

Chapter 10: City of Boulder

The FLEX to Boulder continues to the City of Boulder along the SH119/Diagonal Highway, to SH157/Foothills Parkway, to Pearl Parkway, to US 36, to SH119 through downtown Boulder, before turning onto SH93 and terminating at University of Colorado (CU Boulder). This amounts to approximately 5 miles.

Road Network

Figure 10-1 shows bridges on state and US highways, active railroads, and traffic signals within the City of Boulder. Because of the mix of roadways used by the FLEX route, maintenance for bridges and traffic signals falls under the auspices of both the City of Boulder and CDOT.

The City of Boulder maintains a large traffic signal network on arterial streets. The traffic signals were mapped by the City of Boulder, and shared with the NFRMPO. Within the City, more than 140 traffic signals control traffic, including 33 on the FLEX Boulder Express route. Traffic signals are predominantly located on arterial streets. Downtown Boulder has a higher density of signals, though the Broadway corridor in general has the most dense signal network.

There are 33 bridges on state-maintained highways in the Study Area. According to CDOT, four bridges were rated in fair condition and the rest in good condition in 2015. There is one Load Restricted bridge on SH7, near SH157/Foothills Parkway. The load restriction category for this bridge is orange. The maximum allowable permit weight depends on the number of axle groups and distance between axle groups, and is identified in **Appendix A: Bridge Load Restrictions** for all load restriction categories.

BNSF Railway is the only rail operator in the City of Boulder. Its route is parallel to SH119/Diagonal Highway, until Boulder Junction where it begins to head east parallel to SH7/Arapahoe Avenue. Multiple spurs exist in eastern Boulder, but are outside of the Study Area, and some are inactive. The crossings are still marked by the FRA as shown in **Figure 10-2**.

Figure 10-1 Boulder Bridges and Traffic Signals

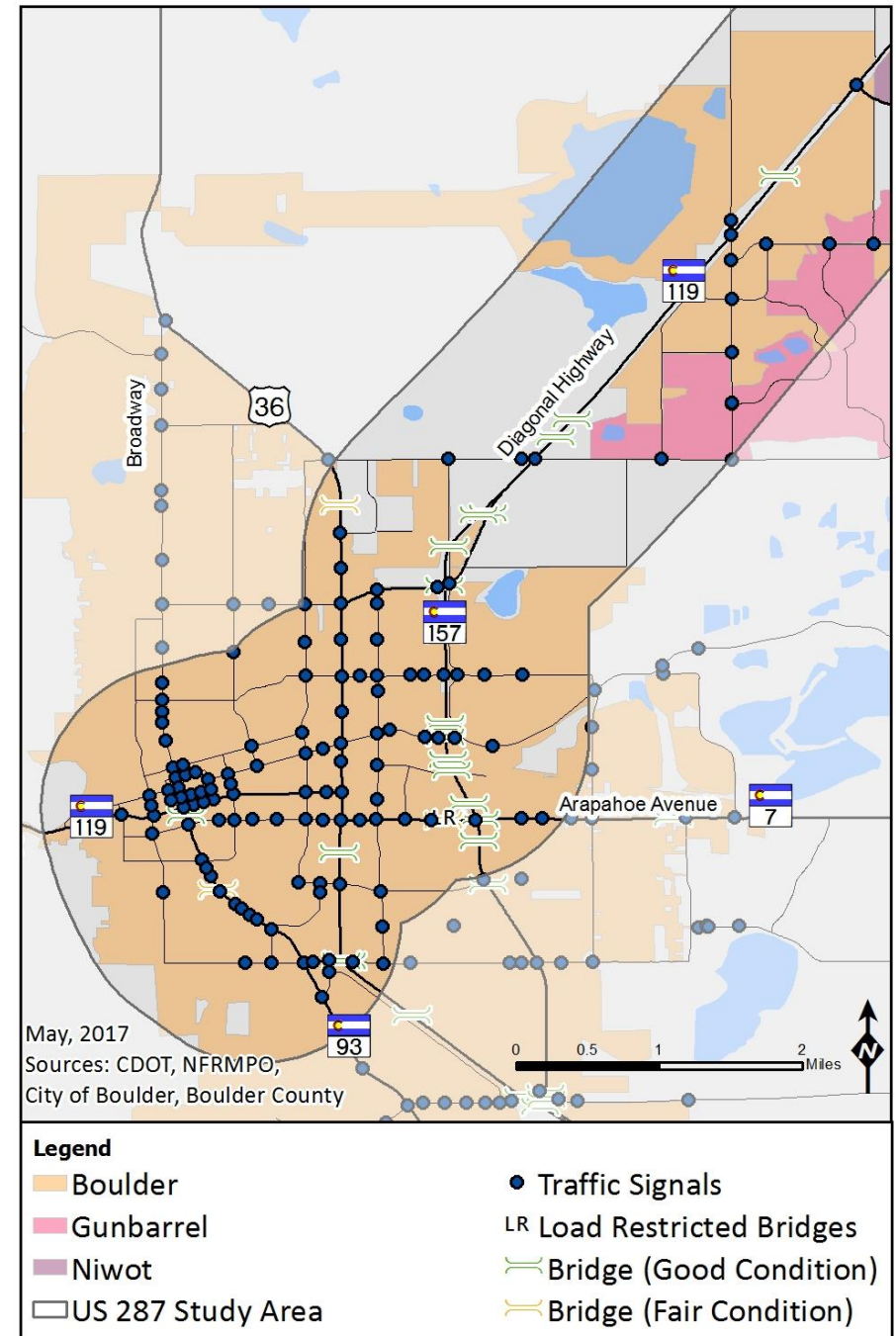


Figure 10-3 shows the Annual Average Daily Traffic (AADT) on state highways in the City. SH119/Diagonal Highway, SH157/Foothills Parkway, US 36 have the highest volumes in the City. US36 north of SH119 and west of downtown Boulder have the lowest traffic volumes.

Figure 10-4 illustrates the Annual Average Daily Truck Traffic for the corridor. The lowest truck traffic is on US36 north of SH119, while the highest is on the SH157/Foothills Parkway corridor, near the intersection of SH7/Arapahoe Avenue. State highways traversing downtown Boulder have moderate truck traffic. SH119 west of downtown Boulder has low truck traffic in comparison.

Figure 10-5 shows the number of through lanes on state highways, US highways, and local roads used by FLEX. The highest number of lanes are on the SH119/Diagonal Highway junction with SH157/Foothills Parkway, SH7/Arapahoe Avenue east and west of SH157/Foothills Parkway, and on SH93 south of the CU campus. In each of these locations, there are six through lanes. Most other state highways are four lanes, except US36 which is two through lanes.

Speed limits on state highways, US highways, and local roads used by FLEX vary depending on their locations as shown on **Figure 10-6**. SH119/Diagonal Highway and US36 north of Broadway are built for higher speeds, allowing the speed limits to be 55 MPH. US36 as it heads southeast toward Denver has a 65 MPH speed limit. Roads in downtown Boulder have lower speed limits, ranging from 30 to 35 MPH.

Figure 10-7 shows Drivability Life, CDOT’s rating system for pavement condition. Much of the City of Boulder has a medium Drivability Life. A portion of SH119 at the eastern Boulder City boundary is rated Low, but a project is underway to improve pavement condition in this area. SH119 has a Low Drivability Life rating as it heads west from downtown Boulder.

