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Multimodal Transportation Implementation Plan

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LIST OF ACRONYMS

BRT	bus rapid transit
CDOT	Colorado Department of Transportation
CIP	Capital Improvement Program
DRCOG	Denver Regional Council of Governments
FY	Fiscal Year
LOS	Level of Service
MMTP	Multimodal Transportation Plan
MTIP	Multimodal Transportation Implementation Plan
NAMS	Northwest Area Mobility Study
NEPA	National Environmental Policy Act
RTD	Regional Transportation District
SH	State Highway
TAZ	transportation analysis zone
TIP	Transit Improvement Plan
US #	United States Highway
V/C	volume/capacity
vpd	vehicles per day



Multimodal Transportation Implementation Plan

1. INTRODUCTION

The City of Longmont began the Envision Longmont planning effort in early 2015 to update and integrate the Longmont Area Comprehensive Plan and the Multimodal Transportation Plan (MMTP). Rather than developing separate comprehensive plan and MMTP documents as was done in previous planning processes, Envision Longmont integrates the two plans reflecting an increased emphasis on the interrelationships between land use and transportation planning.

The Envision Longmont plan presents six Guiding Principles, with GP2 addressing A Complete, Balanced and Connected Transportation System. GP2 includes three primary supporting goals and policies:

- ▶ Integrate land use and transportation planning to enhance the overall quality of life in the City
- ▶ Provide a transportation system that offers safe, healthy, and reliable mobility for people of all ages and abilities
- ▶ Enhance the transportation system in a manner that improves the economic vitality of the City, while being responsible stewards of limited resources

The Growth Framework section of Envision Longmont includes an MMTP section that provides an overview of the City's transportation system and future needs, including roadway, transit, bicycle, and pedestrian system elements.

The Envision Longmont final report is a comprehensive document covering land use, transportation, economic development, sustainability, and a number of other topics and strategies. Due to the breadth of Envision Longmont, that plan cannot provide documentation for all of the transportation research, analysis, needs assessment, and implementation planning that has been conducted as part of the planning process. Therefore, the purpose of this Multimodal Transportation Implementation Plan (MTIP) is to document the transportation planning process and findings in greater detail. In addition, a summary of previous Longmont and regional agency plans and studies that relate to Envision Longmont transportation planning is provided as **Appendix A**.



2. TRAVEL FORECASTING

a. Demographic Forecasts

The Denver Regional Council of Governments (DRCOG), as the official metropolitan planning organization for the Denver region, maintains a regional travel demand model. The model is used to analyze and forecast travel by motorized vehicles and transit. A key foundation for the travel model is demographic forecasts: forecasts of the population, households, and employment in each of more than 2000 transportation analysis zones (TAZs) comprising the region. For use in Envision Longmont transportation planning, Longmont’s planners reviewed DRCOG demographic forecasts in the City and made adjustments to better reflect Longmont’s planning.

Forecasts for the Longmont Planning Area show increases of 23% in households and 22% in employment between 2010 and 2040. The 2040 jobs/household ratio for Longmont is projected to be 0.93 compared with an overall DRCOG regional ratio of 1.27. This ratio means that Longmont has a somewhat lower jobs/housing ratio than the region as a whole and more Longmont residents commute outside the City than commute to the City to work. However, this ratio is more balanced than many of Denver’s suburban communities reflecting a strong employment base. Additional detail on demographic forecasts is provided in **Appendix B**.

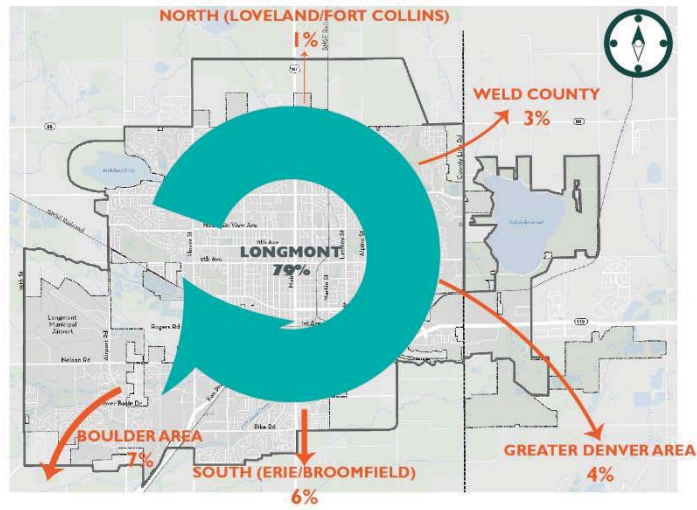
b. Travel Patterns

The regional travel model provides a valuable tool to examine travel patterns that can be used to assist in the assessment of transportation system needs in and around Longmont. **Figure 1** provides three diagrams that illustrate Longmont’s travel patterns, including automobile and transit trips:

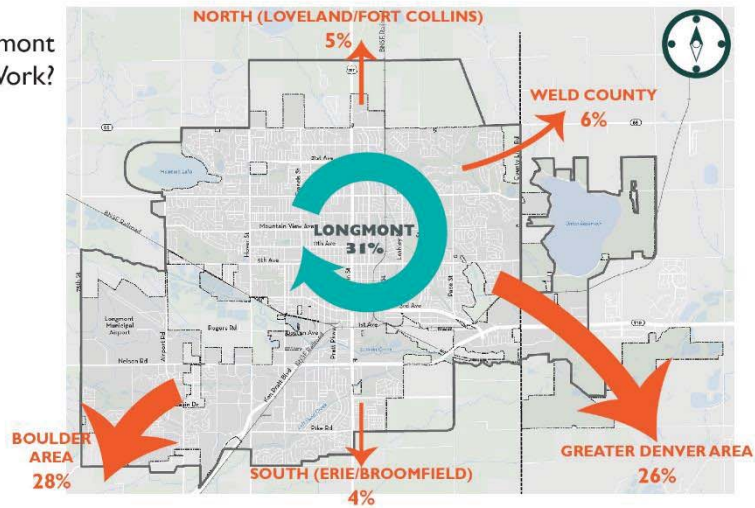
- ▶ The **top diagram** shows that of **all trips** taken by Longmont residents, nearly 80% remain within the City’s planning area. This shows that most of the day-to-day activities for Longmont residents, including trips to and from work, schools, shopping, recreation, or visiting friends, are accomplished within the City.
- ▶ Compared with most other trip types, commuting trips tend to be longer and are more likely to include travel between cities. The **middle diagram** shows that only an estimated 31% of **work trips for Longmont residents** are to workplaces within the City. The Boulder area and the greater Denver area each represent more than a quarter of the workplace locations for Longmont residents.
- ▶ The **bottom diagram** shows that an estimated 37% of **trips to Longmont jobs** are made by Longmont residents. (Those who both live and work in Longmont represent different percentages of residents [31%] versus workers [37%] because there are more total Longmont working residents than Longmont jobs.) Residents from the Boulder area, the greater Denver area, Weld County, and the Loveland/Fort Collins area each represent more than 10% of Longmont workers’ area or residence.

Multimodal Transportation Implementation Plan

Where do Longmont Residents Travel To?



Where do Longmont Residents Work?



Where do Longmont Workers Live?

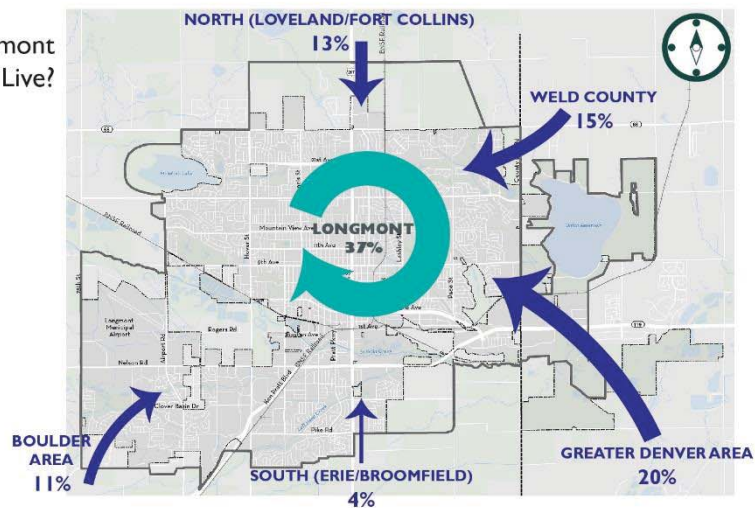


Figure 1
Travel Patterns

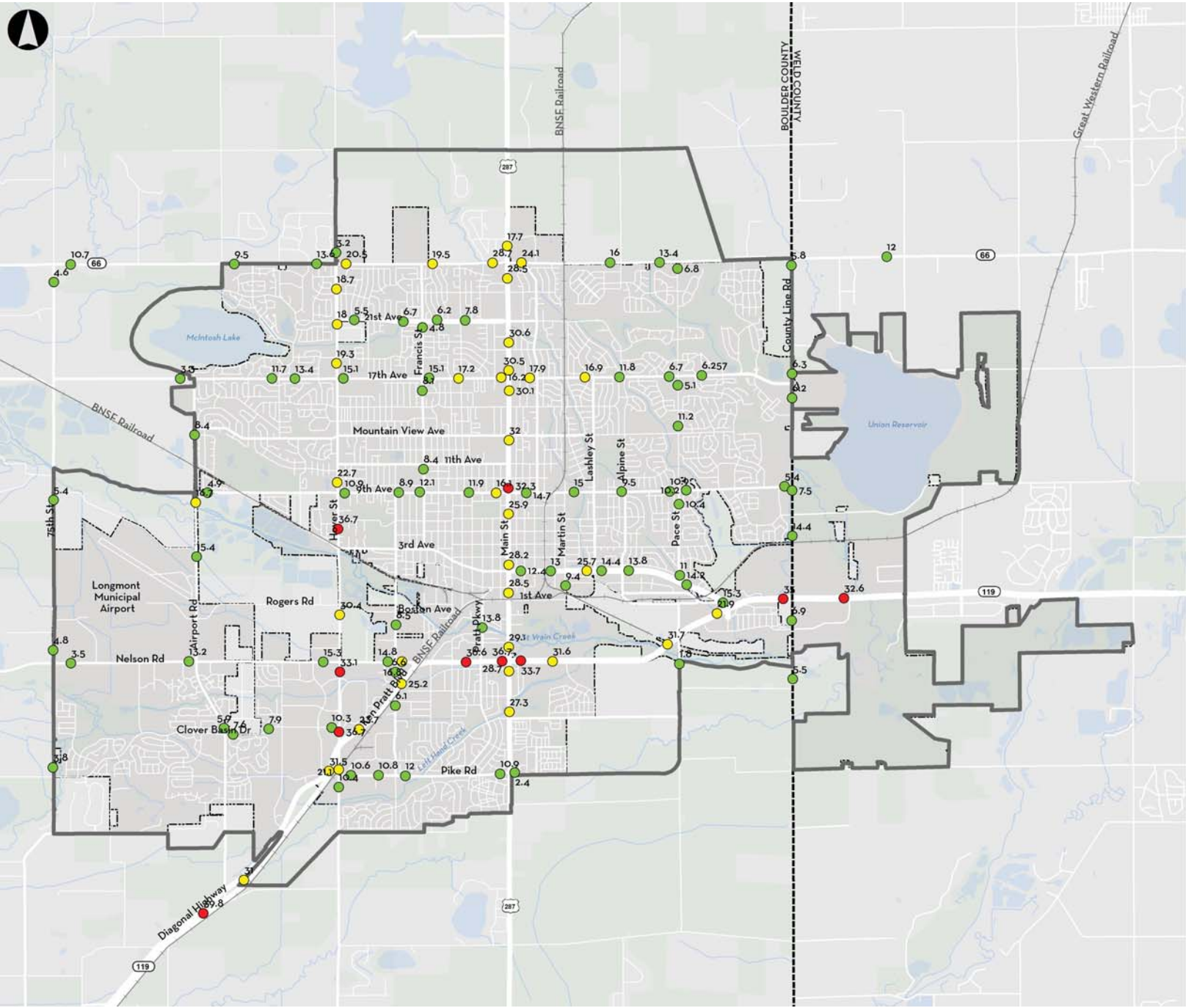
Multimodal Transportation Implementation Plan

Additional information on travel patterns among sub-areas of Longmont is provided in **Appendix B**. This origin/destination pattern analysis discussed above and in **Appendix B** provided insights that informed the assessment of multimodal transportation improvement needs. For example, the high commuting patterns between Longmont and Boulder confirmed the importance of public transit improvements between the two cities and the high volumes of shorter trips between the Main Street corridor and surrounding residential neighborhoods to the east and west confirmed the importance of good bicycle and pedestrian connections within and to the Main Street corridor.

c. Traffic Forecasts

The regional travel model was used to develop 2040 traffic volume forecasts for Longmont's major street system. **Figure 2** shows current daily traffic volumes and **Figure 3** shows 2040 forecasts. Traffic growth and forecasted volumes on key Longmont arterial streets include:

- ▶ Main Street (U.S. Highway 287 [US 287]) forecasts range from 35,000 to more than 50,000 vehicles per day (vpd), representing 25% to 50% growth over current traffic levels in central and southern parts of the corridor and even sharper increases to the north in the vicinity of State Highway (SH) 66.
- ▶ Hover Street forecasts range from 30,000 to 45,000 vpd, representing similar 25% to 50% growth with higher growth rates projected to the north.
- ▶ Ken Pratt Boulevard/SH 119 forecasts range from 35,000 to more than 50,000 vpd, again with 25% to 50% increases projected throughout the corridor.
- ▶ SH 66 forecasts are more variable, with more than 40,000 vpd projected in the vicinity of Main Street and volumes less than half that level in the northwest corner of Longmont and just more than 20,000 vpd on the northeast. SH 66 forecasts represent 50% to 100% growth over current volumes.



