

2045 Long Range Transportation Plan

City of Fremont, Nebraska

August 2022

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Introduction

The Fremont Long Range Transportation Plan (LRTP or Plan) is an opportunity for the Fremont community to define a vision for how the city’s transportation system should evolve to fit its community goals. The LRTP has been completed in concert with the Comprehensive Plan update to leverage a joint land use-transportation policy and strategic approach to planning. The LRTP provides a framework for future investment decisions that support these community goals. This coordinated effort allows for a Plan that not only meets mobility and safety goals, but also supports community development and quality of life goals.

This document provides a summary of the work completed to develop the LRTP, including the major elements that summarize:

- **What are our Community Goals, Vision, and Objectives?** This is about defining successful outcomes and what the community is trying to achieve. The community vision framework provided direction to the planning team while they developed the LRTP in tandem with the Fremont community.
- **Where are We Now?** This looks at Fremont’s current characteristics from a demographic, transportation performance, and public and stakeholder assessment. This overview provides a baseline of Fremont’s current community assets and defines transportation gaps and needs.
- **How are We Going to Change?** The LRTP looks out through the year 2045. The Plan evaluates an anticipated level and pattern of growth based on available data and trends in cooperation with the Comprehensive Plan. The Fremont community is positioned for growth, and this Plan identifies how the transportation system needs to evolve to address that growth. The future conditions assessment includes future travel growth, areas of safety and congestion issues, and projections of how transportation funding capabilities will change over time.
- **What Policies, Strategies, and Projects should we Prepare For?** A range of potential improvement alternatives were evaluated based on the vision framework and technical and public input on current and future needs. These different improvement alternatives were screened with a series of tools and data, public and stakeholder input, and the community vision. The improvement alternatives that did the best job of meeting the community vision have been recommended in this LRTP. The benefits and costs of each of those recommendations is included as well.





Goals, Vision, and Objectives

The Fremont LRTP’s vision was developed through input received from the community during public engagement activities. This vision plays a central role in guiding transportation decision making through the LRTP by articulating the community’s values and tying them to the Plan’s goals and objectives. Performance measures, based on these goals and objectives, were developed to evaluate how projects and strategies might aid progress toward the LRTP vision.

2045 LRTP Vision Statement

The vision statement for the Fremont 2045 LRTP is:

*The Fremont community envisions a future transportation system that is **safe** for all users and provides an **accessible, reliable, and connected** multimodal network. Fremont seeks to **maintain current infrastructure** while promoting enhancements to **resiliency, economic growth, and community character**.*

2045 LRTP Goals and Objectives

The Fremont 2045 LRTP goals and objectives are shown in **Table 1**.

Table 1: Fremont 2045 LRTP Goals and Objectives

Transportation Goal	Objectives
Safe	Reduce crashes at high crash frequency intersections
	Reduce serious and fatal injury crashes
	Promote safe bicycle and pedestrian facilities
Accessible, Reliable, and Connected	Reduce bike and pedestrian system gaps
	Provide bicycle and pedestrian access to downtown, parks, and recreation areas
	Provide roadway connections in new and existing developments
	Limit vehicular delay due to train-vehicle conflicts
	Limit recurring peak hour congestion
Economic Growth	Provide access to key retail and entertainment destinations
	Provide a system to support efficient freight movements
	Connect workers to employment opportunities
Resiliency	Reduce transportation impacts to natural resources
	Increase system resiliency to natural weather events
Maintain Current System	Maintain the condition of roadways
	Maintain the condition of bicycle and pedestrian facilities
Maintain Community Character	Provide transportation systems that support community quality and livability



2045 LRTP Performance Measures

Evaluating progress toward LRTP goals is a critical part of the planning process. To measure progress toward LRTP goals, performance measures were developed for each objective. These performance measures and their associated goal and objectives are shown in **Table 2**.