Figure 10-2 Boulder Active Railroads and At-Grade Crossings

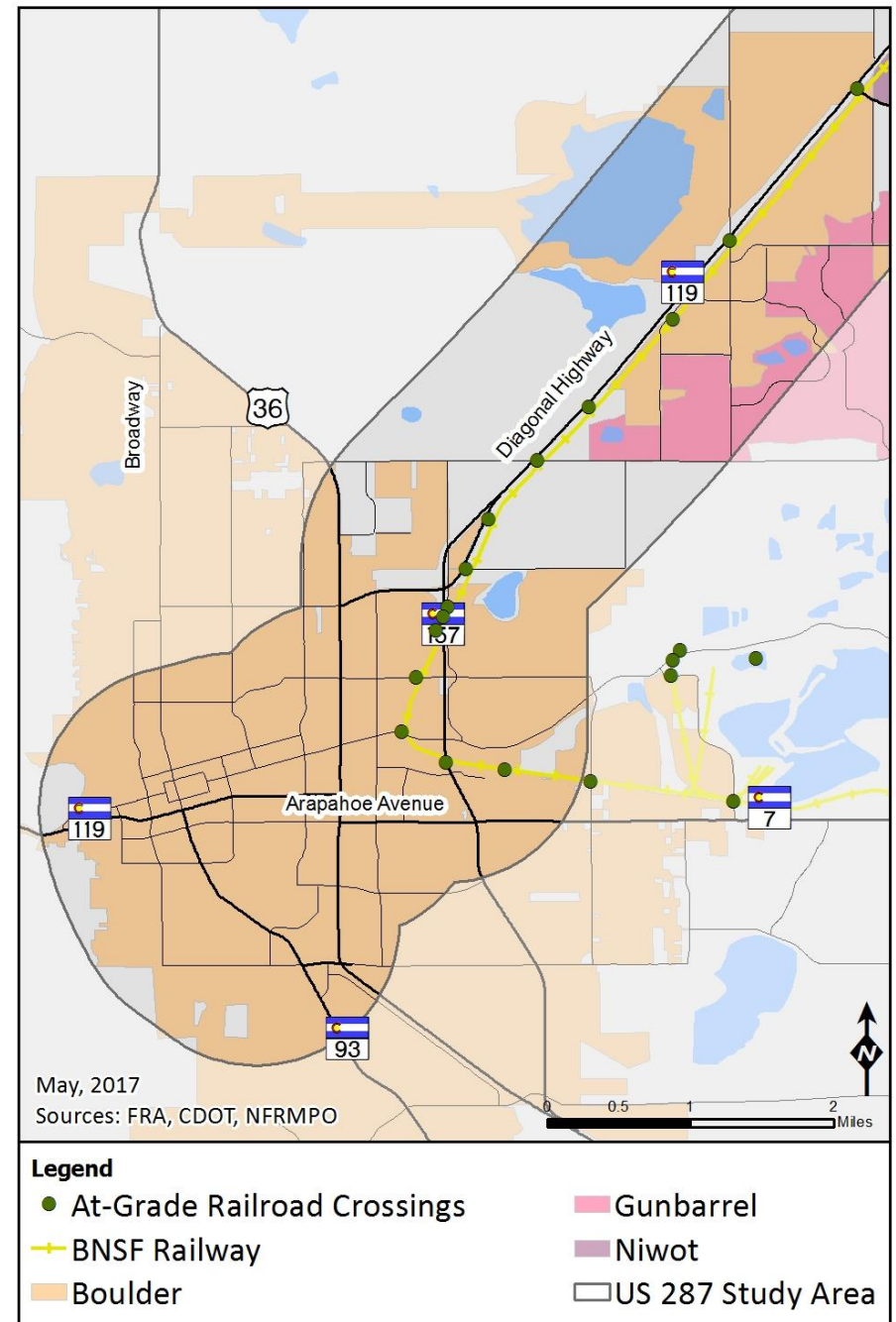


Figure 10-3 Boulder Annual Average Daily Traffic