CITY OF LONGMONT Existing Traffic Volumes

XX.X Daily Volume (in thousands)

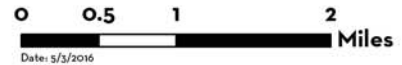
Average Daily Traffic Volumes

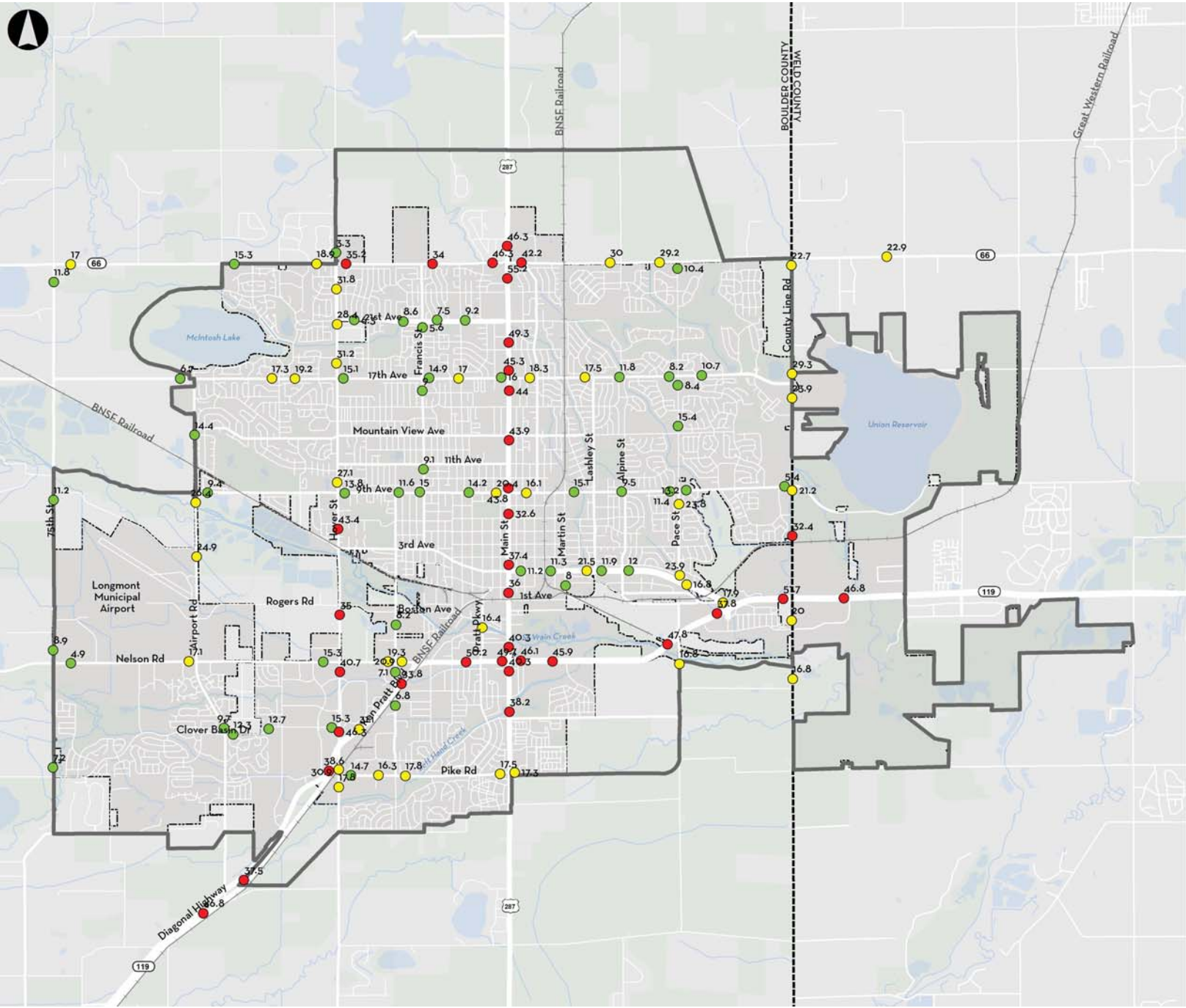
- < 16,000
- 16,000 - 32,000
- > 32,000

- Roads
- Railroad
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Source: City of Longmont count database (2008-2014).

Figure 2





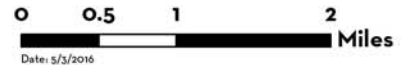
CITY OF LONGMONT
2040 Traffic Forecasts

XX.X 2040 Daily Volume (in thousands)

Average 2040 Daily Traffic Volumes

- < 16,000
- 16,000 - 32,000
- > 32,000
- Roads
- Railroad
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Figure 3



Date: 5/3/2016



3. ROADWAY SYSTEM

Figure 4 shows the planned roadway system as presented in the Envision Longmont plan. The sections below provide documentation about the analysis that led to the identification of improvement needs and the estimated roadway improvement costs. In addition to moving people in vehicles, roadways play a significant multimodal role by moving people in buses, on bikes, by foot, and by other means, as well as moving freight through and within the City.

a. Capacity Analysis

A roadway's traffic-carrying capacity depends upon a number of factors including number of lanes, intersection types, access control, traffic composition, and peaking characteristics. While understanding that individual road and road segment capacity can vary, at a general planning level, roadway capacity can best be estimated by the functional classification and number of through lanes. For the Longmont roadway system analysis, the following typical planning level thresholds were used to estimate roads' daily traffic carrying capacity at a moderate level of congestion equivalent to approximately level of service (LOS) D on a scale from A to F:

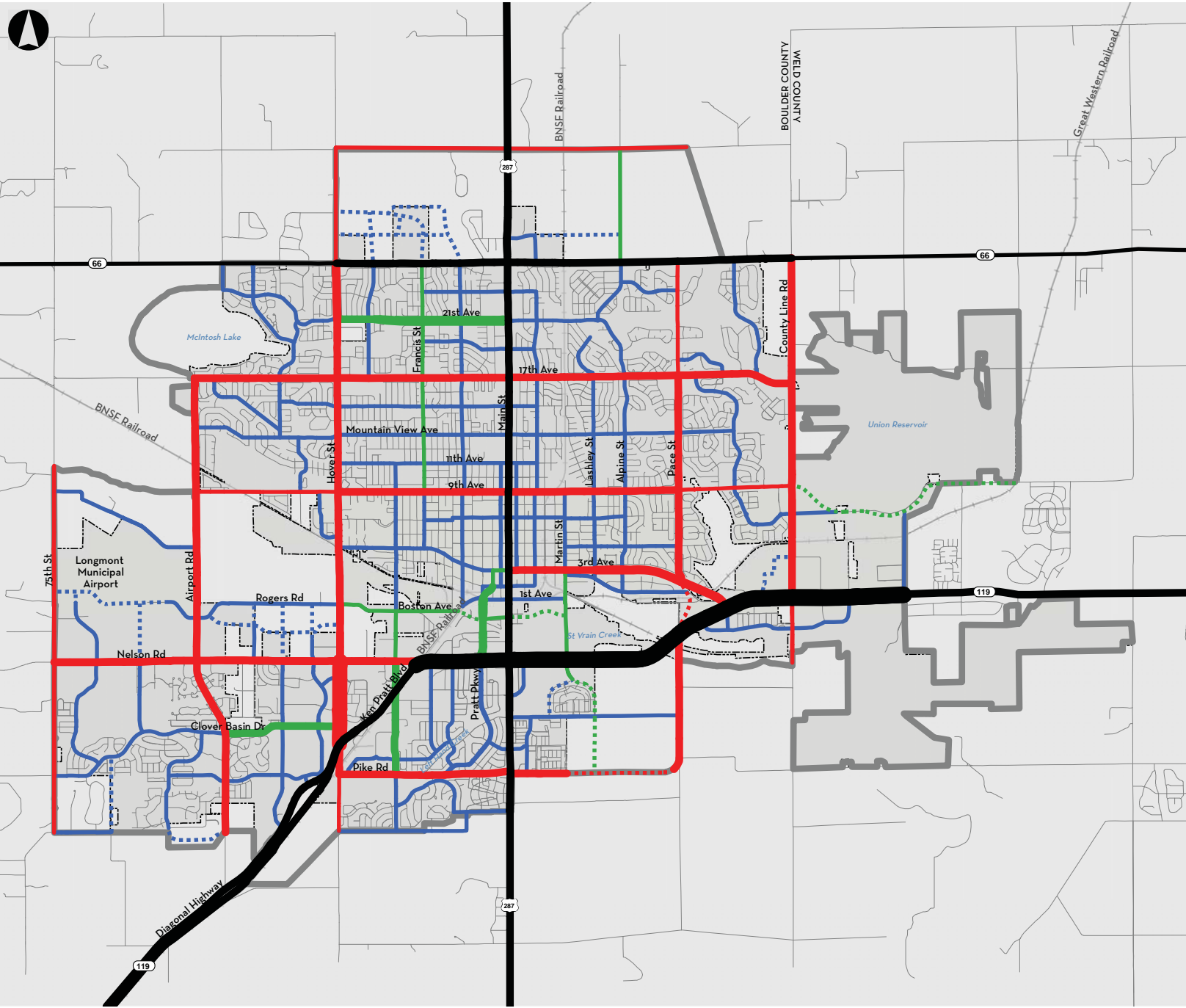
- ▶ Regional and Principal Arterial – 8,000 vpd / lane
- ▶ Minor Arterial – 6,000 vpd / lane
- ▶ Collector – 5,000 vpd / lane

Traffic volumes were compared to these thresholds and congestion levels were estimated based on the following volume/capacity (V/C) ratios:

- ▶ $V/C > 1.2$ = Highly Congested
- ▶ $V/C 1.0$ to 1.2 = Congested
- ▶ $V/C 0.71$ to 0.99 = Near Congested
- ▶ $V/C < 0.7$ = Not Congested

Figure 5 shows congestion levels for the major roadway system based on current traffic volumes. Highly congested roadways in Longmont are limited to the 2-lane section of SH 66 west of Main Street. Other congested road segments are found on Main Street, Ken Pratt Boulevard, Hover Street, and 9th Avenue.

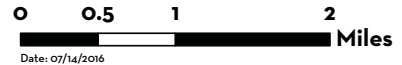
Figure 6 shows congestion levels projected with 2040 forecasts and with no major improvements to the existing roadway system. Highly congested conditions are projected on significant stretches of Main Street, Hover Street, Ken Pratt Boulevard, and SH 66, as well as segments of 9th Avenue and County Line Road.

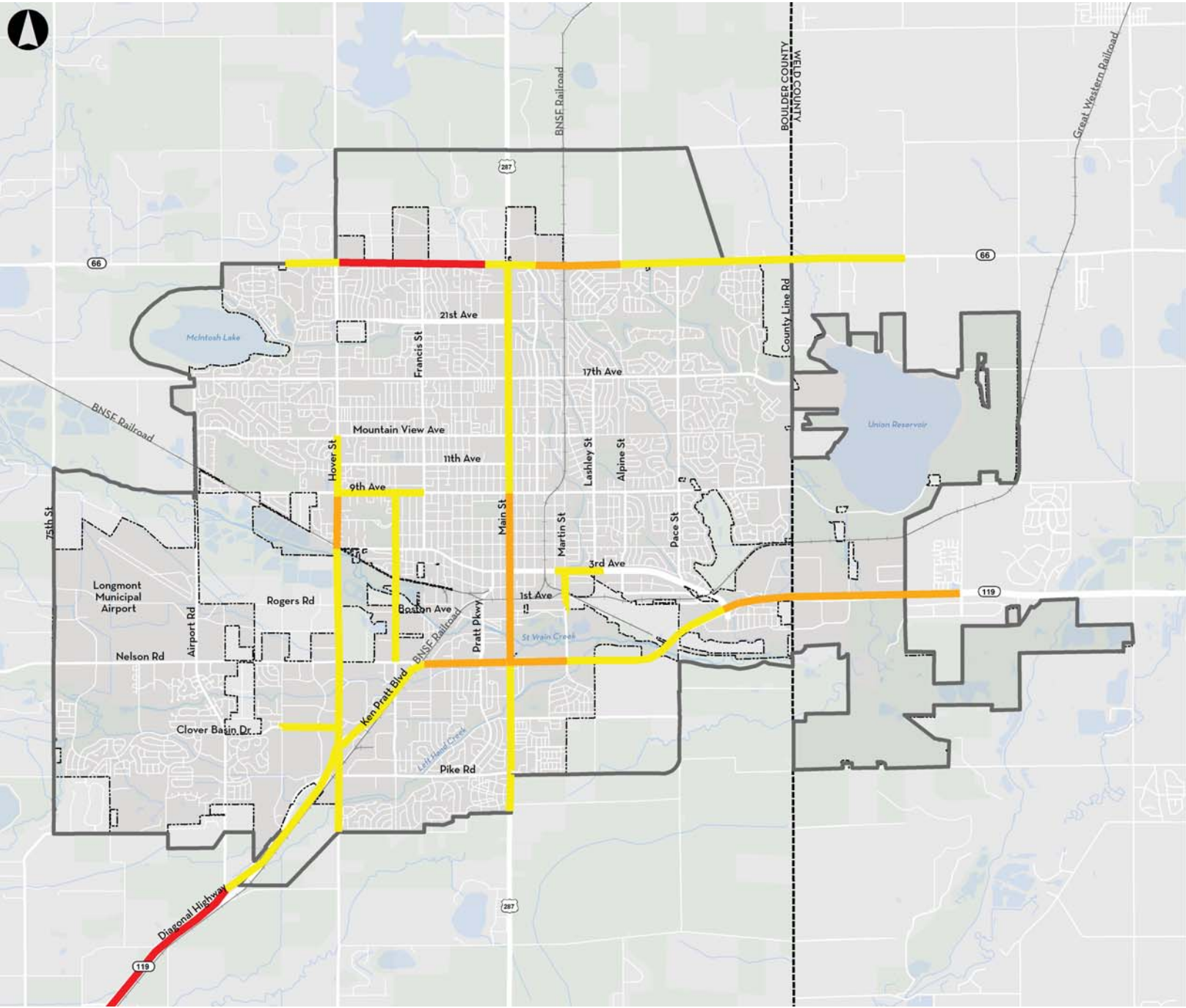


CITY OF LONGMONT
Roadway System Plan

- Regional Arterial (2 Through Lanes)
- Regional Arterial (4 Through Lanes)
- Regional Arterial (6 Through Lanes)
- Principal Arterial (2 Through Lanes)
- Principal Arterial (4 Through Lanes)
- Principal Arterial (6 Through Lanes)
- Future Arterial (2 Through Lanes)
- Minor Arterial (2 Through Lanes)
- Minor Arterial (4 Through Lanes)
- Future Minor Arterial (2 Through Lanes)
- Collector (2 Through Lanes)
- Future Collector (2 Through Lanes)
- Local
- Railroad
- Longmont Planning Area
- Longmont City Boundary

Figure 4





CITY OF LONGMONT

Existing Traffic Congestion

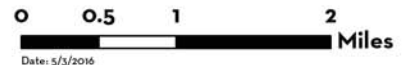
- Near Congested
- Congested
- Highly Congested
- Roads
- Railroad
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Note:
 Near Congested = Volume/Capacity 0.71-0.99 (LOS D)
 Congested = Volume/Capacity 1.0-1.2 (LOS E)
 Highly Congested = Volume/Capacity >1.2 (LOS F)