Table 2: Fremont 2045 LRTP Performance Measures

Transportation Goal	Objectives	Performance Measure
Safe	Reduce crashes at high crash frequency intersections	Vehicular Crash Reduction
	Reduce serious and fatal injury crashes	
	Promote safe bicycle and pedestrian facilities	Bike and Pedestrian Crash Reduction
Accessible, Reliable, and Connected	Reduce bike and pedestrian system gaps	Bike and Pedestrian Network Connectivity
	Provide bicycle and pedestrian access to downtown, parks, and recreation areas	
	Encourage roadway connections in new and existing developments	Road Network Connectivity
	Limit vehicular delay due to train-vehicle conflicts	Train-Automobile Exposure (daily trains x daily autos)
	Limit recurring peak hour congestion	Level of Service
Economic Growth	Provide access to key retail and entertainment destinations	Multimodal Connections to Retail and Entertainment Zones
	Provide efficient freight movements	Reliable Travel Times on Freight Corridors
	Provide access to employment	Multimodal Connections to Employment Zones
Resiliency	Reduce transportation impacts to natural resources	Infrastructure Proximity to Natural Resources
	Increase system resiliency to natural weather events	Infrastructure Relationship to Floodplain / Accommodation for Stormwater
Maintain Current System	Maintain condition of roadways	Roadway Pavement Condition / Bridge Condition Index
	Maintain condition of bicycle and pedestrian facilities	Bicycle and Pedestrian Pavement Condition
Maintain Community Character	Provide transportation systems that support community quality and livability	Neighborhood Context Consistency



Community Profile

Fremont’s demographic, social, and economic conditions have important implications on the multimodal transportation system. Continued growth within the community will spur travel demand as the number of new households and new workers rises. This section summarizes the current demographic, social, and economic indicators most closely related to transportation. Refer to the 2050 Comprehensive Plan for a complete community profile.

Population

Fremont’s population grew from 23,680 in 1990 to 26,437 in 2019, marking an increase of over 11 percent during this three-decade period. Dodge County experienced a growth rate of 6.3 percent during this period, which highlights Fremont’s nature as a major population center within the county.

Table 3: Population Growth in Fremont and Dodge County, 1990–2019

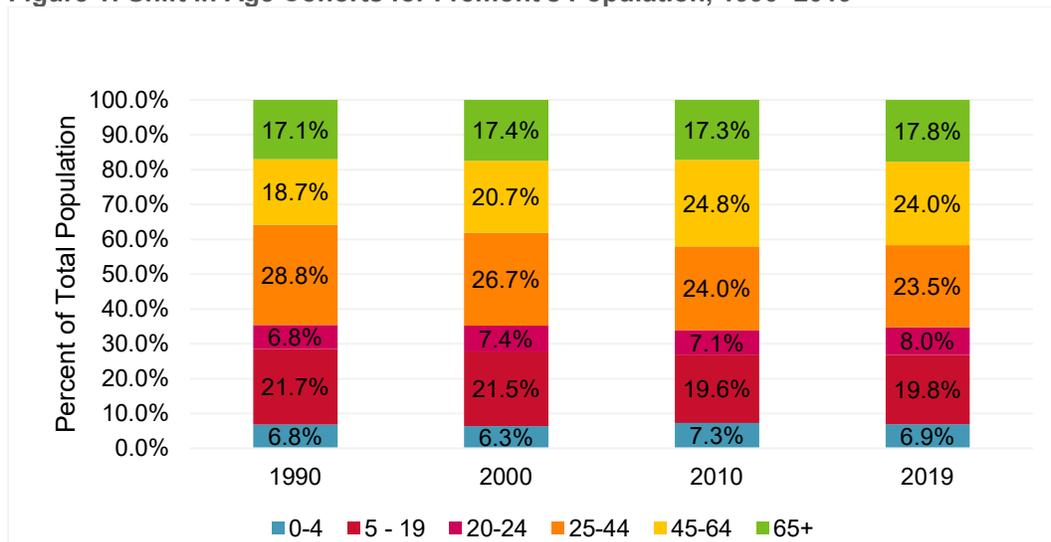
Jurisdiction	1990	2000	2010	2019	1990–2019 Percent Growth
Fremont	23,680	25,174	26,397	26,437	11.6%
Dodge County	34,500	36,160	36,691	36,665	6.3%