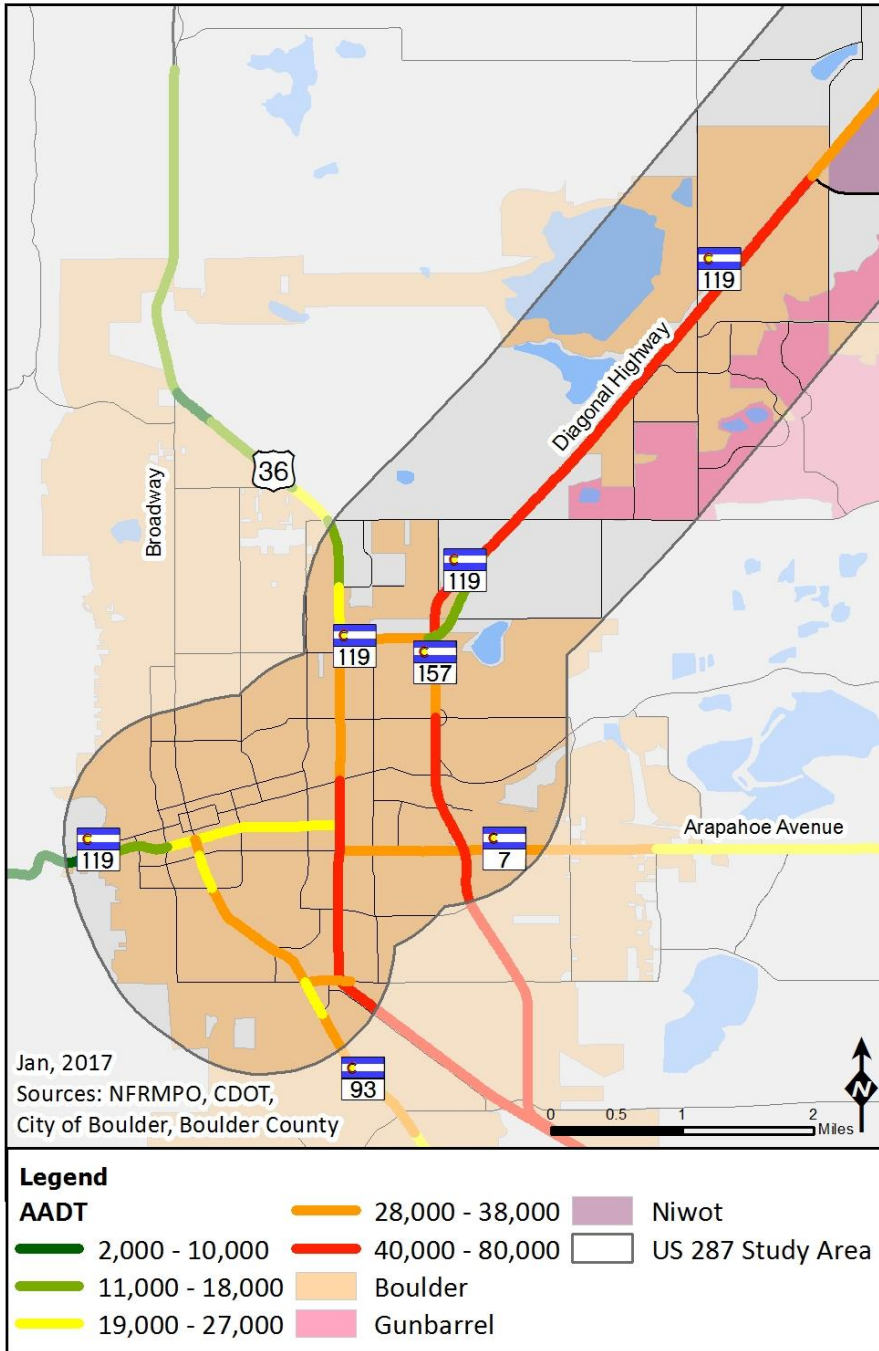


Figure 10-4 Boulder Annual Average Daily Truck Traffic

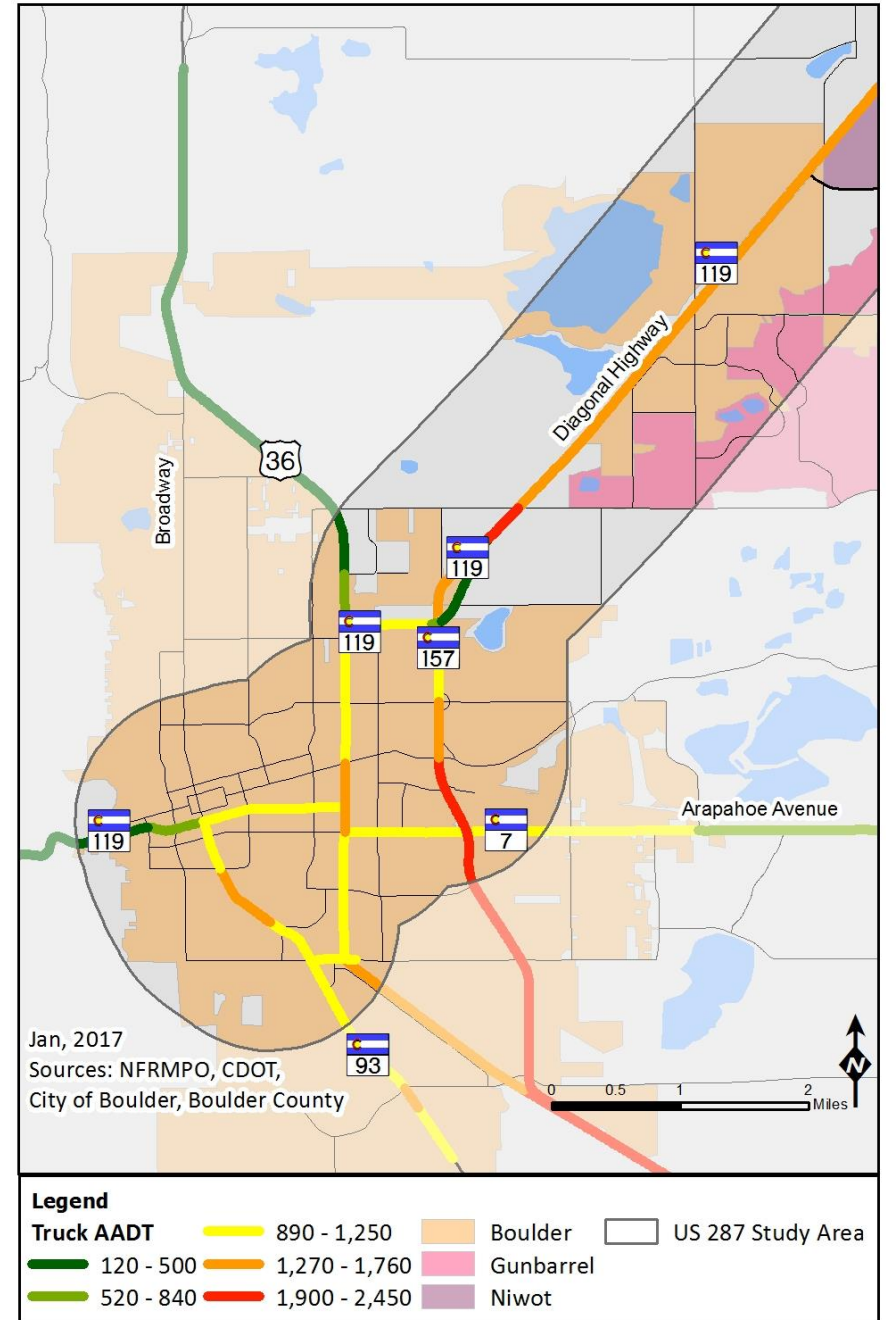


Figure 10-5 Boulder Number of Through Lanes