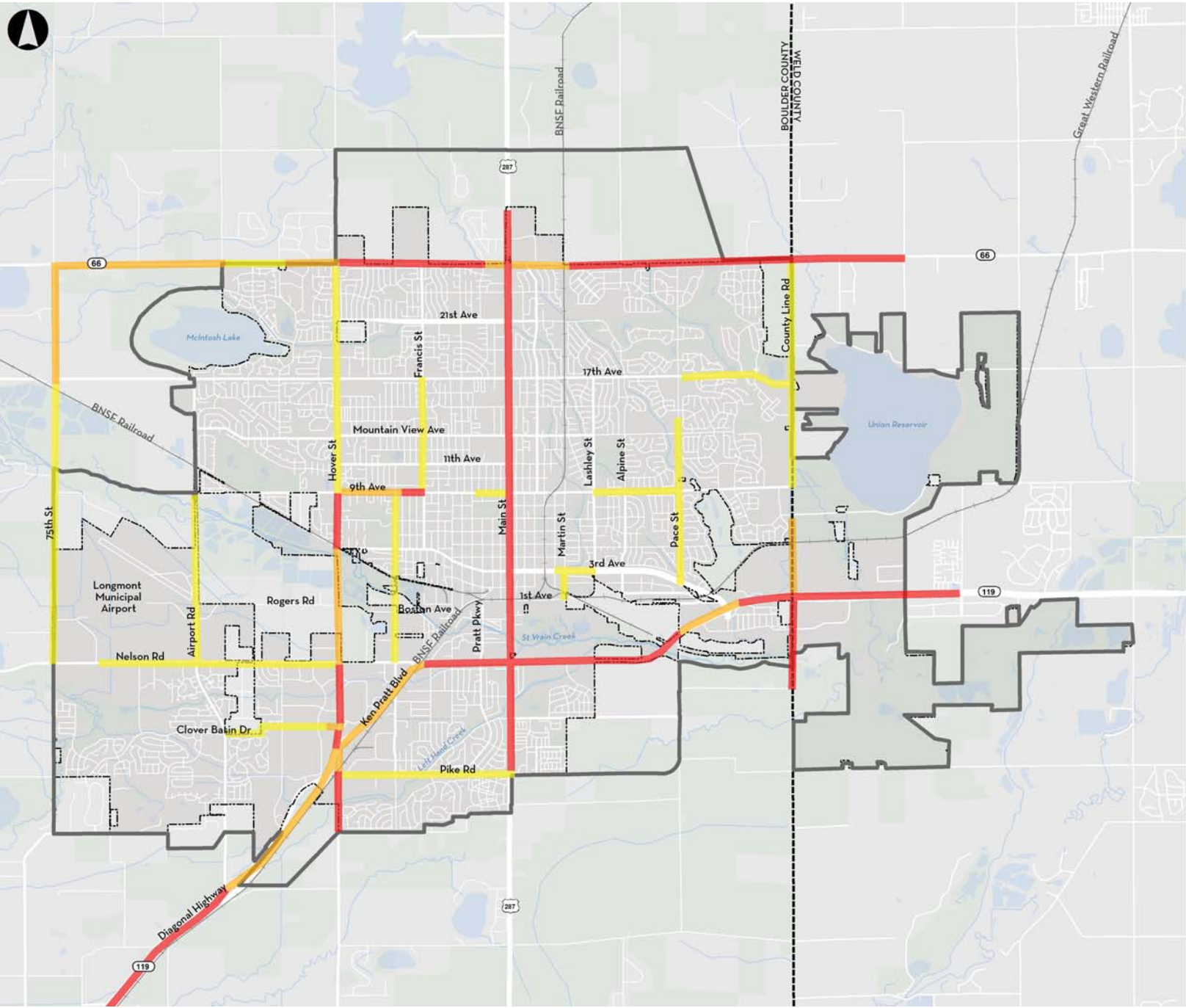
Capacities represent planning level daily traffic thresholds approximately equivalent to Level of Service D conditions during peak periods.

Per lane capacities by roadway type are:
 Principal Arterial - 8,000 vpd
 Minor Arterial - 6,000 vpd
 Collector - 5,000 vpd

Figure 5



Date: 5/5/2016



CITY OF LONGMONT
2040 No Action Traffic Congestion

- █ Near Congested
- █ Congested
- █ Highly Congested
- Roads
- Railroad
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Note:
 Near Congested = Volume/Capacity 0.71-0.99 (LOS D)
 Congested = Volume/Capacity 1.0-1.2 (LOS E)
 Highly Congested = Volume/Capacity >1.2 (LOS F)

Capacities represent planning level daily traffic thresholds approximately equivalent to Level of Service D conditions during peak periods.

Per lane capacities by roadway type are:
 Principal Arterial - 8,000 vpd
 Minor Arterial - 6,000 vpd
 Collector - 5,000 vpd

Figure 6



b. Roadway Improvement Plan

Traffic forecasts and roadway improvement needs were carefully examined in 2014 with the development of the Longmont Roadway Plan. The needs were reevaluated during the Envision Longmont planning process based on updated traffic forecasts. A set of roadway improvements was developed based on the needs assessment, evaluation of feasibility and potential impacts associated with potential improvements, and input received through the extensive Envision Longmont stakeholder as well as community outreach processes. **Figure 7** shows the resulting roadway improvement plan. The two principal roadway improvement types are:

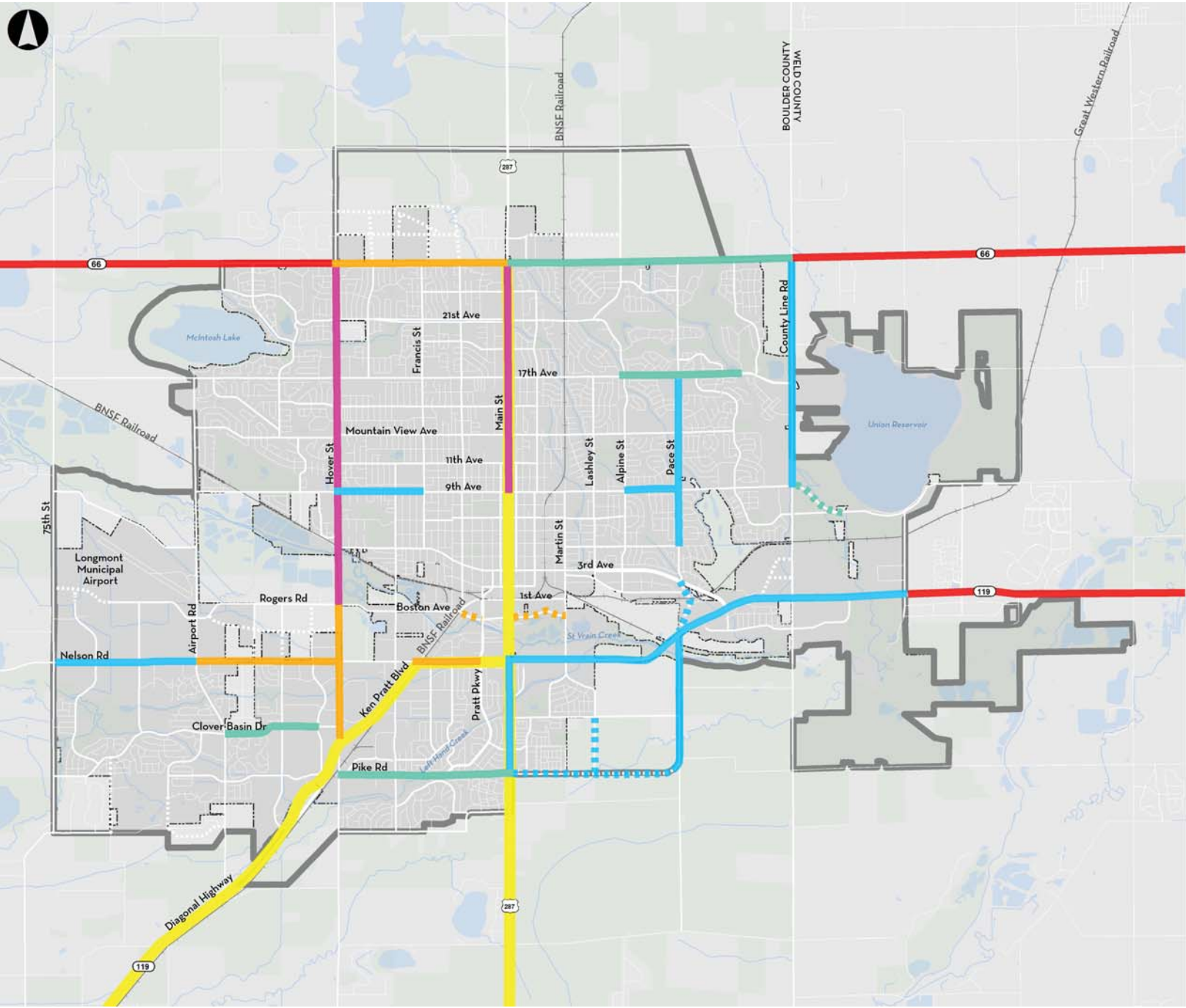
- ▶ Capacity Improvements, which would typically consist of an additional through lane in each direction
- ▶ New Roads, which include extensions of Pike Road, Pace Street, Rogers Road, Martin Street, and 9th Avenue/Weld County Road 26

These recommended capacity improvement and new roadway projects are listed in **Table 1**. Each project is categorized by time frame based on the immediacy and severity of the need. Short-range projects are planned for the next 10 years, mid-range projects are planned for the 10- to 20-year time frame, and long-range or vision plan projects are anticipated to be implemented after the 20-year time frame. Funding at various levels has been initially identified for roadways project in the next 20 years, while no funding has been identified for projects beyond the 20-year planning horizon.

Conceptual planning-level cost estimates are provided for each project based on typical construction costs per mile for different types of improvements; however, it should be recognized that actual costs may differ significantly during the more detailed design process for each project.

Additional project types shown on **Figure 7** include:

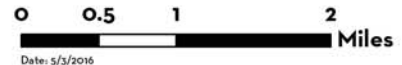
- ▶ *Coordinated Studies* – Improvements on state highways within and adjacent to Longmont need to be planned in coordination with the Colorado Department of Transportation (CDOT). A planning and environmental linkage study is planned to be conducted for the SH 66 corridor beginning in 2016 and a similar or equivalent study is recommended for the SH 119 corridor east of Longmont.
- ▶ *Corridor Study* – Future travel demands on Hover Street suggest the possible need for capacity improvements; however, corridor right-of-way is constrained in several sections so a comprehensive corridor study is recommended to evaluate the benefits, costs, and impacts associated with improvements on Hover Street.
- ▶ *Bus Rapid Transit (BRT)* – The Northwest Area Mobility Study (NAMS) conducted by the Regional Transportation District (RTD) recommended BRT on the SH 119 Corridor between Longmont and Boulder as a top priority and BRT on the US 287 corridor between Longmont and Lafayette as a second priority. These BRT projects are discussed in greater detail in the Transit section of this report.



CITY OF LONGMONT Roadway Improvement Plan for Arterial Streets

- Short-Range Capacity Improvement
- - - Short-Range New Road
- Mid-Range Capacity Improvement
- - - Mid-Range New Road
- Long-Range Capacity Improvement
- - - Long-Range New Road
- Coordinated Study With CDOT
- Corridor Study
- BRT
- Roads
- Railroad
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Figure 7



Date: 5/5/2016



Multimodal Transportation Implementation Plan

Table 1. Recommended Roadway Improvement Projects (Arterial Streets)

Roadway	Project Type	Horizon	Planning Level Cost Estimate (2014)
Boston Ave between Main St (US 287) and Martin St	New Roadway	Short-Range	\$2,300,000
Boston Ave railroad crossing between Price Rd and Pratt Pkwy	New Roadway	Short-Range	\$2,100,000
Ken Pratt Blvd (SH 119) between Nelson Rd and Pratt Pkwy	Capacity Improvement	Short-Range	\$3,500,000
Nelson Rd between Airport Rd and Hover St	Capacity Improvement	Short-Range	\$4,300,000
SH 66 between Hover St and Main St (US 287)	Capacity Improvement	Short-Range	\$7,200,000
Hover St between Ken Pratt Blvd and Rogers Rd	Capacity Improvement	Short-Range	\$1,400,000
Short-Range Subtotal			\$20,800,000
17th Ave between Alpine St and Ute Creek Dr	Capacity Improvement	Mid-Range	\$4,200,000
Clover Basin Rd between Airport Rd and Dry Creek Dr	Capacity Improvement	Mid-Range	\$3,000,000
Pike Rd between Hover Rd and Main St (US 287)	Capacity Improvement	Mid-Range	\$5,800,000
SH 66 between Main St (US 287) and County Line Rd	Capacity Improvement	Mid-Range	\$12,500,000
WCR 26 between County Line Rd and WCR 26	Realignment	Mid-Range	\$3,100,000
Mid-Range Subtotal			\$28,600,000
Pace St between Pike Rd and Ken Pratt Blvd (SH 119)	Capacity Improvement	Long-Range	\$13,000,000
Pace St between Ken Pratt Blvd (SH 119) and 3rd Ave	New Roadway	Long-Range	\$9,300,000
9th Ave between Alpine St and Pace St	Capacity Improvement	Long-Range	\$1,000,000
9th Ave between Hover St and Francis St	Capacity Improvement	Long-Range	\$1,700,000
County Line Rd (WCR 1) between 9th Ave and SH 66	Capacity Improvement	Long-Range	\$15,700,000
Ken Pratt Blvd (SH 119) between Main St (US 287) and City Limits	Capacity Improvement	Long-Range	\$10,000,000
Main St (US 287) between Pike Rd and Ken Pratt Blvd (SH 119)	Capacity Improvement	Long-Range	\$7,900,000
Martin St between Pike Rd and Quail Rd	New Roadway	Long-Range	\$2,300,000
Nelson Rd between 75th St and Airport Rd	Capacity Improvement	Long-Range	\$4,300,000
Pace St between 5th Ave and 17th Ave	Capacity Improvement	Long-Range	\$6,200,000
Pike Rd between Main St (US 287) and 119th St	New Roadway	Long-Range	\$13,100,000
Rogers Rd between 75th St and current terminus	New Roadway	Long-Range	\$3,100,000
Long-Range Subtotal			\$87,600,000
Grand Total			\$137,000,000