Source: 1990, 2000, 2010 Decennial Census; 2019 American Community Survey (ACS) 5-Year Estimates

Population by Age

Age is an important indicator of travel needs for a community, as both younger and older populations are generally more restricted in terms of mobility. **Figure 1** shows how the age cohorts for Fremont’s population shifted between 1990 and 2019. The largest shifts occurred for the 25–44 and 45–64 cohorts as the proportion of residents aged 25–44 declined during this period while the proportion of residents aged 45–64 increased. The proportions of residents 19 years and younger and 65 years or older were relatively stable between 1990 and 2019.

Figure 1: Shift in Age Cohorts for Fremont's Population, 1990–2019



Source: 1990, 2000, 2010 Decennial Census; 2019 ACS 5-Year Estimates



Housing

Fremont’s housing stock totaled 11,745 units in 2019, with just over half of the units identified as owner-occupied, as shown in **Table 4**. The ACS data indicates that most of Dodge County’s housing stock is within Fremont and reaffirms the city’s role as a regional population and employment center.

Table 4: Housing Unit Characteristics for Fremont and Dodge County

	Fremont	Dodge County
Total	11,745	16,778
Occupied housing units	10,990	15,261
Owner-occupied	6,182	9,481
Renter-occupied	4,808	5,780
Vacant housing units	755	1,517

Source: ACS 2019 5-Year Estimates

Employment

The main industries employing Fremont workers are health care and social assistance positions (21 percent) and retail trade (18 percent). Other key industries were educational services, manufacturing, and accommodation and food services. Manufacturing is the top industry employing workers within Dodge County, which contrasts with Fremont’s share of roughly 10 percent. Retail trade in Dodge County is also an important source of employment.

Table 5: Employment by Industry for Fremont and Dodge County

Industry	Fremont Percent of Employment	Dodge County Percent of Employment
Agriculture, Forestry, Fishing and Hunting	0.4%	0.9%
Mining, Quarrying, and Oil and Gas Extraction	0.0%	0.1%
Utilities	0.4%	0.7%
Construction	3.2%	4.6%
Manufacturing	9.6%	22.2%
Wholesale Trade	4.2%	5.6%
Retail Trade	18.1%	13.4%
Transportation and Warehousing	4.9%	4.0%
Information	0.4%	0.9%
Finance and Insurance	2.7%	2.4%
Real Estate and Rental and Leasing	0.8%	0.6%
Professional, Scientific, and Technical Services	1.9%	1.6%
Management of Companies and Enterprises	0.1%	0.1%
Administration & Support, Waste Management and Remediation	4.3%	4.1%
Educational Services	12.1%	10.1%
Health Care and Social Assistance	21.1%	16.0%
Arts, Entertainment, and Recreation	0.7%	0.7%
Accommodation and Food Services	7.8%	6.2%
Other Services (excluding Public Administration)	3.9%	3.1%
Public Administration	3.5%	2.9%

Source: U.S. Census LEHD Program, 2018



Commuting

Most workers in Fremont and Dodge County drive to their place of employment, and those who drive typically do so alone, as shown in **Table 6**. The next largest modal share for commuting is walking (2 percent). An additional 2 percent of workers are estimated to work from home.

Table 6: Modal Share for Commuting

Commute Mode	Fremont	Dodge County
Car, truck, or van	94.8%	94.1%
Drove alone	84.0%	82.6%
Carpooled	10.8%	11.4%
Public transportation (excluding taxicab)	0.1%	0.1%
Walked	2.0%	2.1%
Bicycle	0.9%	0.8%
Taxicab, motorcycle, or other means	0.4%	0.5%
Worked from home	1.7%	2.4%

Source: ACS 2019 5-Year Estimates

Nearly all workers in Fremont and Dodge County have at least one vehicle available to them, which reinforces the observation that a large proportion of workers who commute to work do so in a car, truck, or van. For most workers, two or more vehicles are available, which highlights the auto-oriented nature of the community as well as the importance of maintaining existing infrastructure while anticipating travel demand associated with future household and employment growth.