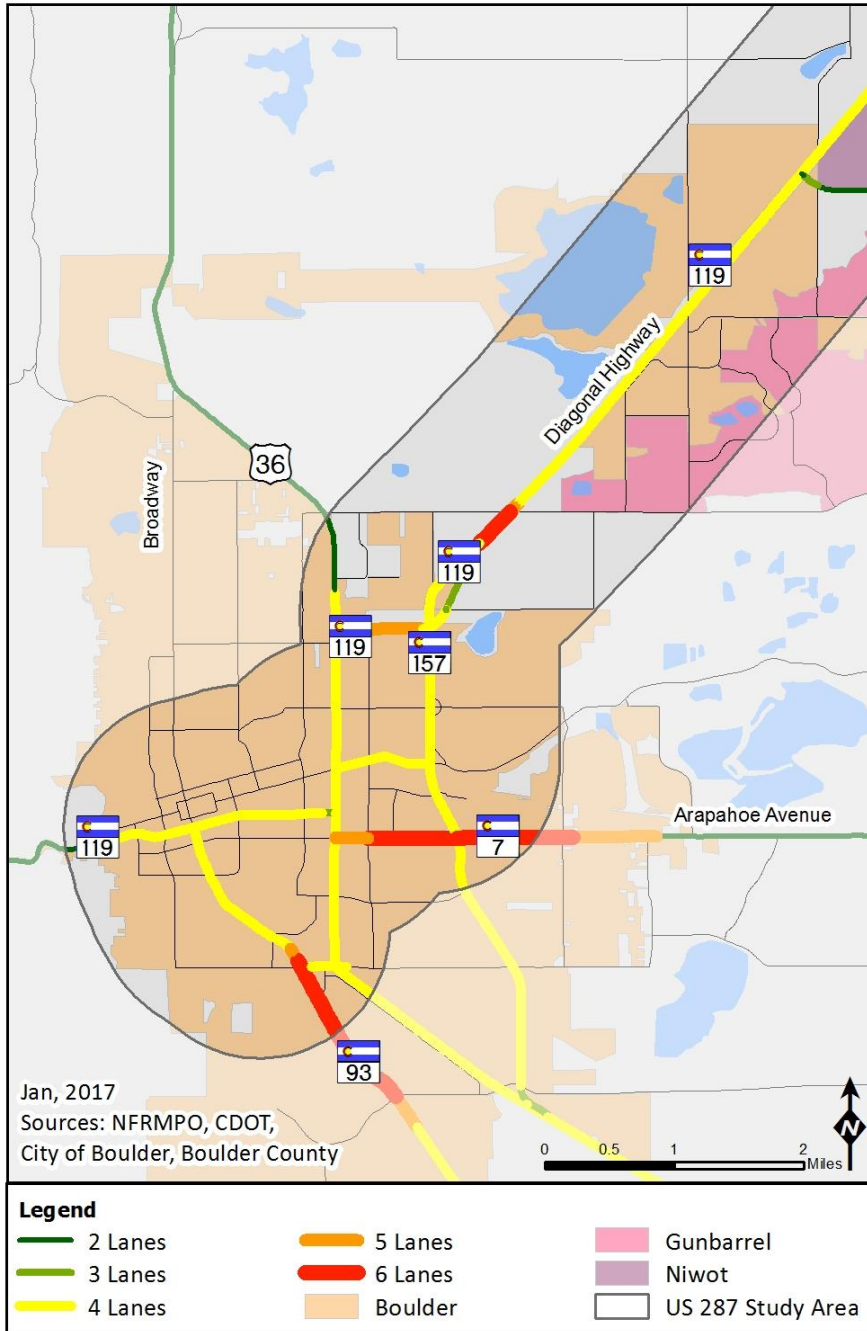


Figure 10-6 Boulder Speed Limits

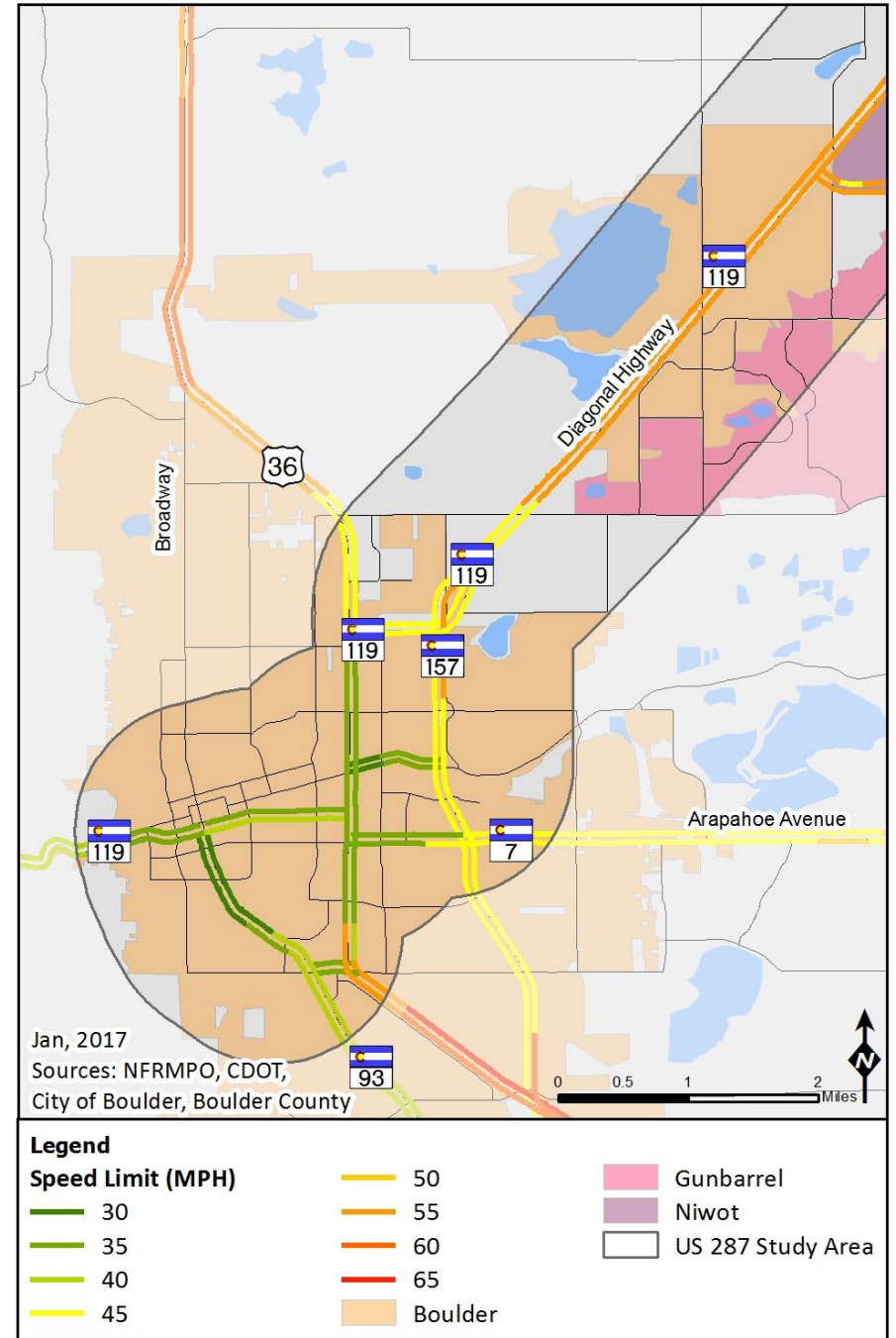
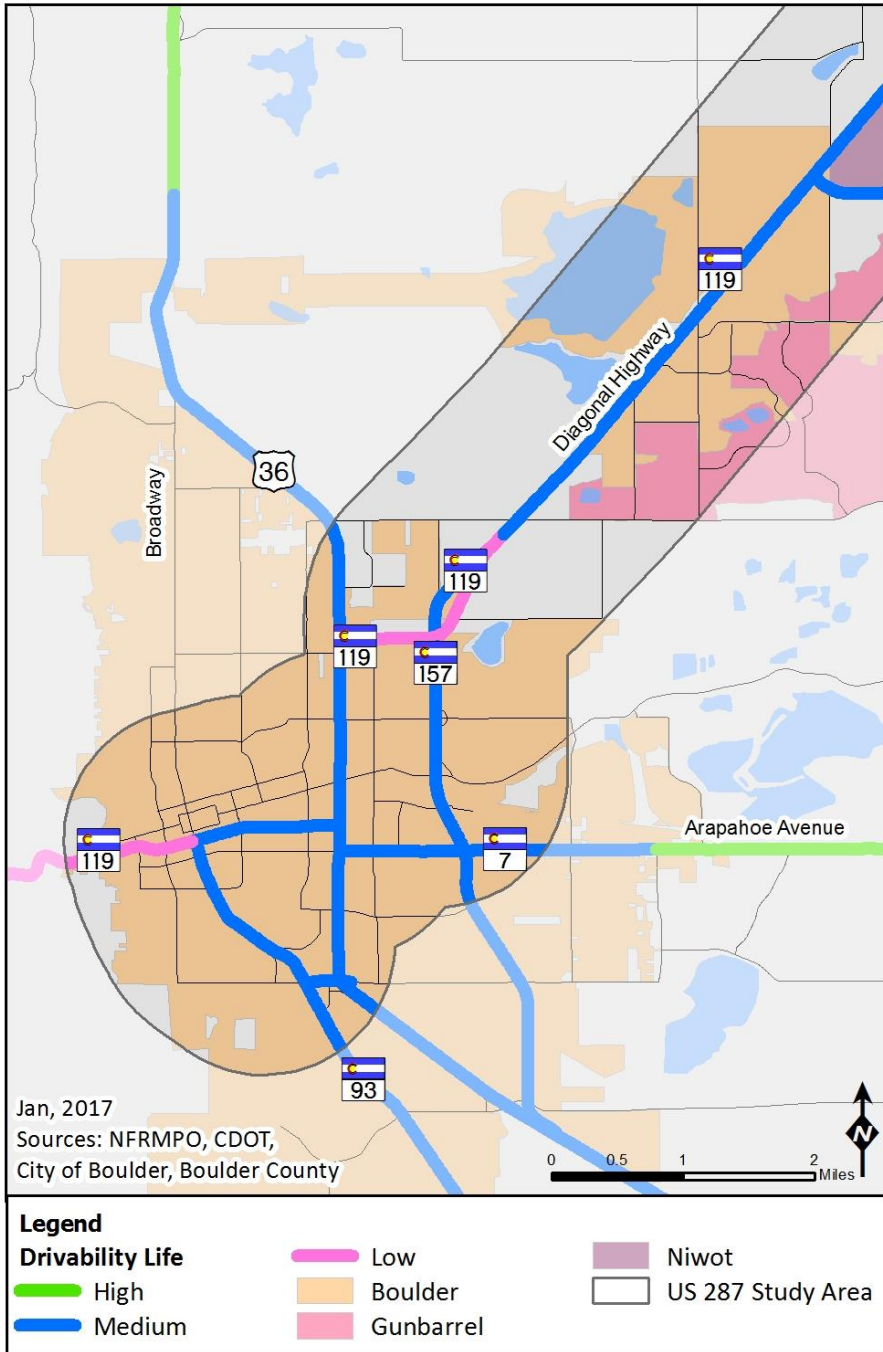