Figure 8 shows congested levels anticipated with 2040 traffic forecasts, similar to **Figure 6**, but with the recommended roadway improvements in place. With the recommended improvements, the most highly congested corridor is anticipated to be Main Street. While traffic demand on Main Street is anticipated to exceed its capacity as a 4-lane arterial through most of Longmont, corridor constraints make it infeasible to widen the corridor to six lanes. Therefore, a multimodal approach is needed to manage and accommodate increasing travel demand in the Main Street corridor, including:

- ▶ Enhance transit service in the corridor by implementing BRT along Coffman Street and Main Street and improving local east-west bus service to and from the Main Street corridor
- ▶ Encourage mixed use and particularly transit oriented development in the corridor
- ▶ Improve bicycle and pedestrian connections within the corridor and between the corridor and surrounding neighborhoods
- ▶ Implement traffic system management such as improvements to signal timing, intersection turn lanes and vehicle storage

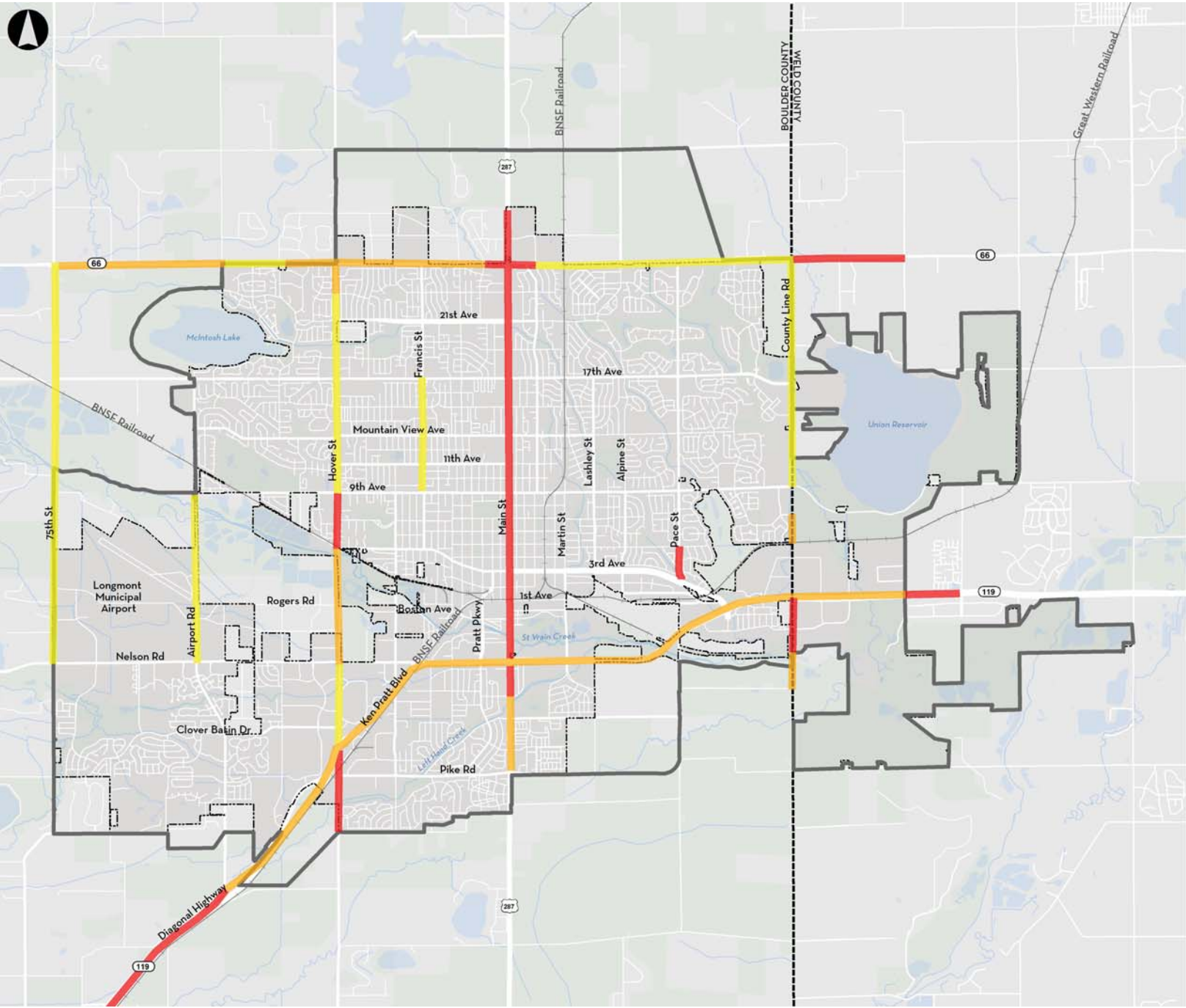
Other remaining highly congested roadways shown on **Figure 8** are predominantly on Hover Street, Ken Pratt Boulevard and SH 66, corridors where focused corridor studies are recommended to evaluate potential improvements. Emphasizing multimodal transportation in congested corridors is often a less expensive alternative to widening for additional through lanes; making the best use of existing right-of-way should be carefully considered prior to automobile-only capacity improvements.

c. Truck Routes

To ensure the efficient movement of freight, the City has established a system of truck routes that uses arterial streets and collectors through industrial areas in order to move goods to Longmont's industrial and commercial centers while minimizing truck traffic through residential neighborhoods. The Longmont Municipal Code prohibits driving trucks or other commercial vehicles on public streets within the City unless the roadway is specifically designated and posted as a truck route. Exceptions to this rule allow trucks to use other streets to reach a final delivery destination.

Trucks cannot be restricted from using state and federal highways, and Longmont's three Regional Arterials, SH 66, SH 119/Ken Pratt Boulevard, and US 287 (Main Street) are all key components of Longmont's truck route system. Additionally, Boulder and Weld Counties do not currently restrict trucks on numbered county roads.

Figure 9 shows the City's truck route plan. It includes all state and U.S. highways, numbered county roads, and all other Longmont Principal Arterials. Also a few of the Minor Arterials and Collector streets are designated because they provide truck access to industrial or commercial areas and no other alternative is available.



CITY OF LONGMONT
 2040 Traffic Congestion
 With Roadway Improvement Plan

- █ Near Congested
- █ Congested
- █ Highly Congested
- Roads
- Railroad
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Note:
 Near Congested = Volume/Capacity 0.71-0.99 (LOS D)
 Congested = Volume/Capacity 1.0-1.2 (LOS E)
 Highly Congested = Volume/Capacity >1.2 (LOS F)

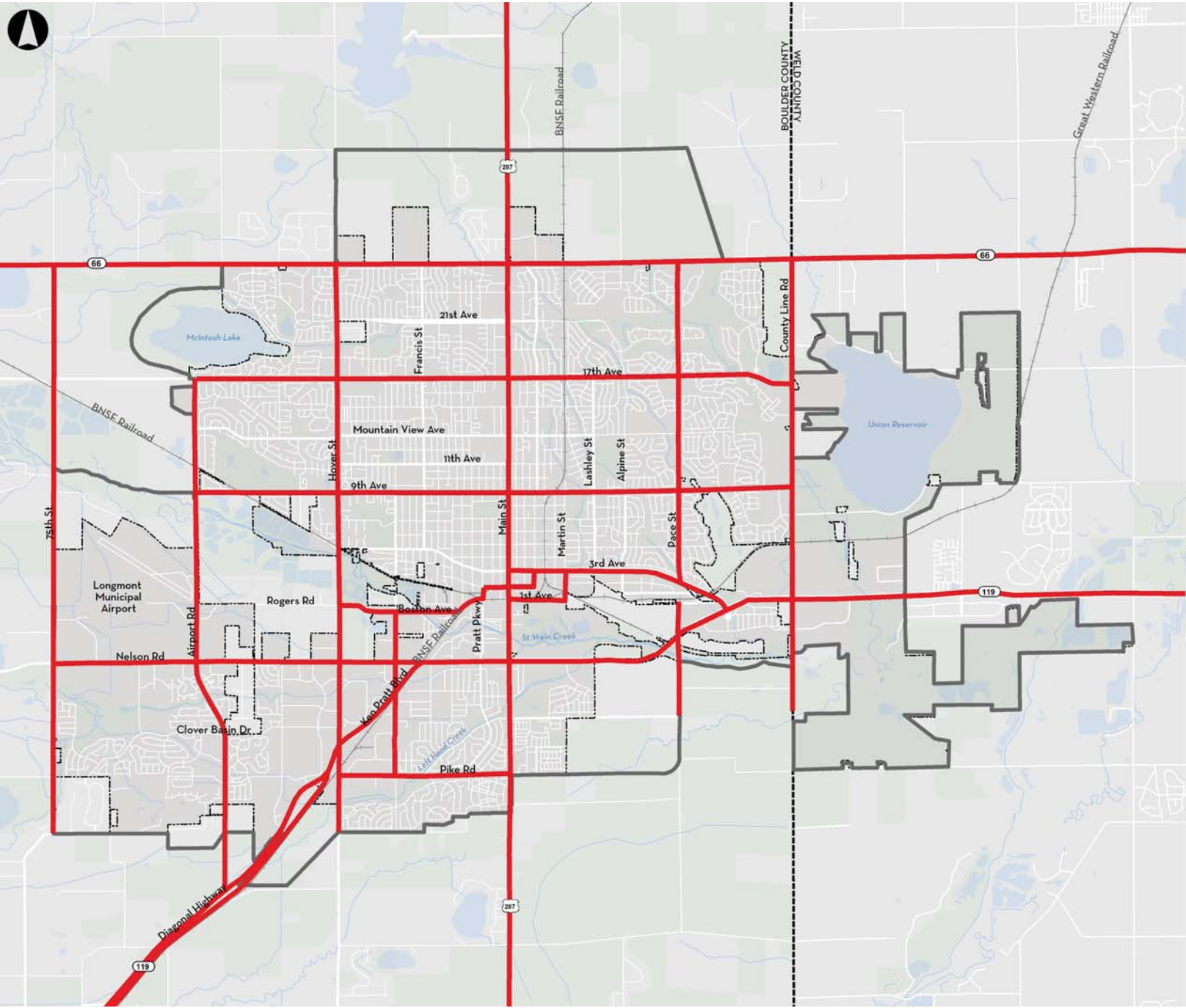
Capacities represent planning level daily traffic thresholds approximately equivalent to Level of Service D conditions during peak periods.

Per lane capacities by roadway type are:
 Principal Arterial - 8,000 vpd
 Minor Arterial - 6,000 vpd
 Collector - 5,000 vpd

Figure 8



Date: 4/4/2016



CITY OF LONGMONT
Truck Route Plan

- Truck Routes
- Roads
- Railroad
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Note:
State and US Highways and County roads
allow commercial vehicle/trucks.

Figure 9



4. TRANSIT SYSTEM

RTD, TransFort, and Via provide transit services within Longmont. RTD operates 10 fixed-routes in the City of Longmont, including Routes 323, 324, 326, 327, BOLT, J, L, LX, LSX, and LNX, and three Park-n-Rides. RTD and Via partner to provide Access-a-Ride and required Americans with Disabilities Act paratransit service, within $\frac{3}{4}$ of a mile of all fixed-routes. RTD also provides Call-n-Ride service, a demand response transit service that operates in the City of Longmont. TransFort operates FLEX, a fixed-route service that provides transit service between Fort Collins and Longmont, and continuing to Boulder. Via, a private nonprofit organization, offers on-demand paratransit service primarily to older adults and people with disabilities within Longmont and its surrounding communities. All of these transit services combined currently attract approximately 4,000 riders per weekday.

a. Needs Assessment

Relatively high density land use is required to support regularly scheduled public transit on fixed routes. In order to assess how well the current fixed route transit system serves Longmont, the existing and planned land use density was mapped and overlaid on the existing transit system. **Figure 10** shows (in pink/red shading) the most transit supportive areas of the City based on existing and planned land uses. The most highly supportive areas shown are ones that are projected to have more than 12 combined residences plus jobs per acre, as well as regional centers that are also planned to have highly transit supportive uses.

These transit supportive areas are overlaid on the existing transit routes on **Figure 10** to identify transit supportive areas that are not served by transit. These areas were targeted in the transit system improvement plan presented in the next section.



CITY OF LONGMONT 2040 Transit Supportive Areas

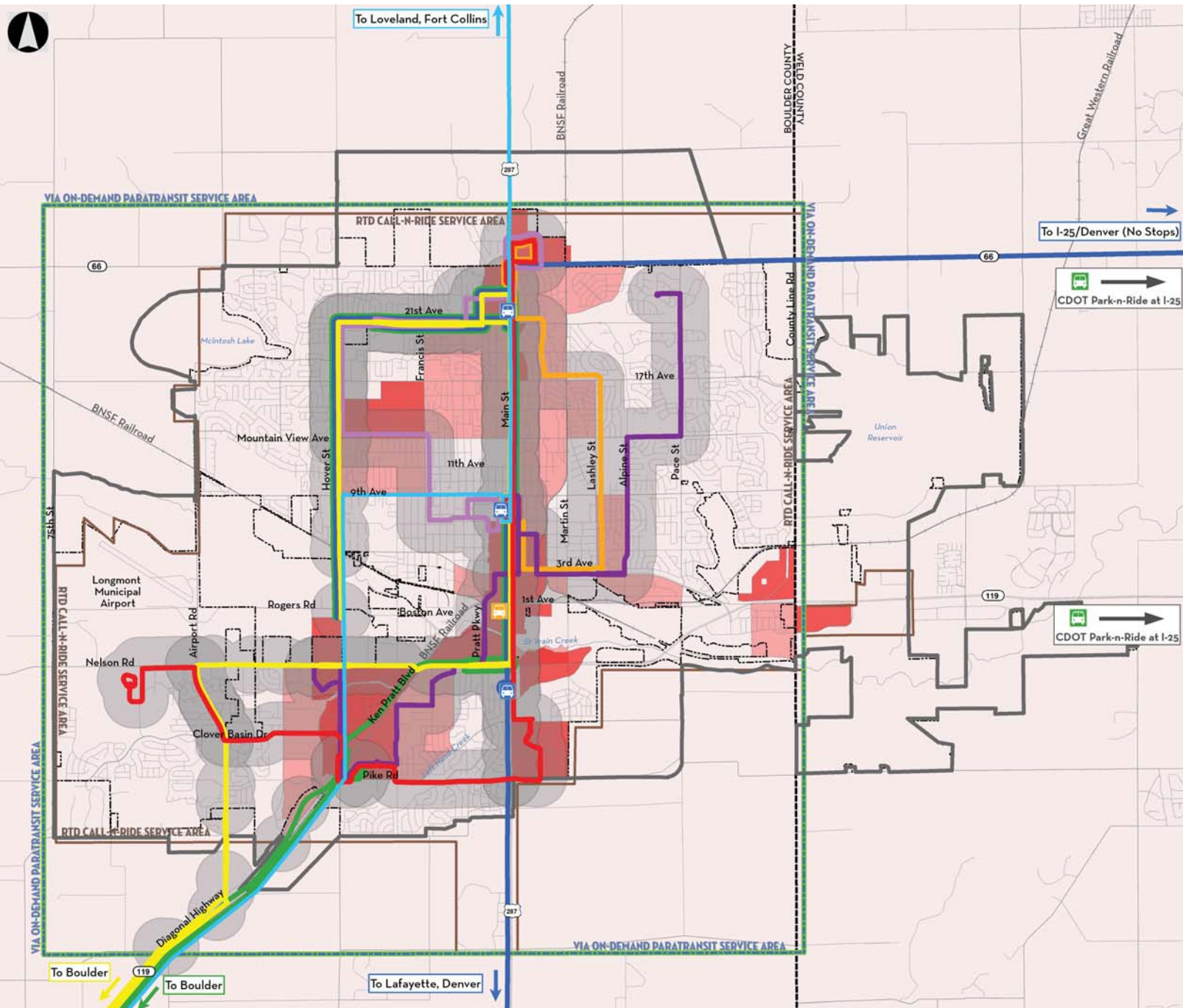
Land Use Density

- <6 (HH + Jobs)/Acre
- 6-12 (HH + Jobs)/Acre
- >12 (HH + Jobs)/Acre and/or Regional Center
- Transit Service Within 1/4 Mile
- CDOT Park-n-Ride
- RTD Park-n-Ride
- Planned 1st/Main Station
- Route 323 (Every 60-Minutes)
- Route 324 (Every 30-Minutes)
- Route 326 (Every 60-Minutes)
- Route 327 (Every 60-Minutes)
- BOLT Route
- FLEX Route
- J Route
- L, LNX, LSX, LX Route
- RTD Call-n-Ride Service Area
- Via On-Demand Paratransit Service
- Railroad
- Roads
- County Boundary
- Longmont Planning Area
- Longmont City Boundary