Table 7: Vehicles Available to Fremont and Dodge County Workers

Vehicles Available to Workers	Fremont	Dodge County
No vehicle available	2.0%	1.6%
1 vehicle available	16.8%	14.8%
2 vehicles available	48.2%	45.6%
3 or more vehicles available	33.1%	38.1%

Source: ACS 2019 5-Year Estimates

Time spent commuting to work for Fremont and Dodge County workers is relatively low, as more than half of workers get to their place of employment in under 15 minutes. Over two thirds of workers indicated commute times of 19 minutes or fewer. Less than 5 percent of workers travel 60 or more minutes to work.



Table 8: Travel Time to Work for Fremont and Dodge County Workers

Travel Time to Work (Minutes)	Fremont	Dodge County
Less than 10 minutes	35.1%	31.7%
10 to 14 minutes	25.0%	22.2%
15 to 19 minutes	10.2%	11.1%
20 to 24 minutes	4.9%	6.6%
25 to 29 minutes	2.7%	4.2%
30 to 34 minutes	6.9%	7.6%
35 to 44 minutes	4.7%	5.0%
45 to 59 minutes	7.3%	6.8%
60 or more minutes	3.2%	4.8%
Mean travel time to work (minutes)	17.5	19.2

Source: ACS 2019 5-Year Estimates

Additional commuting data sourced from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) program for the year 2018 revealed that a large portion of Fremont’s workers do not reside within the city, but rather commute from surrounding areas. Furthermore, most of Fremont’s residents work outside of the city, as only 36 percent of residents indicate they live and work in the community. **Table 9** summarizes the LEHD data.

Table 9: Inflow and Outflow of Fremont Workers and Residents

Fremont Workers	Count	Share
Employed in Fremont	10,521	100%
Employed in Fremont but Live Outside the City	5,926	56%
Employed and Live in Fremont	4,595	44%
Fremont Residents		
Live in Fremont	12,871	100%
Live in Fremont but Employed Outside the City	8,276	64%
Living and Employed in Fremont	4,595	36%

Source: U.S. Census LEHD Program, 2018

Public Engagement

Fremont is a community that values the role residents play in the planning process. The public engagement events that sought input from community members were central to the LRTP's development. This input informed the Plan's vision and goals, which were developed to articulate the community's vision for the future multimodal transportation system.

Two community events were held during the LRTP process—a Visioning Workshop for community members to share their ideas for Fremont's future transportation system and a Community Open House event that invited community members to give their input regarding existing issues and opportunities for the multimodal system. Both community events were held jointly with the city's Comprehensive Plan so attendees could offer feedback for both.

Visioning Workshop

The Visioning Workshop was held on April 28, 2021, at the Fremont City Auditorium. Activities at this event included a brief survey asking attendees questions related to their vision for the community with an emphasis on land use and transportation. A second activity invited attendees to mark-up maps of the community with comments related to the issues and opportunities they see today.

Community Open Houses

Community Open Houses were held on August 18, 2021 and June 13, 2022, at the Fremont City Auditorium. Activities at the first event (August 2021) included stations for attendees to review information for both the Comprehensive Plan and LRTP, then place comments on an area map with any feedback they have related to issues and opportunities that planning could address. Additional activities included a station for attendees to review goals and objectives for these planning efforts and vote for the goal areas they feel should be a primary focus of the LRTP. Activities at the second event (June 2022) included a presentation of the plan framework for public feedback.