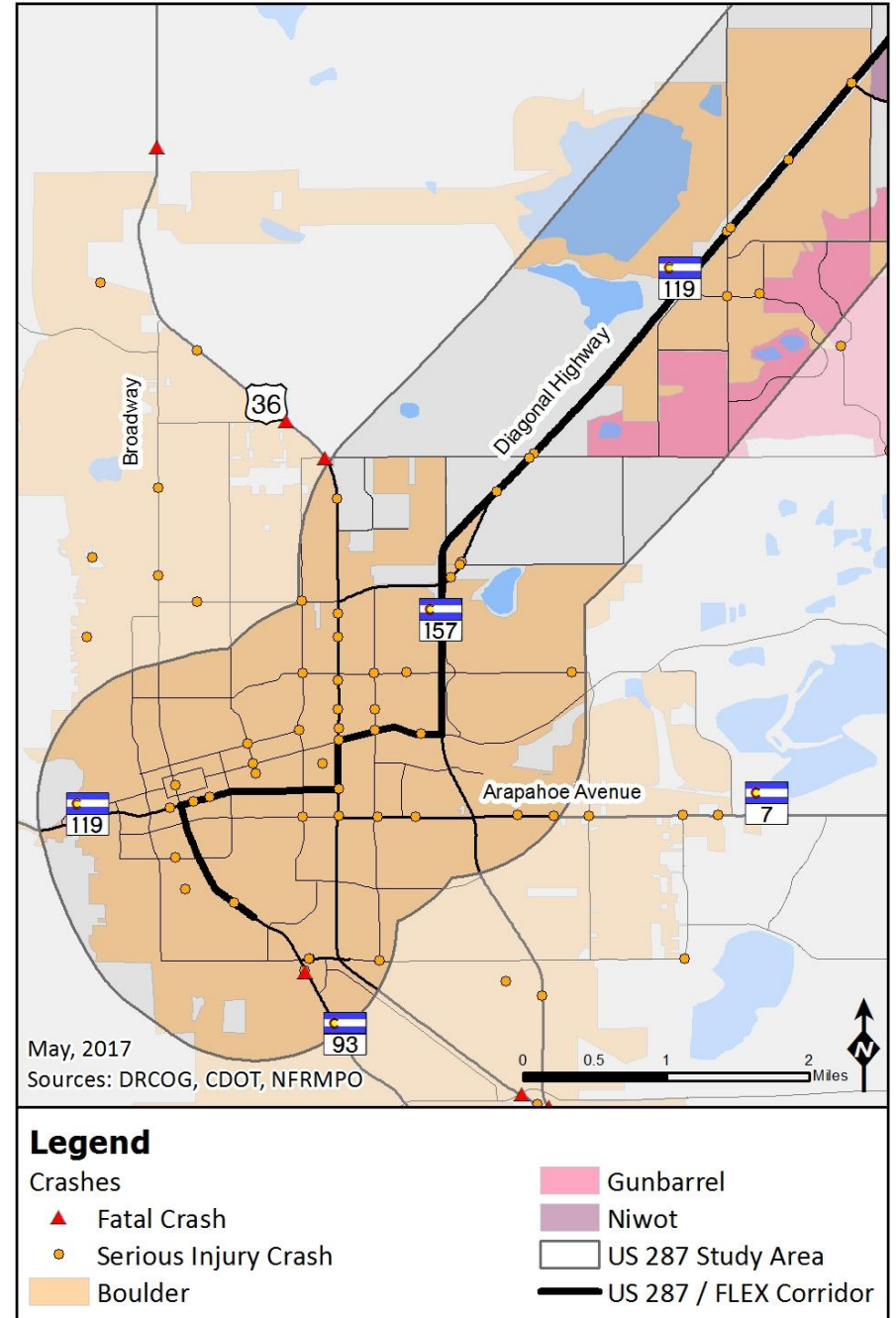
Figure 10-7 Boulder Drivability Life



Crash Data

Figure 10-8 shows the serious injury and fatal crashes in the Boulder Study Area between 2009 and 2013. There was one fatal crash and 54 serious injury crashes in the Boulder Study Area.

Figure 10-8 Boulder Serious Injury and Fatal Crashes (2009-2013)

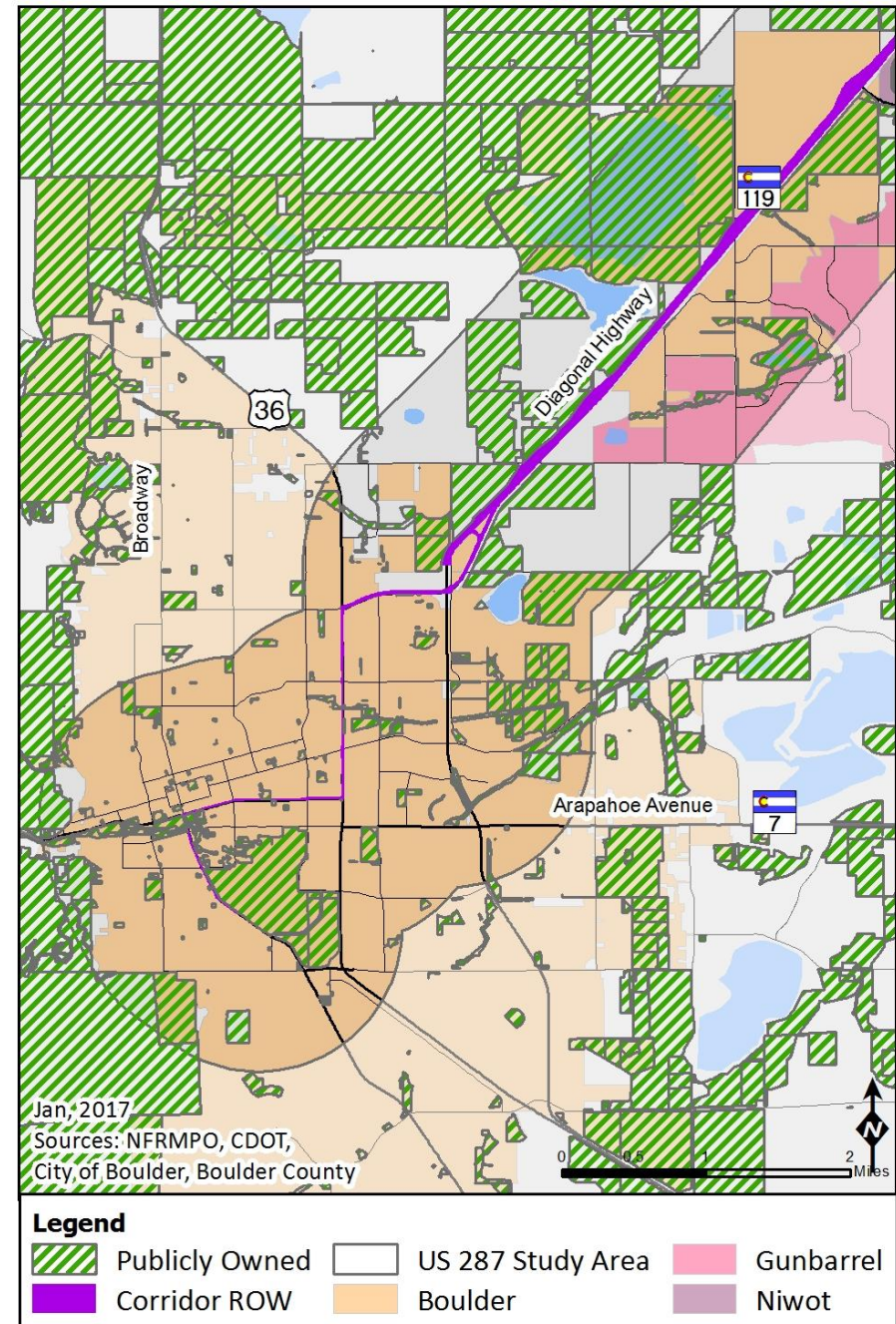


Right-of-Way

An estimate of US287 right-of-way is shown on **Figure 10-9**. Based on Boulder County parcel data, the right-of-way is colored in between the parceled land. The width of the right-of-way estimate along the FLEX corridor ranges from 79-149 feet in Boulder. Due to the irregular borders of the right-of-way, a general map is presented in the figure. In-depth maps are available upon request.

Also shown is the land owned by the City of Boulder, Boulder County, the State of Colorado, or the US. CDOT is in the process of creating a right-of-way database, which will be available in the future. The expected timeline is three to five years.

Figure 10-9 Boulder US287 Right-of-Way and Publicly Owned Land



Bicycle and Pedestrian

Boulder is well known for its bicycle and pedestrian infrastructure and culture. As shown on **Figure 10-10**, the network is dense and connected. A variety of trails, sidewalks, and bicycle lanes allow non-motorized transportation to be a viable option for mobility in the City. No lanes exist on SH119, though wide shoulders allow confident cyclists to travel. Because of the density of the network, the map has been divided to show downtown Boulder and Northeast Boulder on separate maps, **Figures 10-11 and 10-12**. Northeast Boulder also shows portions of Gunbarrel and Niwot.

In addition, the city has the Boulder BCycle system, which is a bicycle sharing service located predominantly downtown and near the CU campus. The bicycles can be hired on a day, month, or annual pass or on a pay-as-you-go model.