Figure 10



Date: 5/5/2016





b. Transit System Improvement Plan

Figure 11 depicts key features of the Transit Improvement Plan (TIP) for Longmont.

The TIP shown on the following page illustrates transit system improvements to enhance service for residents and visitors and to serve anticipated growth and development. Improvement needs are categorized within three general time frames: short-range needs within an approximate 5-year time frame, mid-range with an approximate 5- to 10-year time frame, and long-range beyond 10 years.

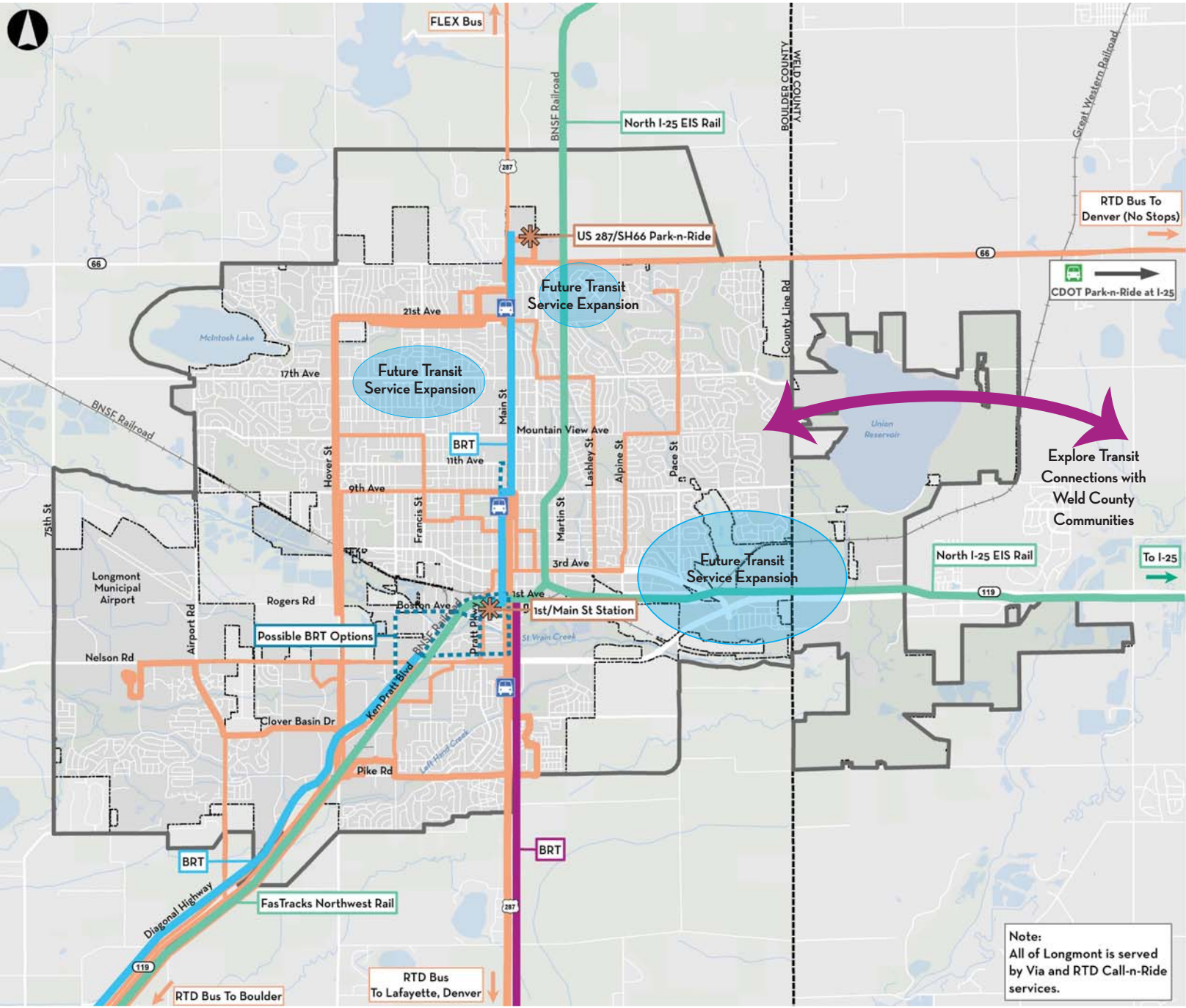
High priority, **short-range transit improvements** include:

SH 119 BRT – The NAMS, completed in 2014, was a collaborative effort among RTD, DRCOG, CDOT, and 16 northwest area stakeholders, including the City of Longmont (See **Appendix A**, page A-5). The purpose of the study was to develop a prioritized list of mobility improvements for the northwest part of the RTD service area. The overall conclusion of the study was that the Northwest area remains committed to Northwest Rail as envisioned in FasTracks, but given the projected timing of Northwest Rail’s implementation (currently projected by RTD as after 2040), Northwest stakeholders want to see mobility benefits sooner. BRT was identified as a transit solution that could be implemented sooner, with SH 119 (Longmont Diagonal) between Boulder and Longmont as the top priority. The DRCOG 2016-2021 TIP includes a planning, environmental, and preliminary design study for the SH 119 BRT corridor, to be led by RTD in coordination with corridor cities and counties. The study is anticipated to begin in 2016. In addition, the TIP includes design and construction dollars for the Longmont Station Transfer Center at 1st & Main in downtown Longmont.

Longmont will actively participate in the planning, design, and implementation of the SH 119 BRT as a short-range priority for the City. Longmont will also coordinate with RTD on reconfiguration of the local Longmont bus routes to optimize connectivity with BRT. To facilitate Longmont’s participation in the RTD-led study, the City prepared a *Longmont Bus Rapid Transit Alignment Analysis*. That report provides initial evaluations of:

- ▶ Four different potential alignments to connect the BRT between the Longmont Diagonal and the planned station at 1st & Main
- ▶ Lane configuration options to provide for the BRT along SH 119/Ken Pratt Boulevard
- ▶ Evaluation on Coffman Street versus Main Street as the preferred BRT route north from the 1st & Main station

Expand Bus Service – Longmont will work with RTD to extend fixed route bus service to the currently unserved southeast areas of the City, including the Sugar Mill and SH 119 Gateway focus area and to underserved north Longmont neighborhoods.



CITY OF LONGMONT
Transit Improvement Plan

- Short-Range
- Mid-Range
- Long-Range
- Future Bus Transfer Station
- Existing Transit Service**
- CDOT Park-n-Ride
- RTD Park-n-Ride
- Existing Bus Routes
- Roads
- Railroad
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Note:
See Multimodal Transportation Implementation Plan (MTIP) for additional details.

Note:
All of Longmont is served by Via and RTD Call-n-Ride services.

Figure 11



Date: 07/25/2016

Mid-range transit improvements include:

US 287 BRT – This is a planned short-range enhancement that will increase the frequency and hours of operation of L Route buses along US 287 to the south of Longmont. The introduction of BRT elements to the US 287 corridor is identified as a mid-range initiative planned in cooperation with RTD and neighboring jurisdictions to the south.

Weld County Transit – Coordination between Weld County and Weld County municipalities to explore options to provide public transit service connecting Weld County communities that are currently outside of the RTD boundary with Longmont.

Long-range transit improvements include:

Northwest Rail – Implement the Northwest Rail corridor that is part of the RTD FasTracks regional transit plan. FasTracks funding is not anticipated to be available until after 2040.

Northern Colorado Rail – Implement the Northern Colorado Rail corridor that is a long-range recommendation of the North I-25 Environmental Impact Statement prepared by CDOT. No funding mechanism has been identified for this project.



5. ACTIVE TRANSPORTATION

This section describes plans for the two primary active transportation modes: bicycling and walking, both of which provide critical non-motorized first/last mile connections to transit. The off-street trails and many of the on-street components of the bicycle and pedestrian systems described in this section also serve the needs of other active models such as wheel chair users, rollerbladers, and skate boarders.

a. Bicycle System

Longmont has built an extensive network of trails and on-street bicycle facilities that support active transportation and recreation-oriented bicycling. The intent of the bicycle system element of the MMTP is to build upon the existing network by:

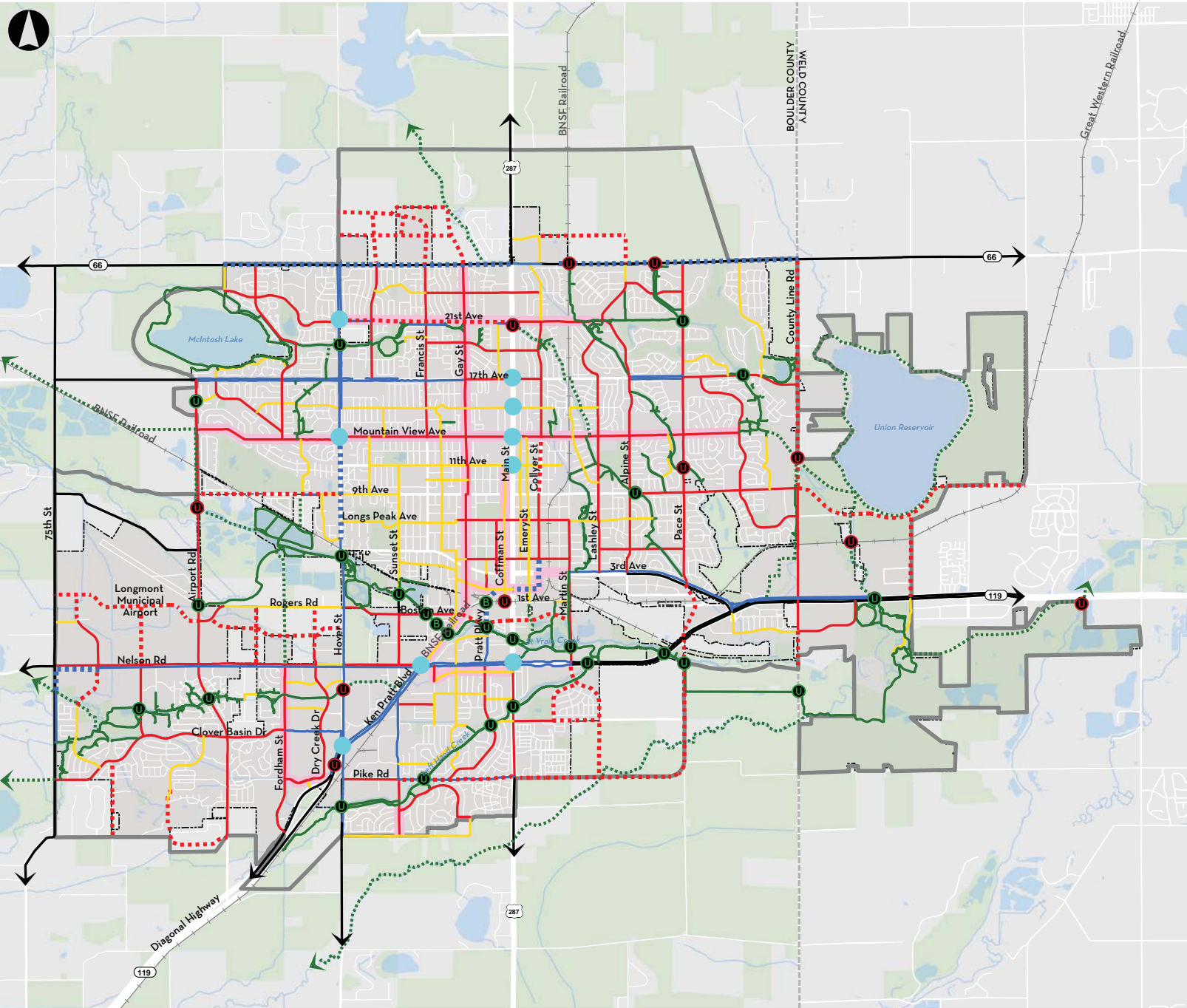
- ▶ Identifying and filling gaps in the existing system to ensure bicycle accessibility to all neighborhoods and activity areas in the City
- ▶ Enhance segments of the existing bicycle system to maximize the safety and comfort of bicycle facilities for a broad range of cycling abilities
- ▶ Improve crossings of busy streets and other potential barriers to bicycle movements

The Longmont Parks, Recreation & Trails Master Plan, accepted by City Council in April 2014, provides a plan for enhancements to the trail system, used primarily for recreational purposes by bicyclists, pedestrians, and other non-motorized users. The Bicycle Facilities Plan map (**Figure 12**) shows the existing and recommended future bicycle system in Longmont, incorporating the trail system plan and recommended on-street bicycle system improvements.