Key Visioning Workshop and Community Open House Takeaways

Both public engagement events lent valuable information to the project team, and this information played a formative role in the LRTP's development. Common themes related to transportation that were heard during the Visioning Workshop and Community Open House were:

- Need to improve traffic operations at specific locations, including the intersection of Military Avenue and Luther Road, and the 23rd Street corridor
- Desire to divert through truck traffic to the highway system, reducing truck volumes on local streets
- Maintaining the condition of existing roads and bridges should be a priority
- Interest in expanding the existing trail network, especially facilities to improve east-west mobility for bicyclists

City Council / Planning Commission Presentations

The LRTP team coordinated with the City Council and Planning Commission on several occasions over the course of the Plan's development to present updates on the LRTP process, often overlapping with Comprehensive Plan presentations. Two sessions were more transportation focused:

- A joint meeting on August 17, 2021, where the LRTP team presented preliminary baseline conditions findings and asked for input on issues from the members.
- A joint meeting on February 22, 2022, where the LRTP team presented a draft transportation plan framework to the joint city council and planning commission. Members provided feedback on the draft framework.
- A joint meeting on July 26, 2022, where the LRTP team presented a draft transportation plan and recommendations to the joint city council and planning commission.

These meetings provided important direction to the Plan's development.



Existing Conditions

This section provides an overview of the existing condition of Fremont’s multimodal transportation system. This assessment describes current traffic operations and safety conditions, freight movement trends, trail system connections, and conditions for Fremont’s other transportation modes.

Existing Roadway Conditions

Fremont’s residents and businesses rely on the city’s roadway network as the primary means of meeting their transportation needs. The roadway network is organized by functional class, which designates how roads function based on their design. The functional classification system is also used to determine federal transportation funding eligibility. **Figure 2** shows the existing functional classifications for the City of Fremont’s roads.

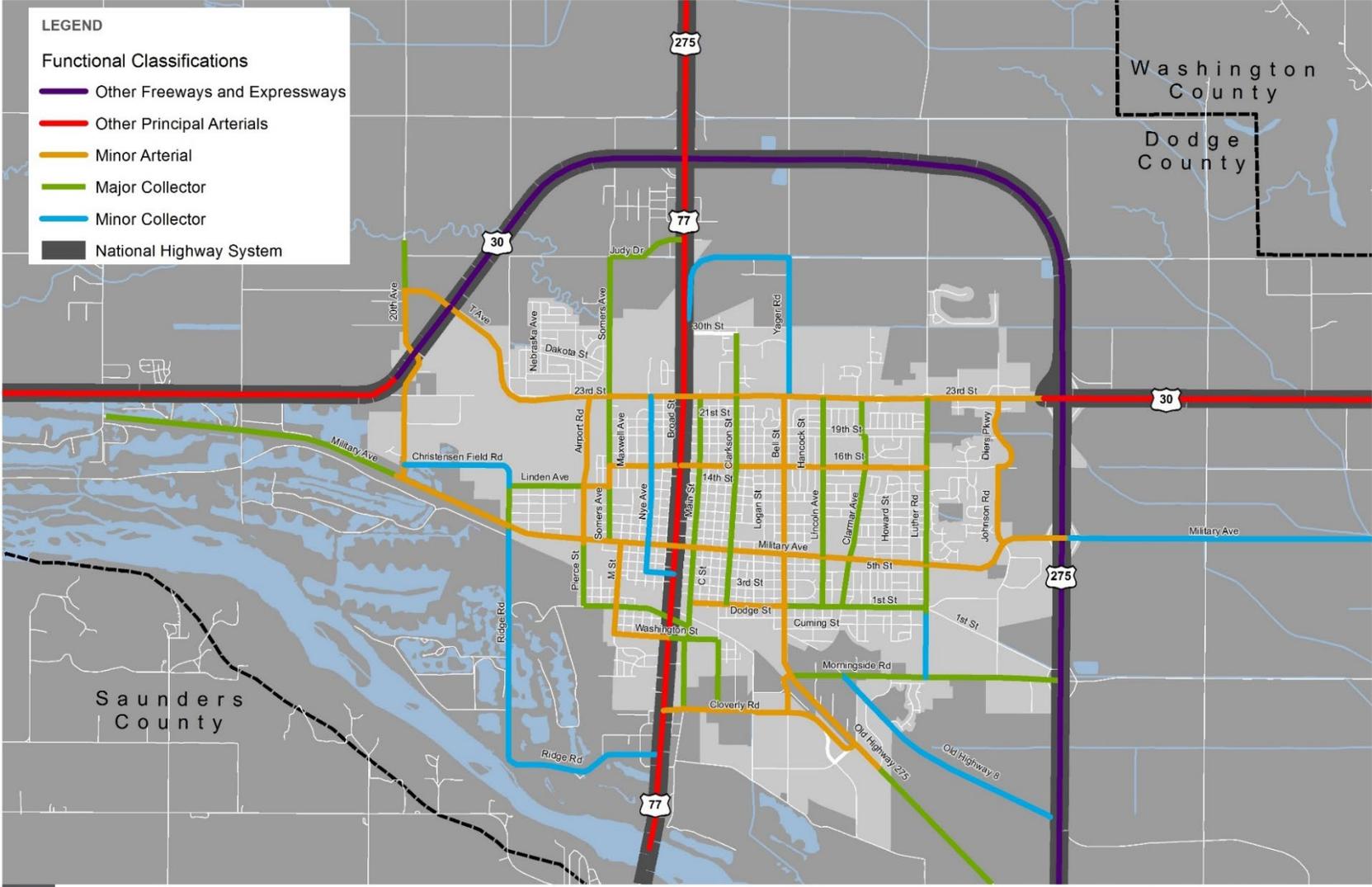
The roadway network was classified further using the National Highway System (NHS) classification. NHS includes the Interstate system and other strategic highways identified as important to the nation’s economy, defense, and mobility. The Nebraska Department of Transportation (NDOT) is responsible for NHS within in the state and is the primary agency for funding NHS maintenance, operations, and improvements. NHS is also shown in **Figure 2**.