Figure 10-10 Boulder Bicycle and Pedestrian Infrastructure

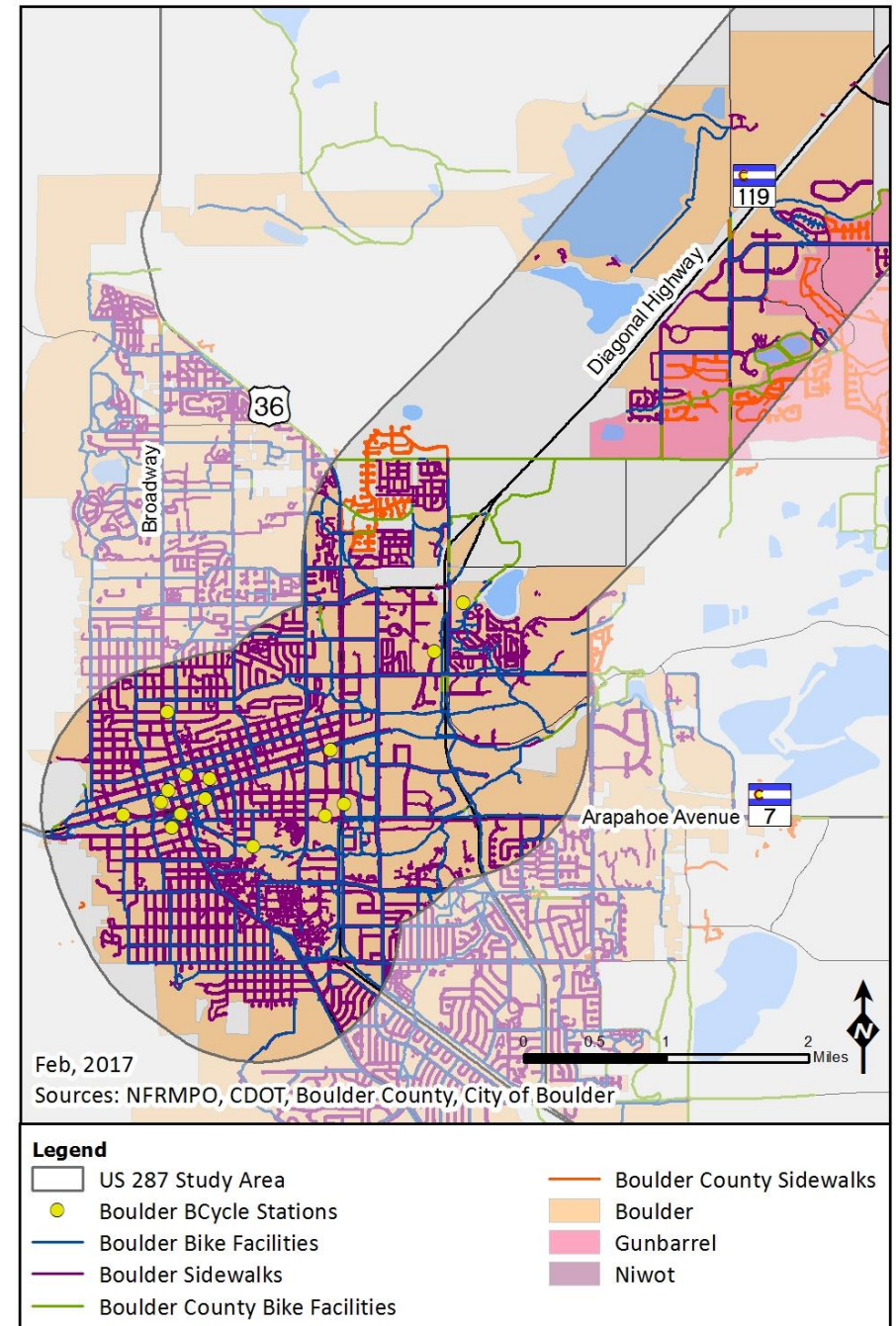


Figure 10-11 Downtown Boulder Bicycle and Pedestrian Infrastructure

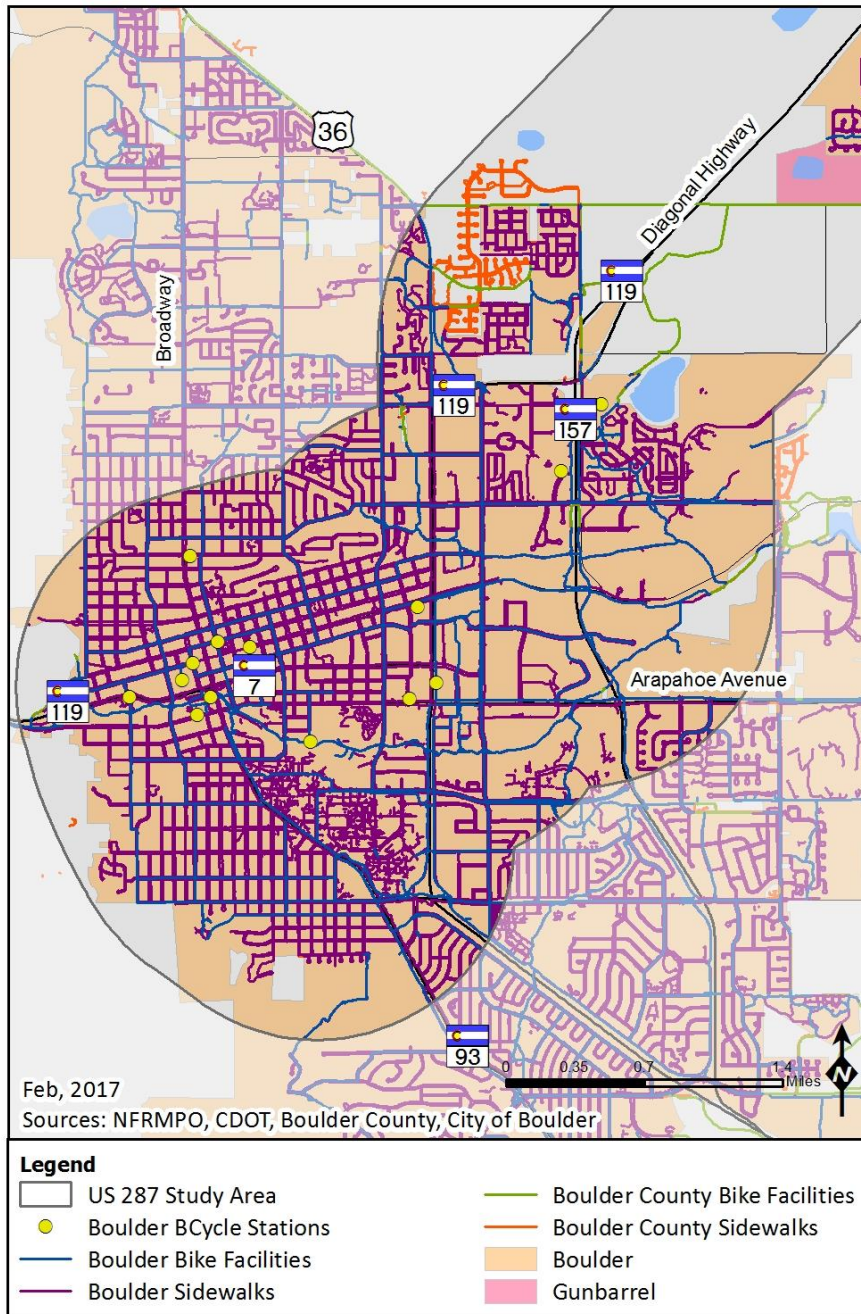
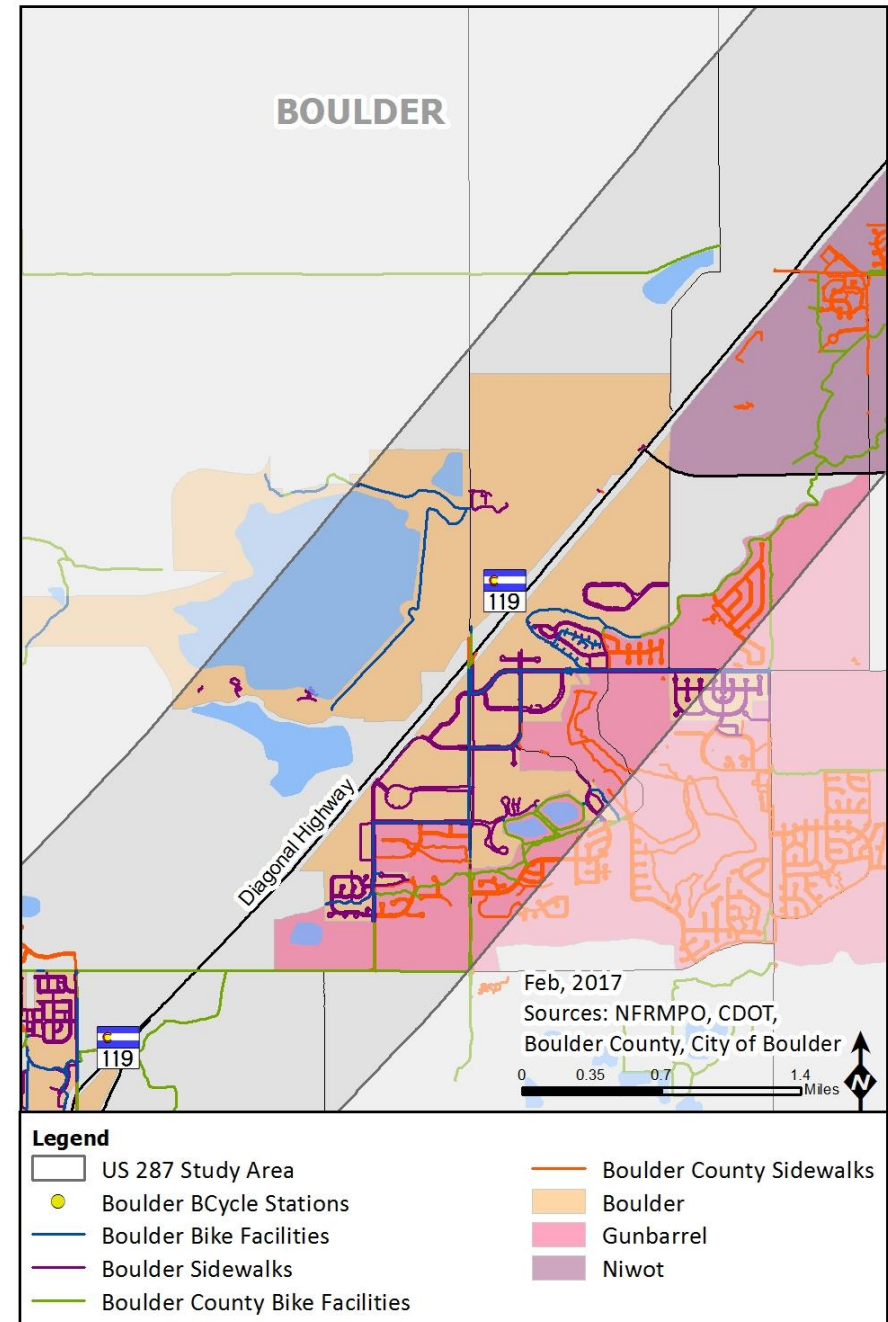