Bicyclists vary in their level of experience and confidence. To offer appropriate options for bicyclists of all levels, it is important that Longmont’s system provides a range of facility types.

THREE TYPES OF CYCLISTS

Confident, Expert, Commuter Cyclists	Interested but Concerned	Casual, Recreational Cyclists
Will use a range of on-street bikeways	May use on-street bike lanes Often prefer protected or separated bike facilities	Prefer off-street trails and sidepaths

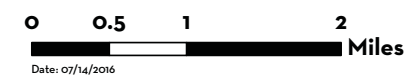


CITY OF LONGMONT Bicycle Facilities Plan

- Existing Underpass
- Future Underpass
- Existing Bridge/Overpass (for streets/RRs)
- Intersection Improvements
- Existing Off-Street Trail
- Future Off-Street Trail
- Existing Bike Lane
- Future Bike Lane
- Future Enhanced Multi-use Corridor
- Existing Sidewalk
- Future Sidewalk
- Designated Shared Lane
- Existing Shoulder
- County Boundary
- Streams
- Lakes
- Parks & Open Space
- Longmont Planning Area
- Longmont City Boundary

Note:
For map clarity, only one facility type may be shown for each segment although more than one facility type may exist in specific areas.

Figure 12



Multimodal Transportation Implementation Plan

Bicycle facility types identified on this plan include:

- ▶ **Multi-Use Trails** – Trails intended to accommodate bicyclists, pedestrians, joggers, and other non-motorized travel on routes that are not part of street right-of-way. The majority of existing and planned trails are paved, but unpaved trails are also included in this category. Being separated from motorized traffic, trails provide the most comfortable bicycling experience for many riders, including families and more casual riders.
- ▶ **Bike Lanes** – Typically 5- to 6-foot wide striped lanes on the roadway that are signed and marked for exclusive use of bicyclists.
- ▶ **Sidepaths** – Detached or attached paths that are a minimum of 8-feet wide allowing for shared use by pedestrians and bicyclists. While sidepaths are not the preferred facility for many expert, commuter bicyclists they may be a suitable facility type for casual riders.
- ▶ **Shared Lanes** – Bike routes on streets with low motor vehicle volumes and speeds that can safely accommodate bicyclists sharing lanes with motorists. Shared lanes are typically marked with sharrows and signs indicating that motorists need to watch for and share lanes with bicyclists.
- ▶ **Shoulders** – Sections of SH 66, Ken Pratt Boulevard/SH 119, and Main Street/US 287 north and south of Longmont have shoulders that can accommodate bicyclists adjacent to motor vehicle lanes. Many casual bicyclists do not feel comfortable on shoulders of high-traffic, high-speed roads, though bicycle commuters may prefer these to meandering trails.

In addition to these facility types, the Bicycle Facilities Plan provides an indication for **Future Enhanced Multi-Use Corridors** on several streets and associated intersections in the City. Enhanced bicycle facilities are those designated as key corridors in the Parks, Recreation and Trails Master Plan, warranting consideration of some special treatment to enhance active modes including bicycling, walking, jogging, and others. Enhanced Multi-Use corridor options may include:

- ▶ **Separated/Protected Bike Lanes/ Multi-use Trails within the Right-of-Way** – On-street bike lanes that are provided with some form of vertical separation from traffic lanes. Examples include using parked cars, posts, or bollards to separate multi-use trails from general traffic.



Multimodal Transportation Implementation Plan

- ▶ *Bicycle Boulevards/Cycle Tracks* – Shared lanes on streets that are designed for bicyclists to be the favored mode. Automobile traffic can be slowed by means of curvilinear streets, diverters, narrow lanes, or traffic circles, as well as enhanced signage.



Finally, several locations are marked where plan participants have identified the need for special accommodations for active modes or where bicycle/pedestrian accidents have been recorded. These location-specific improvements identified on the Bicycle Facilities Plan include:

- ▶ *Intersection/Crossing Improvements* – Special attention should be provided for signing, marking, and traffic control measures to improve crossing safety and comfort.
- ▶ *Underpasses/Bridges* – In addition to the existing bridges and underpasses, several new underpasses are recommended to carry multi-use trail users underneath busy streets to avoid traffic conflicts.

Additional improvements to intersections along future enhanced multi-use corridors may also be needed.

The on-street bicycle improvement recommendations, including bike lanes, sidepaths, and shared lanes, are listed in **Table 2**. Improvements were evaluated based on three criteria and rated from 1 to 3 for each criterion (3 is best) based on the following definitions:

- ▶ **Connectivity/Access Criterion:**
 - Does the project fill a gap in the existing on-street or off-street bike systems?
 - Does the project provide bike access to a commercial or mixed use center?
 - Does the project improve access to transit?

Scoring:

- 3 = Fills a gap in the existing system *and* provides access to a commercial district, community activity or transit; Significantly improves crossing of a major barrier
- 2 = Fills a gap in the existing system *or* provides access to a commercial district, community activity or transit; Significantly improves crossing of a moderate barrier
- 1 = Does not fill a gap (only enhances an existing bike connection)

Multimodal Transportation Implementation Plan

► Use of Infrastructure Criterion:

- Does the project make effective use of existing infrastructure?
- Can the project be built without additional right of way?

Scoring:

- 3 = Provides a new bike connection using an existing street
- 2 = Provides a new bike connection using existing right-of-way or enhances an existing bike connection using an existing street
- 1 = Requires additional right-of-way and/or requires street widening to enhance an existing bike connection

► Safety/Level of Comfort Criterion:

- Does the project address a known safety concern?
- Does the improvement separate bikes from high speed/high volume traffic?

Scoring:

- 3 = Directly addresses a clear safety concern; Provides separation from a high speed/high volume road
- 2 = Addresses a potential safety concern; Provides separation from a moderate speed/moderate traffic road
- 1 = No or only minor safety benefit

Table 2. Bicycle System Improvements

Street/Trail, From-To	Facility Type	Connectivity and Access	Use of Infrastructure	Safety	Priority
<i>Improvements on east-west streets (listed from north to south)</i>					
SH 66, Main St west to Longmont City Limits	Sidepath	2	2	3	High
21st Ave, Hover St to Main St	Enhanced Bike Lanes	3	3	2	High
21 st Ave, Main St to Alpine St	Enhance Multi-Use Corridor	1	2	2	Mid-Low
Mountain View Ave, Airport Rd to Deerwood Dr	Enhance Existing Bike Lanes	2	2	2	Mid-Low
9th Ave, Airport Rd to Hover St	Bike Lanes	2	3	2	High
2nd Ave/Collyer St, Gay St to 3rd Ave, 3rd Ave to Martin St	Enhanced Shared Lanes and Sidepaths	3	3	2	High
Boston Ave, Pratt Pkwy to Martin St	Bike Lanes	3	3	3	High
Grand Ave/Sherman St, Ken Pratt Blvd to Main St	Enhance Existing Shared Lanes	2	2	2	Mid-Low
Pike Rd, Sunset St to Main St	Bike Lanes	2	3	3	High

Multimodal Transportation Implementation Plan

Table 2. Bicycle System Improvements

Street/Trail, From-To	Facility Type	Connectivity and Access	Use of Infrastructure	Safety	Priority
<i>Improvements on north-south streets (listed from west to east)</i>					
Fordham St, Pike Rd/ Dry Creek Dr to Nelson Rd	Enhance Existing Bike Lanes	1	2	2	Mid-Low
Hover St, 3rd Ave to Mountain View Ave	Sidepaths	3	2	3	High
Price St, Nelson Rd to Boston Ave	Enhance Existing Shared Lanes	3	2	2	High
Gay St, Boston Ave to SH 66	Enhance Existing Bike Lanes	3	2	2	High
Coffman St, 1st Ave to 9th Ave	Enhance Existing Shared Lanes	3	2	2	High
Collyer St, 9th Ave to Mountain View Ave	Bike Lanes	3	1	2	High
County Line Rd, 9th Ave to SH 66	Bike Lanes	2	2	3	High
<i>New Underpasses (listed from west to east)</i>					
St. Vrain Creek (South of 9 th Ave) at Airport Rd	Trail Underpass	1	2	1	Mid-Low
Ken Pratt Blvd crossing southwest of Hover St	Ped/bike Crossing under Ken Pratt Blvd	2	2	3	High
Hover St crossing south of Bent Way and Nelson Rd	Trail Underpass	2	2	3	High
Coffman St at 1 st Ave	Ped/bike Crossing under BNSF RR & 1 st Ave	2	2	1	Mid-Low
Oligarchy Ditch (South of 21st Ave) at Main St	Trail Underpass	2	2	3	High
Rough & Ready Trail (north of 9 th Ave) at Pace St	Trail Underpass	2	2	2	Mid-Low
Spring Gulch Trail (west of Union Reservoir) at County Line Rd	Trail Underpass	1	2	2	Mid-Low
Union Reservoir Ditch at BNSF RR	Trail Underpass	1	2	1	Mid-Low
St. Vrain Creek at SH 119 at eastern edge of Longmont	Trail underpass	2	2	3	High

Multimodal Transportation Implementation Plan

Based on the evaluations and giving similar weight to these criteria, projects were assigned priorities in two general categories: High and Mid-Low. Since on-street bicycle improvements are frequently implemented as part of multimodal street reconstruction or other improvement projects, specific time frames are not assigned to the bicycle projects. Similarly, since the specific project scopes and designs have not been identified, cost estimates have not been assigned. However, the high priority projects have been identified as improvements that should be given priority focus because they fill an identified gap in the City's bicycle system and/or address a significant safety concern.

Multi-use trails were not evaluated and prioritized in this effort since their prioritization and implementation is addressed in the Longmont Parks, Recreation & Trails Master Plan.

b. Pedestrian System

The pedestrian element of the plan for Longmont is aimed at providing sidewalks and paths to accommodate pedestrians throughout the City, while focusing on development of high quality pedestrian accommodations in key areas of the City where pedestrian activity is currently high or is expected to be high in the future.

Appropriate sidewalks are incorporated in the City's street standards for all street types and sidewalks are currently provided on a large majority of streets throughout Longmont. However, there are missing sidewalk segments found throughout the City and a goal is to fill these gaps with sidewalks that best fit the street context as quickly as funding will allow or as development occurs. The Pedestrian Plan map (**Figure 13**) shows key missing sidewalk links that have been identified on existing streets. Appropriate sidewalks will also be required as new development occurs within the City boundaries and the Longmont planning area.

The Pedestrian Plan also shows existing and future Pedestrian Activity Centers, including schools, transit stations, centers and mixed use corridors. Streets within and immediately adjacent to these activity centers should include provision of a well-connected and high quality pedestrian system focusing on pedestrian friendly features such as wide sidewalks, sidewalks detached from high traffic streets, landscape buffers, street lighting, and convenient and comfortable street crossings.

A particularly high priority focus area for the pedestrian system is the Main Street corridor, including downtown, the 1st & Main area and other mixed use nodes along the corridor. A high quality pedestrian network is central to Envision Longmont's goals of encouraging high density mixed use development along the Main Street corridor, encouraging transit oriented development, optimizing first/last mile connections to existing and planned transit stations, and limiting the growth of automobile traffic on Main Street.

Investments in improving the pedestrian system throughout the City, and particularly in the pedestrian focus areas, will be implemented both by the City working with private development to provide needed pedestrian connections and targeted City investments in pedestrian enhancements.



CITY OF LONGMONT Pedestrian Plan

Pedestrian Activity Centers

- Elementary School
- Middle School
- High School
- K-8, K-12, Charter, Special School
- Planned Transfer Station
- RTD Park-n-Ride

Existing Parks

- Existing Parks
- Centers and Mixed Use Corridors

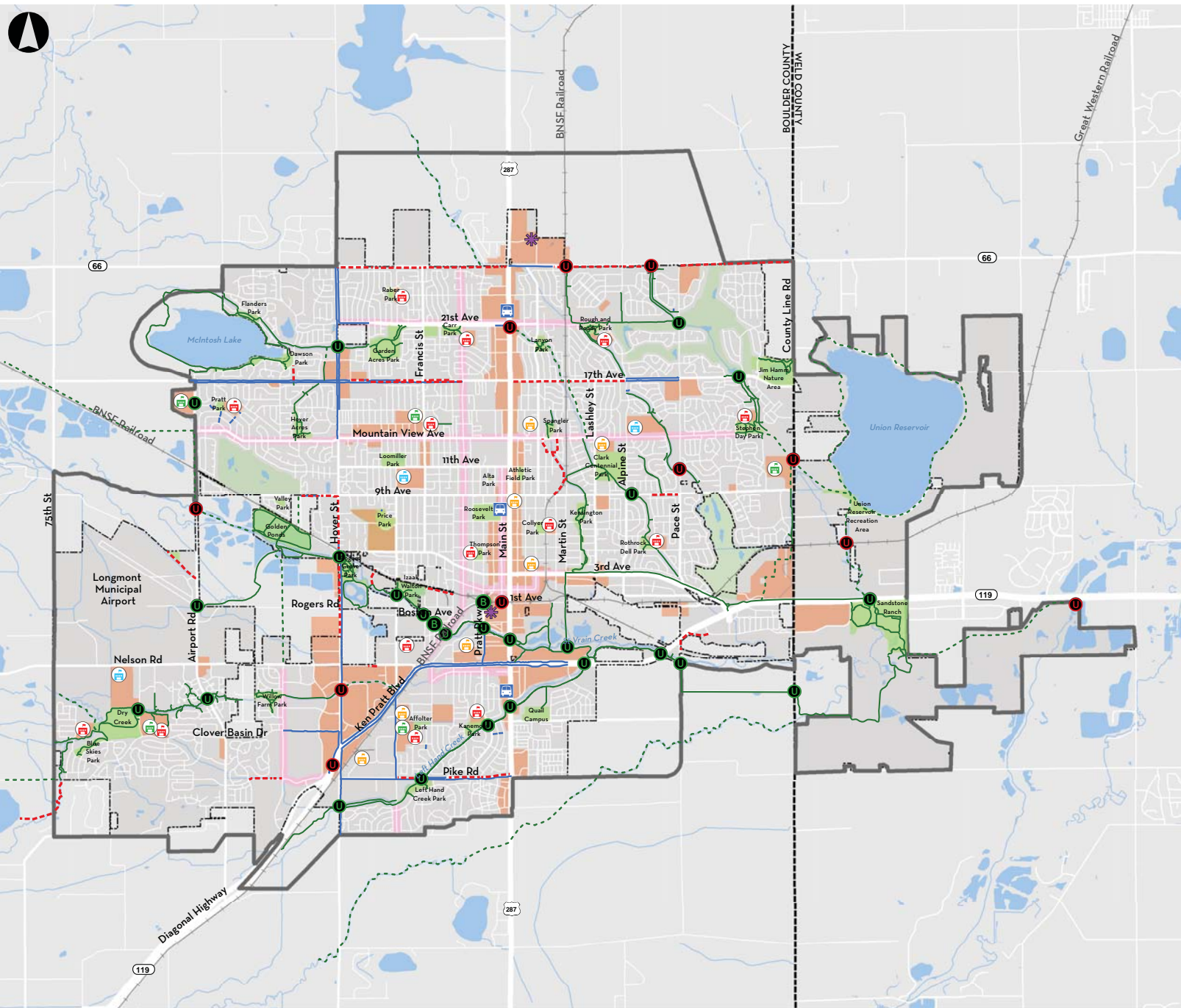
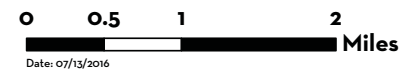
Pedestrian Facilities

- Existing Bridge/Overpass (for streets/RRs)
- Existing Underpass
- Future Underpass
- Roadways (Most with sidewalks)
- Existing Multi-Use Trail
- Existing Sidepath

Future Facilities

- Future Multi-Use Trail
- Future Enhanced Multi-use Corridor
- Other Missing Links

Figure 13





APPENDIX A

SUMMARY OF PREVIOUS PLANS

This section provides brief summaries of plans, reports, and studies prepared by the City of Longmont or other neighboring and regional agencies that are relevant to the current Envision Longmont transportation planning process.