Table 10: Roadway Functional Classification Types and Descriptions

<p>Principal Arterial</p>	<ul style="list-style-type: none"> • Provides the highest degree of vehicular mobility with high traffic volumes and long trips. • Facilitates travel across and between larger cities, including freeways and expressway routes. • Limited access to residential and commercial land uses. • Bicycle and pedestrian travel typically placed in separated facilities.
<p>Minor Arterial</p>	<ul style="list-style-type: none"> • Lower vehicular mobility and volumes than principal arterials, but higher than collectors. • Provides some access to residential and commercial land uses. • Typically serves moderate length trips along the boundaries of neighborhoods. • Bicycle and pedestrian travel provided adjacent to facilities, with marked and signed crossings for enhanced visibility and safety.
<p>Collector Roads</p>	<ul style="list-style-type: none"> • Collects traffic from local streets and connects to the Minor Arterial system. • Provides more access to residential and commercial land uses than arterials. • Bicycle and pedestrian travel provided adjacent to and within streets, with marked and signed bike lanes and crossings for enhanced visibility and safety.
<p>Local Streets</p>	<ul style="list-style-type: none"> • Limited vehicular mobility and lower volumes. • Provides direct access to land uses with limited travel distances. • Connects development to higher classified roadways. • Bicycle and pedestrian travel provided adjacent to and within streets. Reduced vehicular speeds allow for wider bicycle operation and walking within streetscape with limited markings and signage.