Figure 10-12 Northeast Boulder Bicycle and Pedestrian Infrastructure



Transit

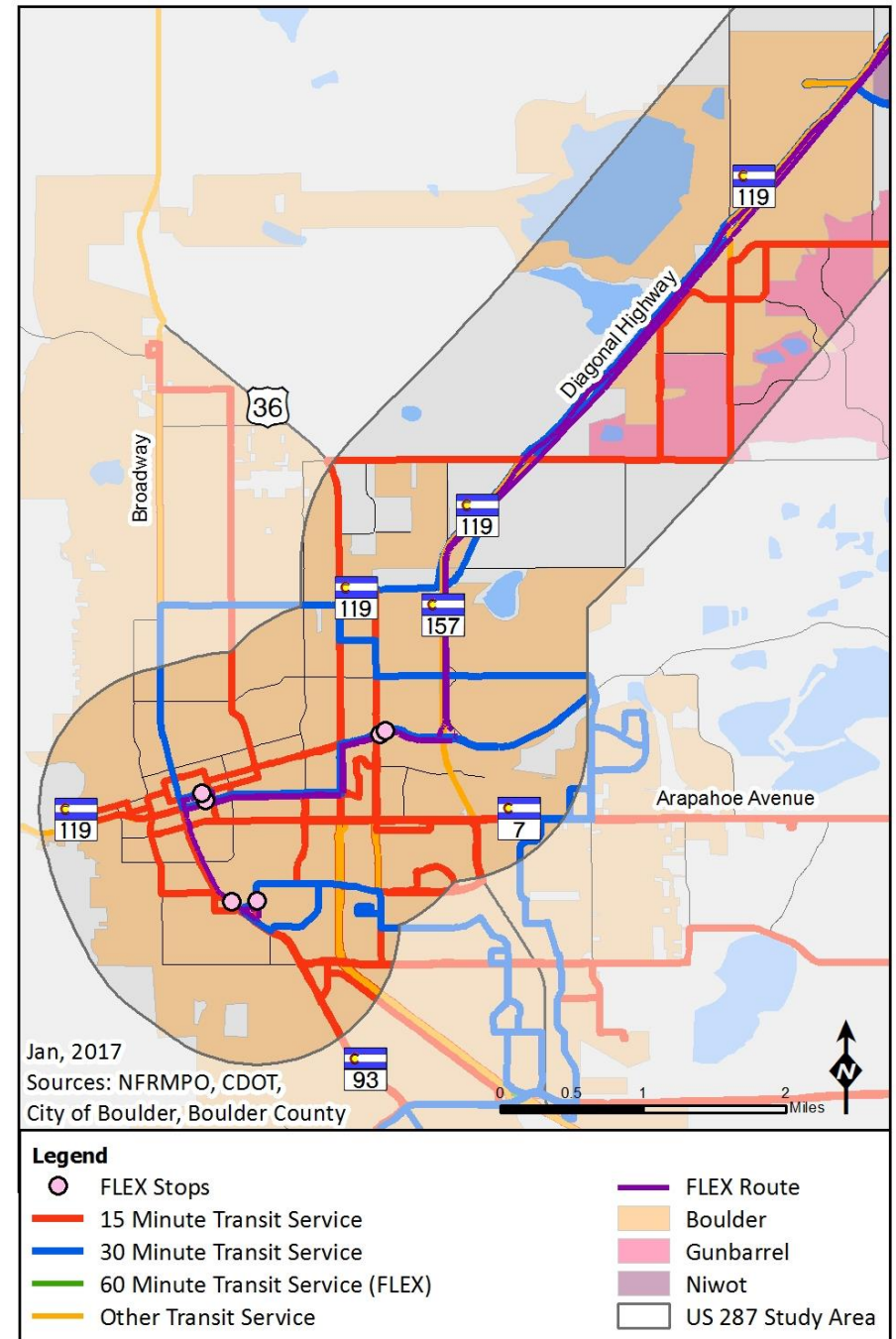
Transit in Boulder is operated by the Regional Transportation District (RTD) and by Via Mobility. Service is subsidized by the City of Boulder to allow more frequent service, specifically in the Broadway corridor and through downtown. Via Mobility operates the Hop route on behalf of the City of Boulder, which is a high-frequency shuttle with connections to major destinations. Because of the subsidized service, Boulder has multiple routes operating at least every 15 minutes during the peak period. These routes are shown in red on **Figure 10-13**. Additional routes which provide service at least every 30 minutes during peak periods are shown in blue, and express service or infrequent buses are shown in gold. FLEX Boulder Express is shown in purple.

Boulder is the terminus of the Flatiron Flyer bus rapid transit service, which provides frequent, express service along the US36 corridor to Denver. Buses stop at the Boulder Transit Center in downtown, before proceeding to CU’s campus, and then toward Denver.

The FLEX service has three stop pairs in Boulder: Boulder Junction, a new transit-oriented neighborhood in east Boulder; the Boulder Transit Center in downtown Boulder; and at CU Boulder. Service is also provided along SH119/Diagonal Highway to Longmont. RTD service provides local stops along SH119, but FLEX is not allowed to pick up or drop off passengers, depending on the direction, in this corridor to reduce competition between Transfort and RTD services.

For more information about schedules and fares, visit RTD’s website at www.rtd-denver.com.