The first group of plans includes those prepared by the City of Longmont. These include the previous Multimodal Transportation Plan (MMTP) prepared in 2005, the City’s capital improvement plan (CIP), and a number of plans focused on a particular transportation mode or sub-area within the City. The current MMTP builds upon the analysis and recommendations from these previous and, in some cases, more focused planning efforts.

The second group of plans includes those prepared by regional and county agencies. These plans by the Denver Regional Council of Governments (DRCOG), Regional Transportation District (RTD), Boulder County, and Weld County provide a regional context for Longmont’s transportation plan and understanding of the roadway, transit and trail systems that connect with the City’s own systems.

LONGMONT PLANS

Longmont Capital Improvement Program

Prepared by: City of Longmont

Prepared in: Updated Annually

Purpose, Findings, and Recommendations Summary: The Longmont 2015–2019 Capital Improvement Program report summarizes the CIP process and lists funded projects for the five-year period beginning in 2015.

Longmont Roadway Plan

Prepared by: City of Longmont, Muller Engineering, and Felsburg Holt & Ullevig

Prepared in: 2014

Purpose, Findings, and Recommendations Summary: The Longmont Roadway Plan provides 2035 traffic forecasts using a refined version of the DRCOG 2035 regional travel demand model, with adjusted demographic data, a refined transportation analysis zone (TAZ) system, and a focused roadway network in the Longmont area. Based on these forecasted conditions, roadway system improvement needs were identified for short- and long-range future, including:

- ▶ 26 corridor improvements, with an estimated total cost of \$144.8 million
- ▶ 14 intersection improvement projects, with an estimated total cost of \$42.0 million

Multimodal Transportation Implementation Plan

Eight of these projects were identified as near-term needs, including:

- ▶ 3 corridor improvements, with an estimated total cost of \$10.8 million
- ▶ 5 intersection improvements, with an estimated total cost of \$20.5 million

The current Envision Longmont transportation plan used the roadway forecasts and improvement needs assessments and recommendations as a starting point, and followed with forecasting and needs assessments that incorporated the latest DRCOG models and local planning information.

Longmont Parks, Recreation & Trails Master Plan

Prepared by: City of Longmont, MIG

Prepared in: 2014

Purpose, Findings, and Recommendations Summary: The Longmont Parks, Recreation & Trails Master Plan, accepted by City Council in April 2014, provides an inventory of existing parks, recreation facilities and trails, and proposed enhancements to those systems. Specific to transportation, the plan recommends utilizing the existing street network to make connections between greenways. The plan envisions something more like a greenway experience introduced to key streets.

First and Main Station Transit Revitalization Plan

Prepared by: City of Longmont, Steer Davies Gleave

Prepared in: 2012

Purpose, Findings, and Recommendations Summary: The RTD 2010 Northwest Rail Corridor Final Environmental Evaluation set the location for the Northwest Rail Corridor end-of-line Station to the corner of First Avenue and Main Street, just south of downtown Longmont. This station is planned to serve as a bus facility in advance of the completion of the Northwest Rail project. The purposes of this First and Main Station Transit Revitalization Plan were to plan transit oriented development in the vicinity of this station and to develop a strategic transit plan to focus Longmont bus routes on this rail station.

Longmont Pedestrian Crossing Treatments Guidelines

Prepared by: City of Longmont

Prepared in: 2009

Purpose, Findings, and Recommendations Summary: The Longmont Pedestrian Crossing Treatments Guidelines, adopted by City Council in September 2009, documents the City's pedestrian cross treatment policies, provides guidelines for recommended treatments applied to Longmont streets, and provides crossing evaluation procedures.

Multimodal Transportation Implementation Plan

Longmont School Safety Program

Prepared by: City of Longmont

Prepared in: 2009

Purpose, Findings, and Recommendations Summary: The School Safety Program report, prepared by Longmont in cooperation with the St. Vrain Valley School District, describes Longmont's school safety program, including safety measures and implementation guidelines for enhanced school access safety for pedestrians, bicyclists, and motorists.

Longmont Design Standards & Construction Specifications

Prepared by: City of Longmont

Prepared in: 2007

Purpose, Findings, and Recommendations Summary: The Design Standards & Construction Specifications manual provides standards and specifications for infrastructure development in Longmont. Elements of particular interest to the MMTP update process include design criteria and typical sections for various classifications of streets and design criteria for sidepaths, multi-use trails, and pedestrian bridges and underpasses.

Longmont Neighborhood Traffic Mitigation Program (Plan and Manual)

Prepared by: City of Longmont

Prepared in: 2006

Purpose, Findings, and Recommendations Summary: The Longmont Neighborhood Traffic Mitigation Program Manual provides neighborhood traffic mitigation policies that can be applied to neighborhood collector and local streets to reduce the impact of vehicular traffic. It provides procedures for city-initiated and citizen-initiated traffic mitigation and a toolbox of mitigation measures that can be considered.

Longmont Multimodal Transportation Plan

Prepared by: City of Longmont, LSA Associates, and Catalyst Consulting

Prepared in: 2005

Purpose, Findings, and Recommendations Summary: The existing MMTP for Longmont was completed and adopted in July 2005. The plan includes a vision statement and a set of seven goals for the City's transportation system and six plan elements, including:

- ▶ Multimodal System Plan
- ▶ Bicycle Vision Plan
- ▶ Pedestrian Vision Plan
- ▶ Transit Vision Plan
- ▶ Travel Demand Management
- ▶ Roadway Vision Plan

Multimodal Transportation Implementation Plan

The MMTP that is part of the Envision Longmont plan and is further documented in this MMTP is an update to the 2005 plan.

REGIONAL PLANS

Boulder County Transportation Regional Trails Program

Prepared by: Boulder County

Prepared in: Updated Annually (initially adopted April 15, 2003)

Purpose, Findings, and Recommendations Summary: The Boulder County Regional Trail program is a multi-year effort to plan, design and construct a series of soft-surface multi-use trails that connect within Boulder County. The Transportation Department focuses its trail planning and development on regional trails that are multi-use and serve both transportation and recreational corridors. The following are priority projects involving Longmont:

- ▶ Longmont to Boulder (LoBo) Regional Trail
- ▶ St. Vrain Greenway

DRCOG 2040 Fiscally Constrained Regional Transportation Plan

Prepared by: Denver Regional Council of Governments

Prepared in: 2016

Purpose, Findings, and Recommendations Summary: DRCOG prepares Fiscally Constrained Regional Transportation Plans (RTPs) at least every five years to define the multimodal transportation elements and services that can be provided over the next 25 years with reasonably expected revenues. The 2040 Fiscally Constrained RTP was adopted by the DRCOG Board in 2016. The RTP provides a consolidated regional transportation planning document that incorporates key transportation improvements contained in municipal and county transportation plans such as Envision Longmont and the MTIP.

The 2040 RTP includes the following major transportation capacity improvement projects in or immediately affecting Longmont:

- ▶ Bus Rapid Transit (BRT) on SH 119, Foothills Parkway to US 287
- ▶ Downtown Longmont Park-n-Ride, 439 spaces
- ▶ SH 66 widening to 4 lanes, Hover Street to Main Street
- ▶ Nelson Road widening to 4 lanes, 75th Street to Affolter Drive
- ▶ Pace Street widening to 4 lanes, 5th Avenue to Ute Road



Multimodal Transportation Implementation Plan

DRCOG 2016–2021 Transportation Improvement Plan

Prepared by: Denver Regional Council of Governments

Prepared in: Updated Every Two Years
(adopted April 15, 2015 and amended January 20, 2016)

Purpose, Findings, and Recommendations Summary: The Transportation Improvement Program (TIP) identifies federally funded surface transportation projects to be implemented in the Denver region in six-year cycles. Recently approved TIP projects in or affecting Longmont, all with at least 80% federal funding, include:

- ▶ *Longmont Station Transfer Center* – A bus transfer facility, 240-space Park-n-Ride, and passenger waiting area to be located at 1st Avenue and Main Street south of downtown Longmont, funded in Fiscal Years (FYs) 2016–2017.
- ▶ *SH 119 Bike/Ped Underpass* – A multi-use underpass at least 8 feet wide and sidewalk connection under SH 119 south of the Hover Street intersection, to be completed in FY 2016.
- ▶ *RTD L Route Service Enhancement* – Expand service frequency on RTD’s L Route between Longmont and Denver, including additional one-hour headways mid-day on weekdays, an additional late night weekday trip, and additional Saturday trips. Funding is included for FY 2016–2018 service enhancements.
- ▶ *FLEX Route Extension – Boulder to Longmont* – Extend the existing Fort Collins to Longmont FLEX bus to Boulder. Funding is included for FY 2016–2018 service enhancements.
- ▶ *SH 119 BRT National Environmental Policy Act (NEPA) Analysis – Boulder to Longmont* – Conduct the next level of route planning, NEPA clearances, and preliminary engineering to implement BRT in the SH 119 corridor, funded in FY 2016.

Northwest Area Mobility Study

Prepared by: Regional Transportation District (RTD), HNTB

Prepared in: 2014

Purpose, Findings, and Recommendations Summary: The Northwest Area Mobility Study (NAMS) was a collaborative effort among RTD, CDOT, DRCOG, and 16 northwest area stakeholders, including the City of Longmont. The purpose of the study was to develop a prioritized list of mobility improvements for the northwest part of the RTD service area. The overall conclusion of the study is that the Northwest Area remains committed to Northwest Rail as envisioned in FasTracks, but given the projected timing of Northwest Rail’s implementation, Northwest stakeholders want to see mobility benefits sooner.

BRT was identified as a transit solution that could be implemented sooner, with six corridors determined to be potentially viable for BRT. The SH 119 (Longmont Diagonal) corridor between Boulder and Longmont was selected as the first priority corridor, and US 287 was identified as the second priority. SH 7 was later selected as a third candidate priority corridor. The following short-range steps were identified for the highest priority corridors:

Multimodal Transportation Implementation Plan

- ▶ Proceed into advanced planning/environmental/preliminary design
- ▶ Implement one or both corridors after completing a study based on further refinement of regional priorities, project scopes, funding availability, and leveraging opportunities.
- ▶ Include anticipated bus ridership in Arterial BRT/Enhanced Bus Service station investments and station design features consistent with future rail service.

Boulder County Transportation Master Plan

Prepared by: Boulder County

Prepared in: 2012

Purpose, Findings, and Recommendations Summary: Boulder County prepared a long range transportation master plan that addresses the transportation system throughout the County. This plan will be used as a reference to coordinate Longmont's multimodal transportation planning north, south, and west of the City.

Weld County 2035 Transportation Plan

Prepared by: Weld County

Prepared in: 2011

Purpose, Findings, and Recommendations Summary: Weld County prepared a 2035 Transportation Plan that focuses on the transportation system in the unincorporated portion of the County. This plan will be used as a reference to coordinate Longmont's multimodal transportation planning in the eastern part of the City.

North I-25 Environmental Impact Statement

Prepared by: Colorado Department of Transportation

Prepared in: 2011

Purpose, Findings, and Recommendations Summary: CDOT completed an Environmental Impact Statement looking at travel between the Denver metro area and Fort Collins along the I-25 corridor. The study corridor also encompassed the US 287 corridor to the west and US 85 corridor to the east and identified roadway and bus transit improvements along I-25, US 287, and US 85. In addition, the study recommended a passenger rail line connecting the North Metro FasTracks corridor with Longmont, and cities north along the BNSF Railroad, including Berthoud, Loveland and Fort Collins. This rail connection was not included in the fiscally constrained improvement package that was covered by the project's Record of Decision, so an implementation timeframe has not been identified.