Source: Federal Highway Administration

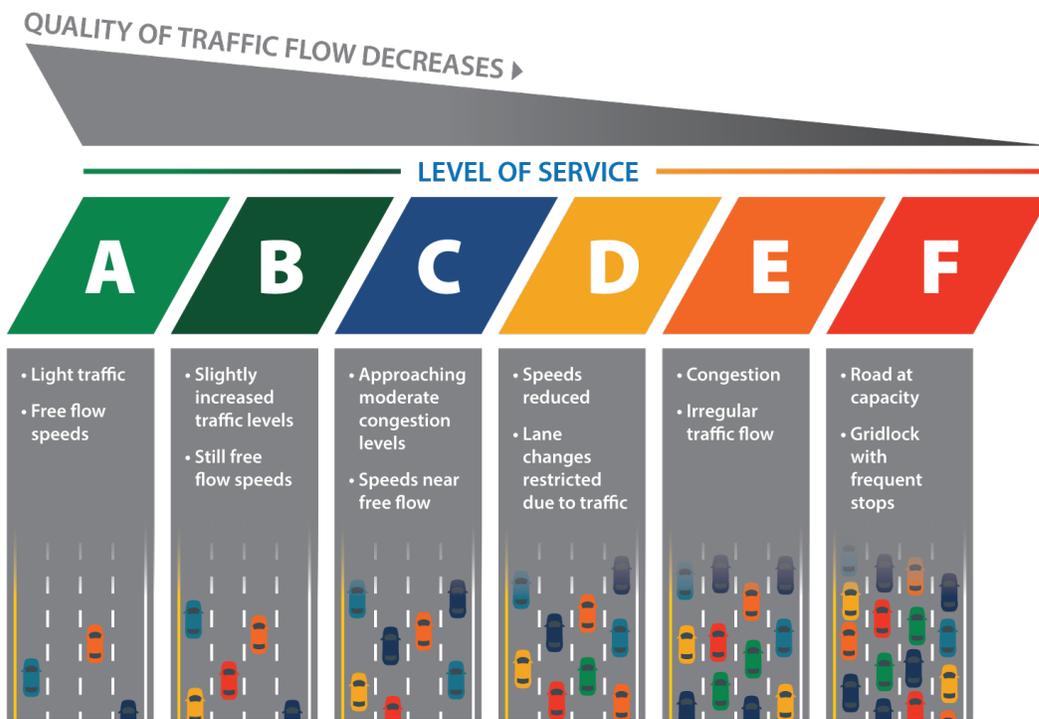
Figure 2: Roadway Federal Functional Classifications



Traffic Operations

The traffic operations analysis focused on evaluating congestion levels during typical peak period conditions. A planning-level approach based on the Highway Capacity Manual methodology was used, incorporating available daily traffic count data from NDOT to estimate traffic operations through a volume-to-capacity (V/C) analysis. The most congested periods occur only during the peak hours of travel while there is typically no congestion during non-peak hours. Thus, the daily traffic data volumes were evaluated by applying capacities that reflected a typical volume threshold representing peak period capacity that would lead to congestion. This approach uses the concept of Level of Service (LOS), with a rating based on a letter grade system where an A denotes free flow traffic and an F denotes gridlock, as shown in **Figure 3**. The V/C analysis was applied to functionally classified roads only.