Figure 10-13 Boulder Transit Routes

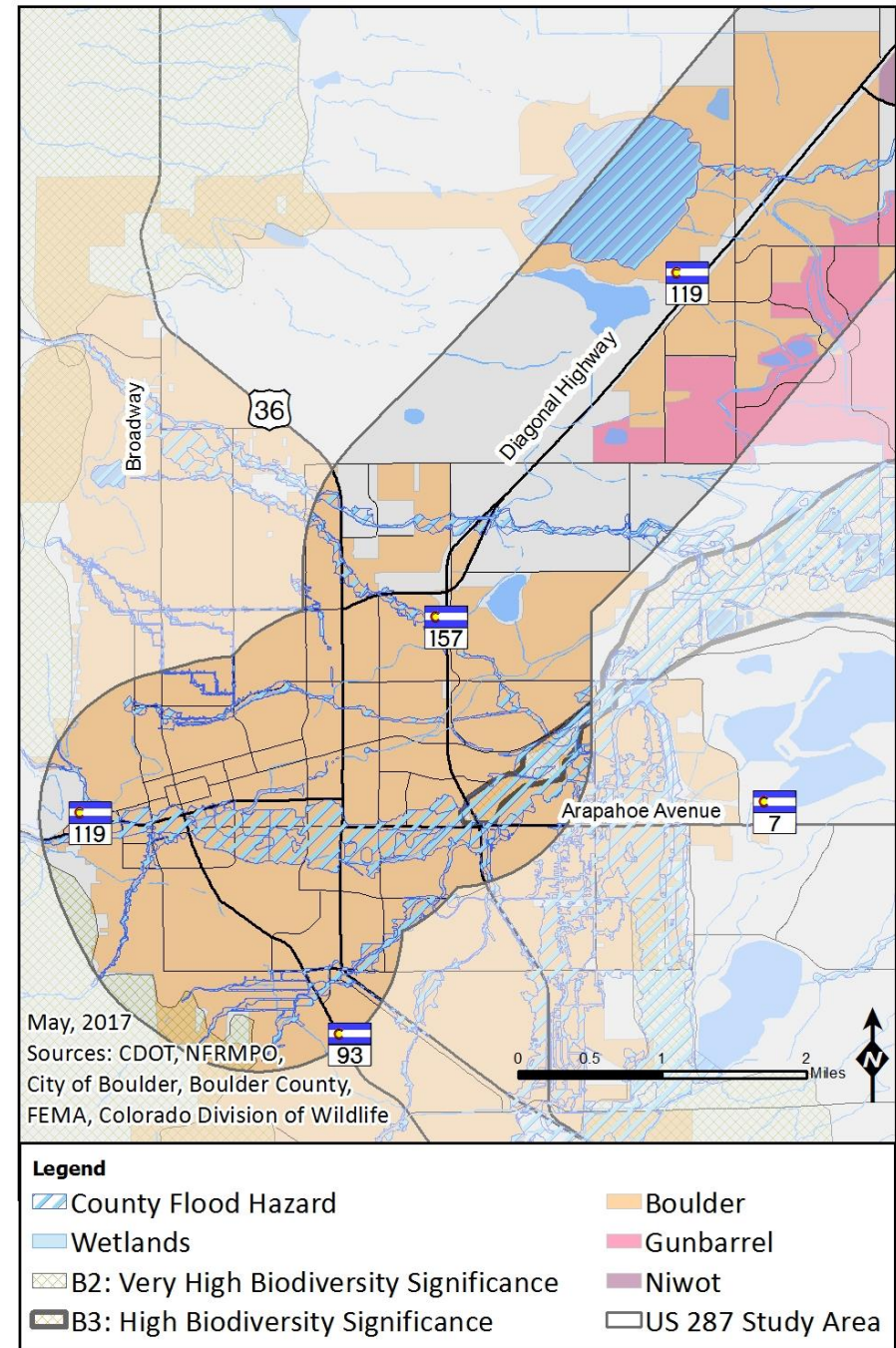


Environmental Features

Due to its location in the foothills, the City of Boulder has a diverse and important environment and landscape. As shown on **Figure 10-14**, much of the City is surrounded by a Very High Biodiversity Significance. Additional High Biodiversity Significant areas are located at Boulder Reservoir, Sawhill Ponds, and the Walden Ponds Wildlife Habitat.

Multiple waterways cross Boulder, including Boulder Creek. Because of the flat nature of the City, flood hazards exist along multiple corridors in the City. These are represented in purple on the map.

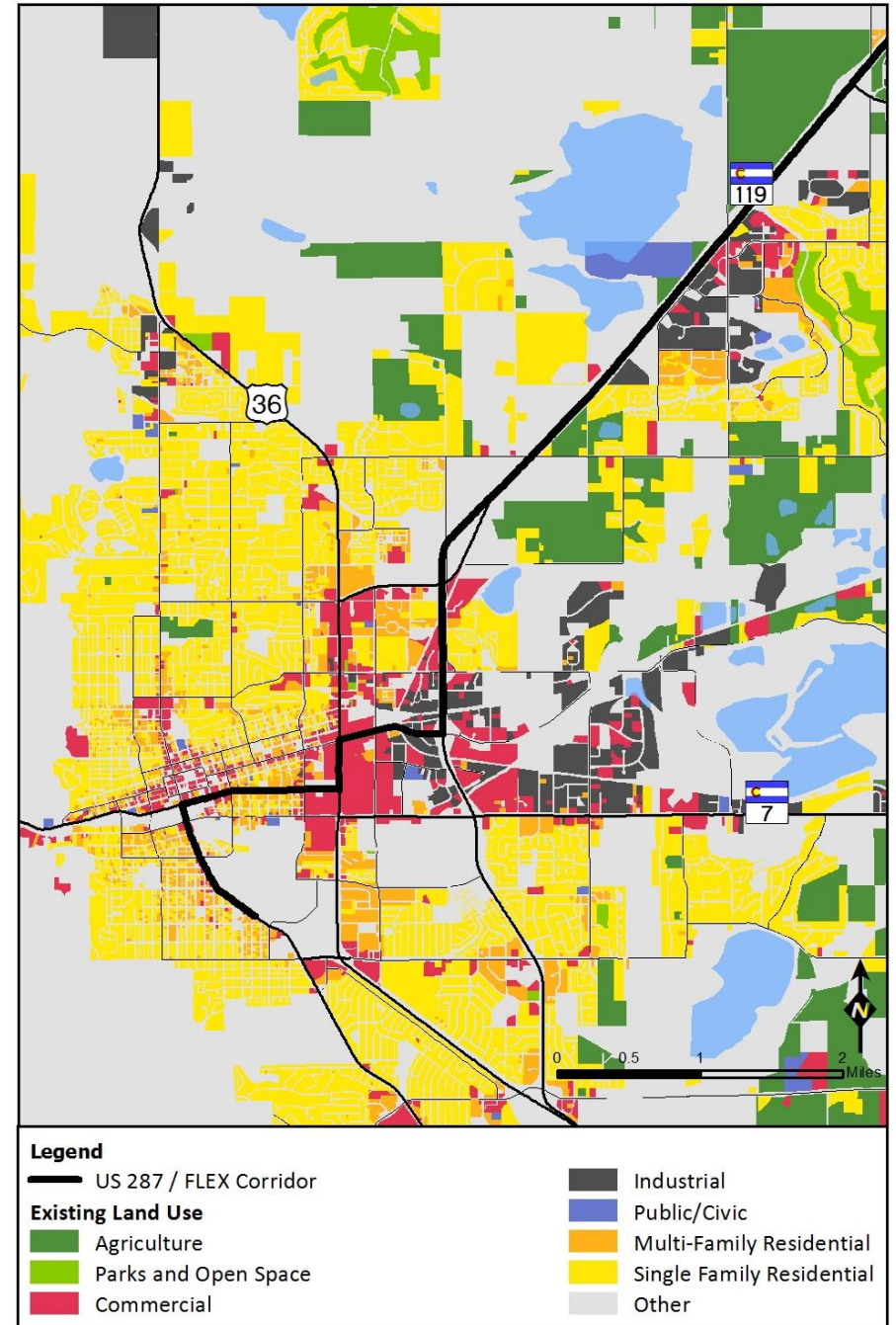
Figure 10-14 Boulder Environmental Features



Existing Land Use

The land uses displayed on **Figure 10-15** represent 2017 land uses from the Boulder County Assessor’s office. Land uses were consolidated into a smaller number of categories. Parcels categorized as “other” include vacant lots and some parcels exempt from property taxation without a clearly identified land use. The Study Area in Longmont contains a variety of land uses, including Commercial, Industrial, Multi-Family Residential, and Single Family Residential.

Figure 10-15 Boulder Existing Land Use



Future Land Use

The land uses displayed on **Figure 10-16** represent future land uses consolidated from Boulder County Zoning (as of November 2016) and the City of Boulder’s 2010 Boulder Valley Comprehensive Plan. The future land uses represent built out conditions identified by local communities, and do not adhere to a specific forecast year. Within the Study Area in Boulder, future land uses vary considerably.

Figure 10-16 Boulder Future Land Use