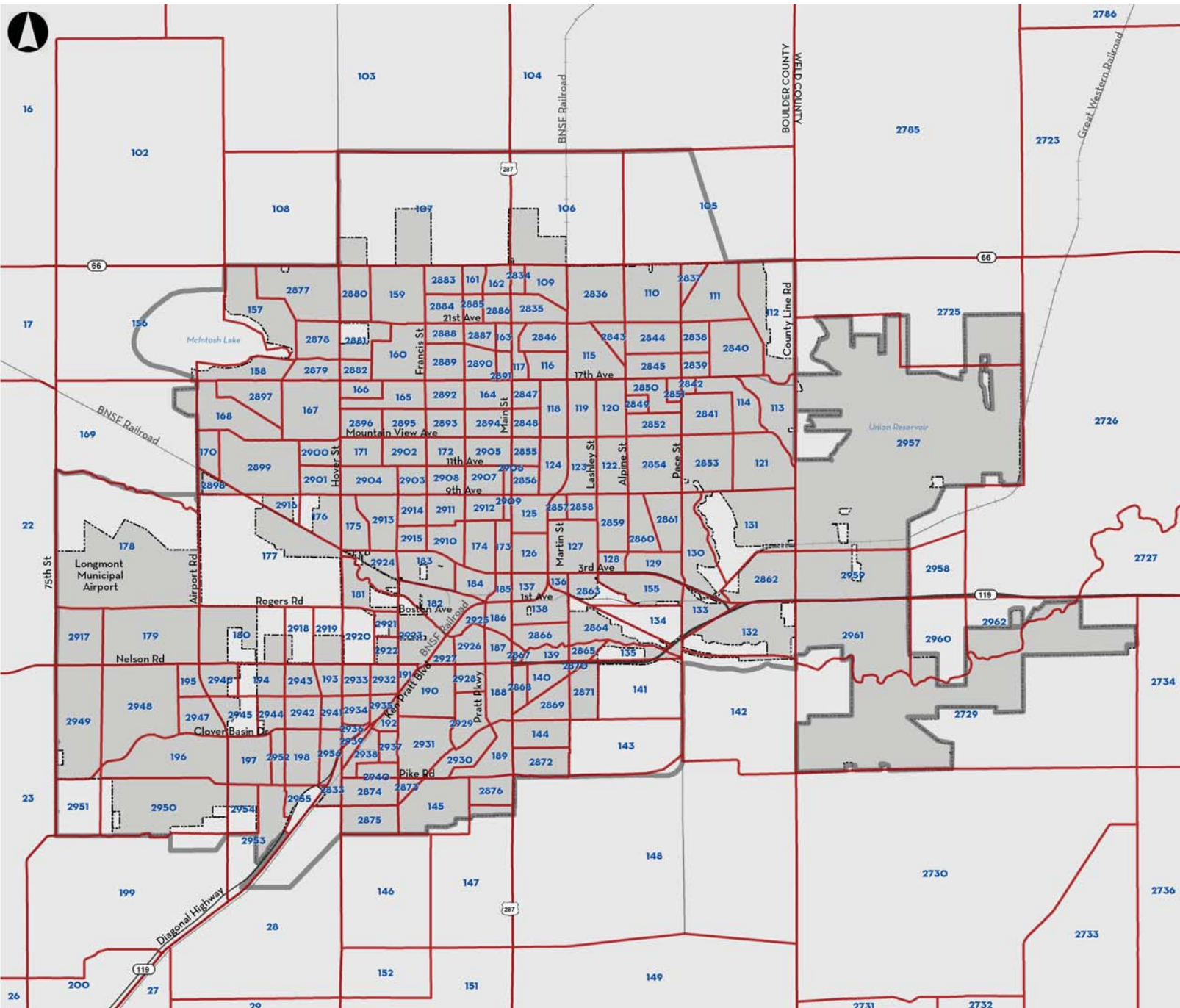


APPENDIX B

DEMOGRAPHIC FORECASTS

Figure B-1 is a TAZ map of the Longmont planning area and **Table B-1** provides the 2040 forecasted numbers of households and employment by category. The totals show forecasted increases of 23% in households and 22% in employment between 2010 and 2040.

To look more closely at travel within Longmont, the City was divided into 7 sub-areas. **Figure B-2** shows the number of daily trips generated within each of the sub-areas and the trip patterns among the different. Understanding these patterns is useful to inform the assessment of needed improvements to multimodal connections throughout the City. Especially notable patterns include high numbers of shorter trips within the Main Street corridor and between the Main Street commercial and employment corridor and surrounding residential sub-areas to the east and west. These patterns bring to light the importance of providing multiple, convenient bicycle, pedestrian and local transit connections within the Main Street corridor and east-west connection between Main Street and adjacent neighborhoods.



**CITY OF LONGMONT
Traffic Analysis Zones**

- TAZ Boundaries
- Railroad
- Longmont Planning Area
- Longmont City Boundary

Figure B-1



Date: 4/4/2016

Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
28	37	16	0	4	20
105	49	73	0	1	74
106	4	27	871	52	950
107	226	20	25	5	50
108	151	3	0	33	36
109	265	0	0	1	1
110	474	2	0	4	6
111	125	0	0	1	1
112	271	0	0	1	1
113	327	17	50	33	100
114	271	2	0	38	40
115	438	1	0	4	5
116	249	0	0	1	1
117	67	8	508	49	565
118	387	16	0	84	100
119	353	5	0	4	9
120	356	3	0	2	5
121	586	13	75	62	150
122	43	5	50	195	250
123	266	0	45	4	49
124	265	172	20	178	370
125	300	4	100	134	238
126	210	30	270	700	1,000
127	585	12	20	68	100
128	145	1	40	9	50
129	267	4	0	1	5
130	305	1	0	4	5
131	800	4	0	6	10
132	662	166	137	154	457
133	0	76	0	24	100
134	1	70	0	70	140
135	0	0	0	1	1
136	94	6	0	34	40
137	144	366	65	69	500
138	26	52	75	158	285

Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
139	0	3	315	32	350
140	0	0	428	22	450
141	20	6	0	9	15
142	5	2	0	23	25
143	32	0	0	3	3
144	575	0	15	0	15
145	328	0	0	5	5
147	35	1	0	0	1
155	2	515	105	117	737
157	655	2	0	3	5
158	163	0	0	5	5
159	533	25	0	25	50
160	513	2	0	3	5
161	109	1	0	44	45
162	193	14	262	94	370
163	0	4	396	40	440
164	331	3	212	50	265
165	296	0	0	10	10
166	0	315	250	135	700
167	805	0	0	78	78
168	396	7	0	38	45
169	30	10	10	67	87
170	140	0	0	2	2
171	211	3	0	397	400
172	210	2	90	8	100
173	150	52	180	968	1,200
174	375	10	40	150	200
175	146	1	0	4	5
176	153	0	0	2	2
177	40	20	0	5	25
178	20	34	168	639	841
179	1	827	0	276	1,103
180	20	8	244	154	406
181	0	49	10	41	100
182	0	431	57	191	679

Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
183	410	2	0	3	5
184	180	54	25	17	96
185	70	1	120	59	180
186	355	57	125	18	200
187	104	49	300	151	500
188	270	3	183	17	203
189	361	8	90	2	100
190	156	167	145	411	723
191	0	46	100	54	200
192	0	169	50	231	450
193	0	79	400	21	500
194	192	0	0	1	1
195	415	1	0	4	5
196	968	4	40	6	50
197	388	0	0	1	1
198	10	1,150	102	383	1,635
2723	204	23	50	39	112
2725	82	18	0	12	30
2726	785	165	0	35	200
2727	11	72	120	8	200
2729	36	40	0	60	100
2734	563	61	225	89	375
2785	128	18	0	30	48
2833	1	31	95	10	136
2834	0	5	170	25	200
2835	624	9	216	45	270
2836	519	9	20	21	50
2837	241	12	50	38	100
2838	64	0	0	1	1
2839	277	1	0	2	3
2840	174	2	0	8	10
2841	395	0	0	5	5
2842	0	0	270	10	280
2843	88	4	0	36	40
2844	146	0	0	1	1



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Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
2845	254	0	0	1	1
2846	521	1	0	9	10
2847	147	8	212	45	265
2848	354	3	80	17	100
2849	77	1	0	0	1
2850	190	1	0	0	1
2851	0	6	270	4	280
2852	0	64	0	36	100
2853	539	4	0	21	25
2854	643	0	0	5	5
2855	141	37	75	38	150
2856	123	22	45	23	90
2857	113	5	0	25	30
2858	104	0	0	1	1
2859	644	1	100	9	110
2860	198	11	0	4	15
2861	271	38	0	12	50
2862	0	62	268	92	422
2863	12	113	0	124	237
2864	0	78	0	86	164
2865	0	21	12	40	73
2866	25	1	0	4	5
2867	20	2	20	18	40
2868	0	0	181	26	207
2869	167	1	75	59	135
2870	0	3	30	7	40
2871	459	0	5	0	5
2872	397	9	150	40	199
2873	0	6	0	209	215
2874	0	15	0	471	486
2875	400	0	0	5	5
2876	575	34	140	26	200
2877	477	4	0	6	10
2878	263	4	0	6	10
2879	267	0	99	11	110

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Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
2880	741	5	0	5	10
2881	156	3	54	3	60
2882	133	10	80	10	100
2883	209	0	0	5	5
2884	182	0	0	5	5
2885	196	0	0	5	5
2886	34	9	380	61	450
2887	210	4	0	46	50
2888	125	0	0	1	1
2889	242	0	0	5	5
2890	308	7	0	73	80
2891	0	4	450	46	500
2892	168	0	0	1	1
2893	183	3	0	42	45
2894	335	3	212	50	265
2895	164	2	0	298	300
2896	293	10	100	1,470	1,580
2897	398	6	40	29	75
2898	84	0	0	1	1
2899	256	0	15	0	15
2900	189	1	0	4	5
2901	575	10	0	40	50
2902	246	0	270	30	300
2903	82	1	0	149	150
2904	369	0	0	10	10
2905	83	0	0	1	1
2906	52	18	150	82	250
2907	247	0	100	0	100
2908	236	0	0	1	1
2909	190	16	55	294	365
2910	268	1	0	19	20
2911	219	0	0	5	5
2912	97	3	25	47	75
2913	90	0	40	0	40
2914	177	1	0	4	5

Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
2915	178	1	0	4	5
2916	152	0	0	3	3
2917	0	1,313	0	438	1,751
2918	15	7	0	98	105
2919	16	2	419	32	453
2920	0	11	0	9	20
2921	0	110	0	90	200
2922	0	264	0	216	480
2923	135	273	110	224	607
2924	130	28	0	32	60
2925	0	212	20	68	300
2926	0	73	300	227	600
2927	0	92	125	283	500
2928	167	2	90	8	100
2929	195	6	0	34	40
2930	223	4	0	1	5
2931	401	43	0	107	150
2932	70	52	56	60	168
2933	0	9	230	11	250
2934	0	55	380	65	500
2935	0	109	100	131	340
2936	0	5	238	7	250
2937	0	126	0	174	300
2938	0	147	0	203	350
2939	0	42	300	58	400
2940	0	177	30	243	450
2941	0	40	450	10	500
2942	0	397	0	103	500
2943	816	95	0	25	120
2944	90	0	0	1	1
2945	207	1	0	4	5
2946	399	4	100	16	120
2947	300	1	0	4	5
2948	1,384	42	0	183	225
2949	888	8	0	32	40

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Table B-1. 2040 Forecasted Numbers of Households and Employment

Envision TAZ	Total Households	Production/ Distribution Employment	Retail Employment	Service Employment	Total Employment
2950	766	0	0	1	1
2951	107	0	0	1	1
2952	60	44	0	221	265
2953	5	290	0	290	580
2954	195	0	0	1	1
2955	1	0	0	111	111
2956	0	1	255	214	470
2957	27	12	0	8	20
2958	645	1	0	0	1
2959	455	448	137	305	890
2960	0	15	200	10	225
2961	500	7	549	4	560
2962	1	330	0	70	400
2963	174	60	75	15	150
Envision Total	47,073	11,413	15,926	16,459	43,798
2040 DRCOG Total	46,989	8,806	10,787	24,205	43,798

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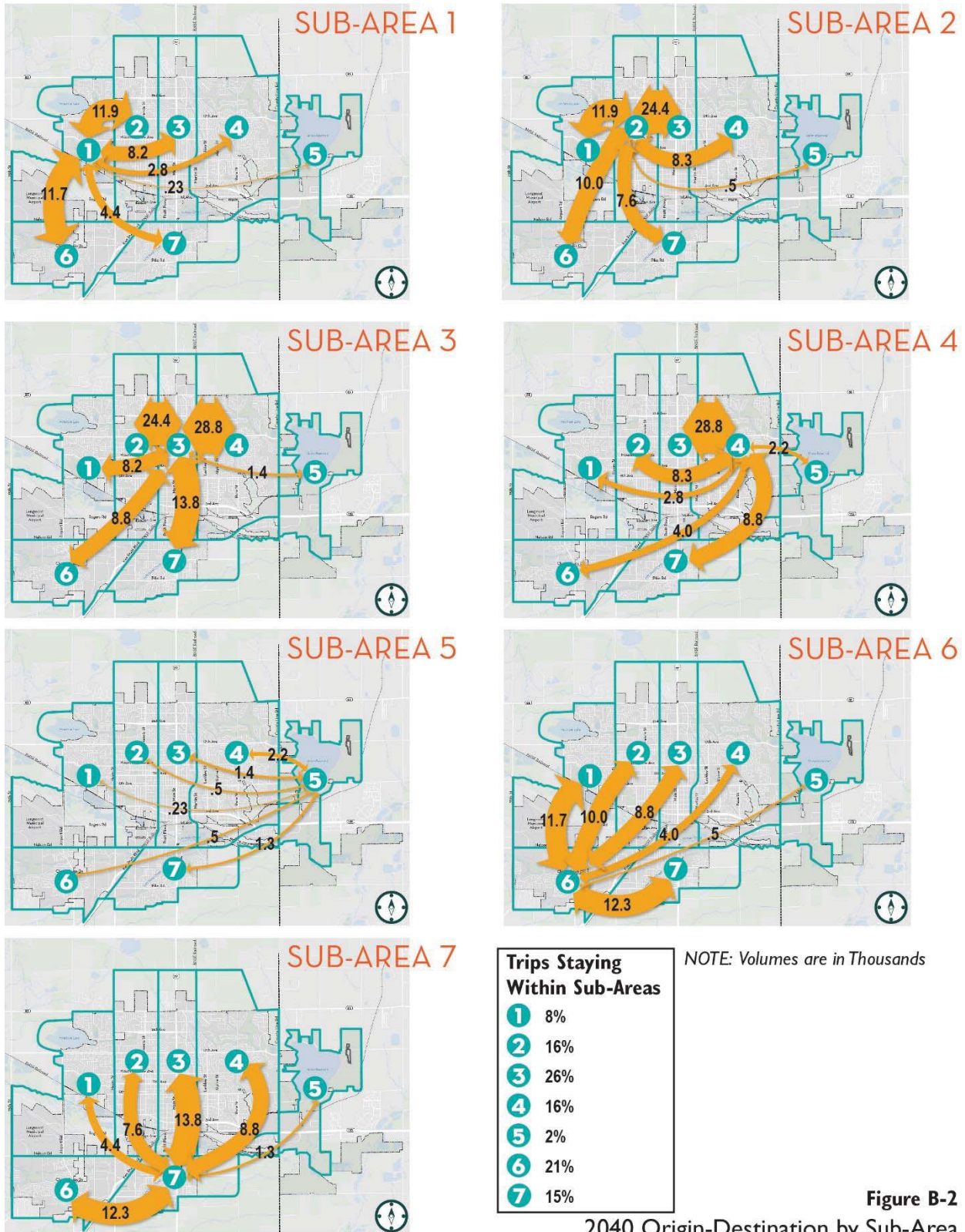


Figure B-2
2040 Origin-Destination by Sub-Area