: Number of Bicycle Trips Originating and Ending in Frisco, Source: Replica (2023)



Traffic Safety

Crash Trends

Crash trends can provide an understanding of Frisco's existing roadway network safety conditions. Based on data provided by CDOT, between 2018 and 2022, 210 total crashes occurred in Frisco, including four crashes (1.9 percent) that resulted in a fatality or serious injury (also known as a Killed or Serious Injury or KSI crash) (see Figure 15). Most crashes in Frisco occurred on Summit Boulevard. This is also where the most severe crashes occurred. Intersections with the highest concentration of crashes include Summit Boulevard's intersections with Lusher Court, Hawn Drive/Ten Mile Road, and Main Street (see Figure 16).

Figure 15: Frisco Crash Analysis, Source: CDOT Open Data (2018-2022)

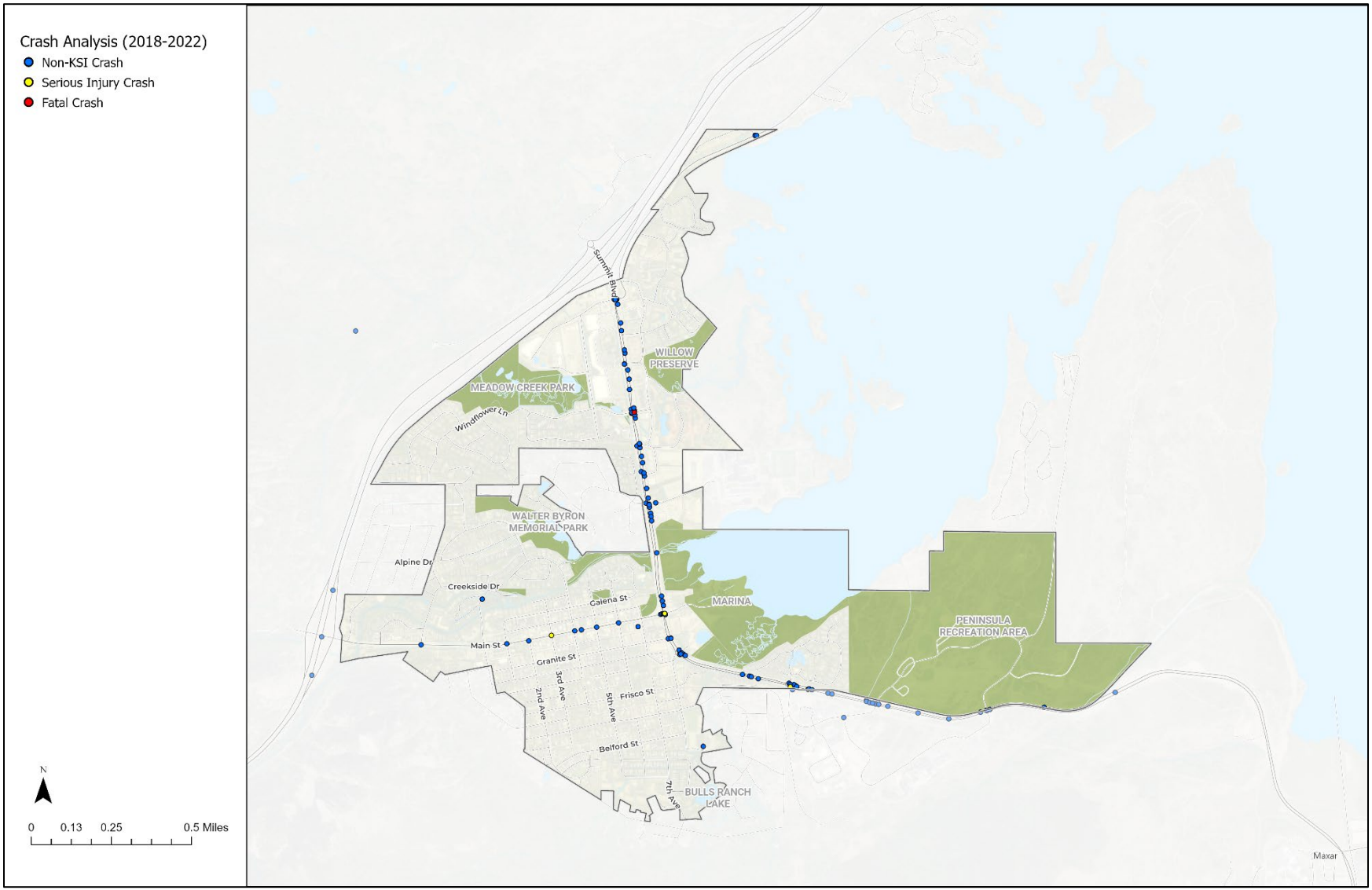
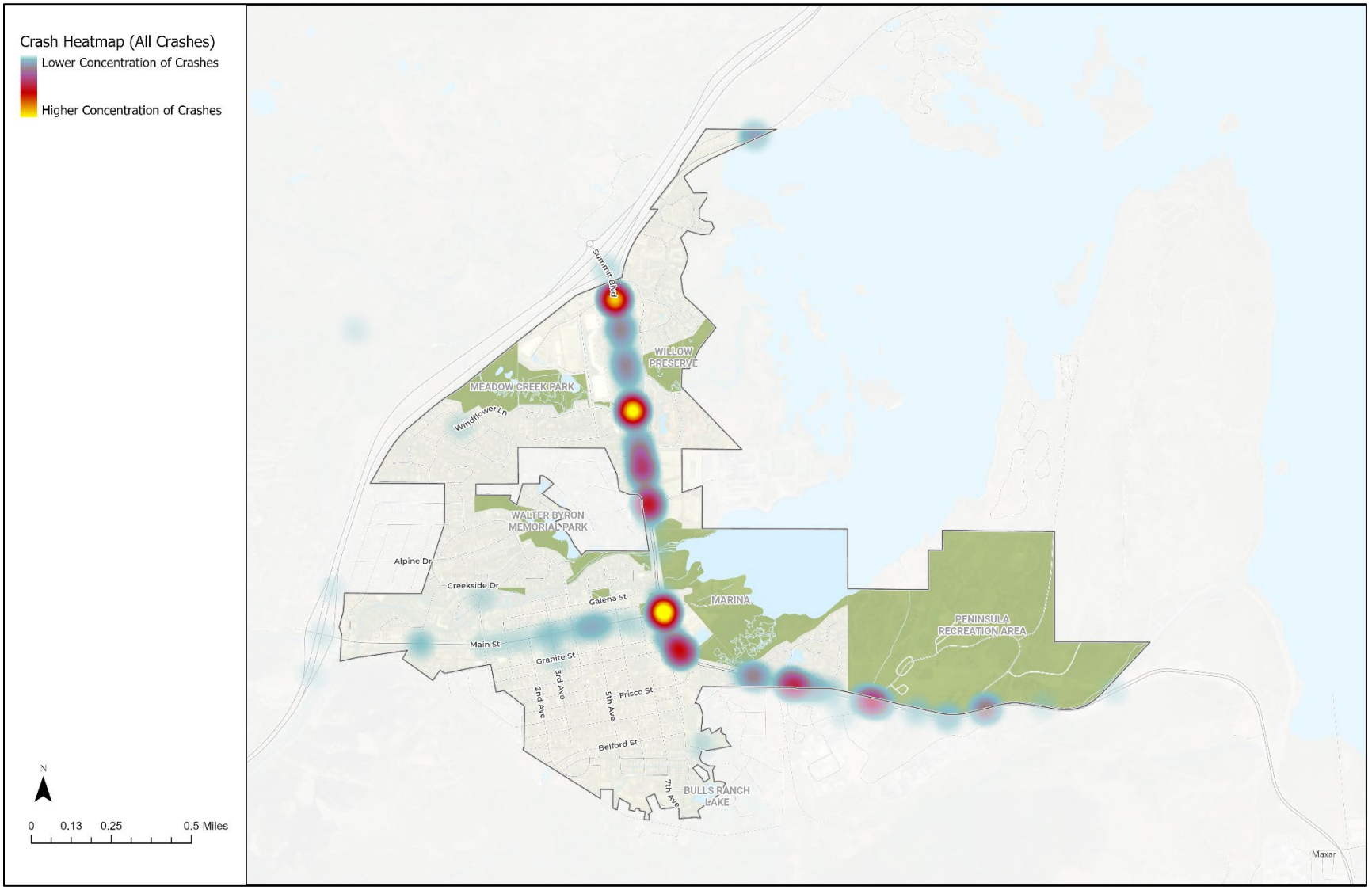


Figure 16: Concentrations of Crashes in Frisco, Source: CDOT Open Data (2018-2022)



Crashes Involving Non-Motorists

Like crashes involving only motor vehicles, crashes involving bicyclists and pedestrians are also most likely to occur on Summit Boulevard and Main Street. However, bicycle- and pedestrian-involved crashes are more likely to have severe outcomes compared to all crashes (see Figure 17). Of the four KSI crashes that occurred in Frisco from 2018-2022, three resulted in the fatality or serious injury of someone not traveling by motor vehicle. Pedestrian crashes, including the single fatal crash, occurred at points on Summit Boulevard, where pedestrians must cross to continue along sidewalks or other designated pedestrian routes. Bicyclist crashes were more common on Main Street, which includes shared lanes but no dedicated bicycle infrastructure between Madison Avenue and 7th Avenue.

Figure 17: Bicycle and Pedestrian Crashes, Source: CDOT Open Data (2018-2022)