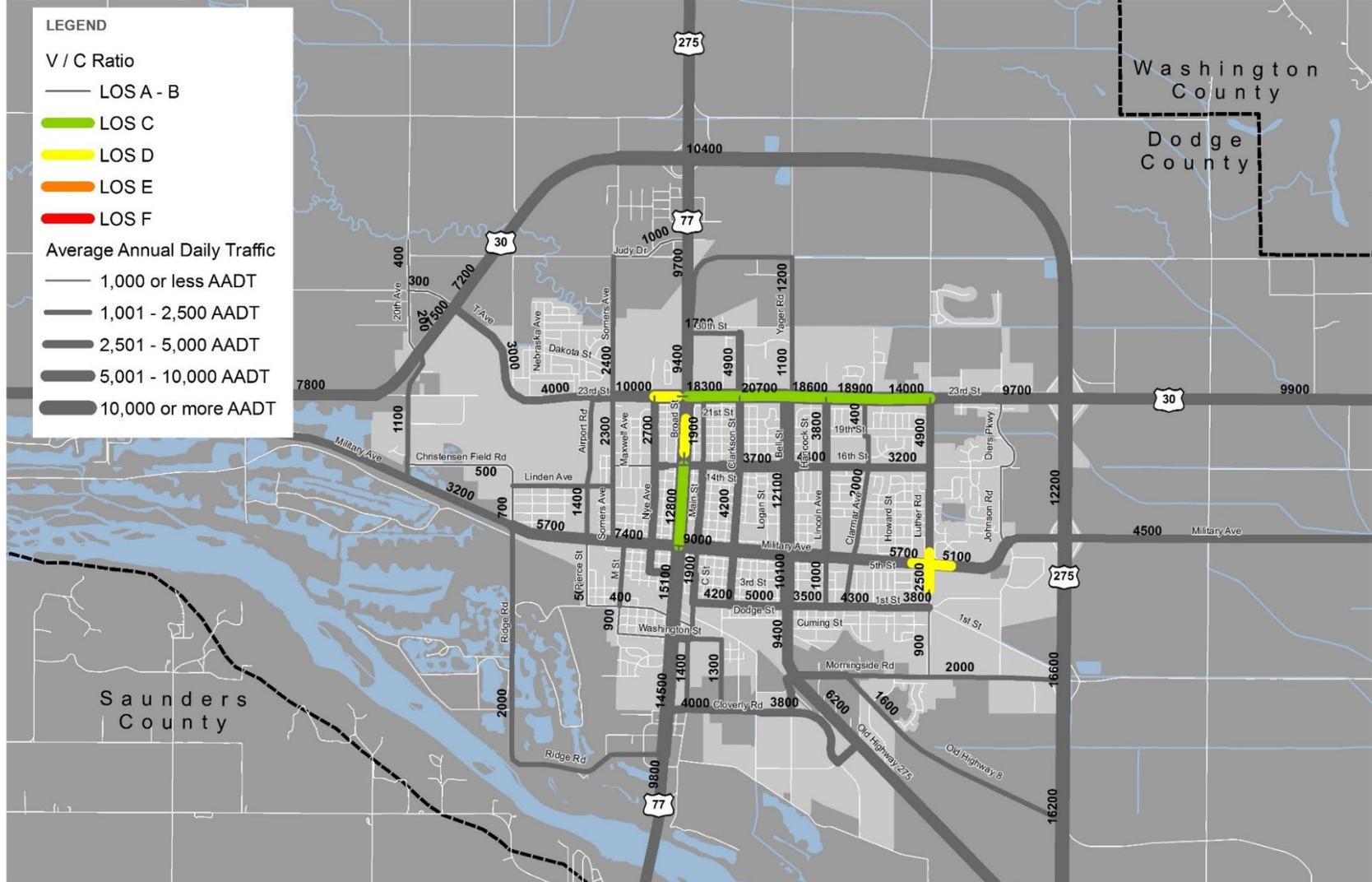
Figure 3: LOS Definitions



As shown in **Figure 4**, most roads in Fremont are operating at LOS B or better during the peak hour, which indicates minimal operational issues exist in the roadway network. There are some roads that exhibited minor congestion at LOS C or worse:

- **W 23rd Street, from H Street to Nye Avenue**
- **W 23rd Street, from Luther Road to Broad Street**
- **Broad Street, from 17th Street to 21st Street**
- **Broad Street, from 16th Street to Military Avenue**
- **Intersection of Military Avenue and Luther Road**

Figure 4: Existing Peak Period Level of Service



Traffic Safety

One of the five goal areas for Nebraska’s 2040 Statewide Transportation Plan is safety, with performance measures aimed at reducing vehicular, bicycle, and pedestrian crashes. Crash data for the years 2015–2019 was provided by NDOT and reviewed to identify the intersections with the highest crash frequencies during the 5-year period. The intersections with the highest vehicular crash frequencies were identified and will be considered priority candidates for future safety improvements. **Table 11** lists the top 10 crash intersections within the City of Fremont, in addition to the severity of the crashes that occurred.

Table 11: Top 10 Crash Frequency Intersections, 2015–2019*

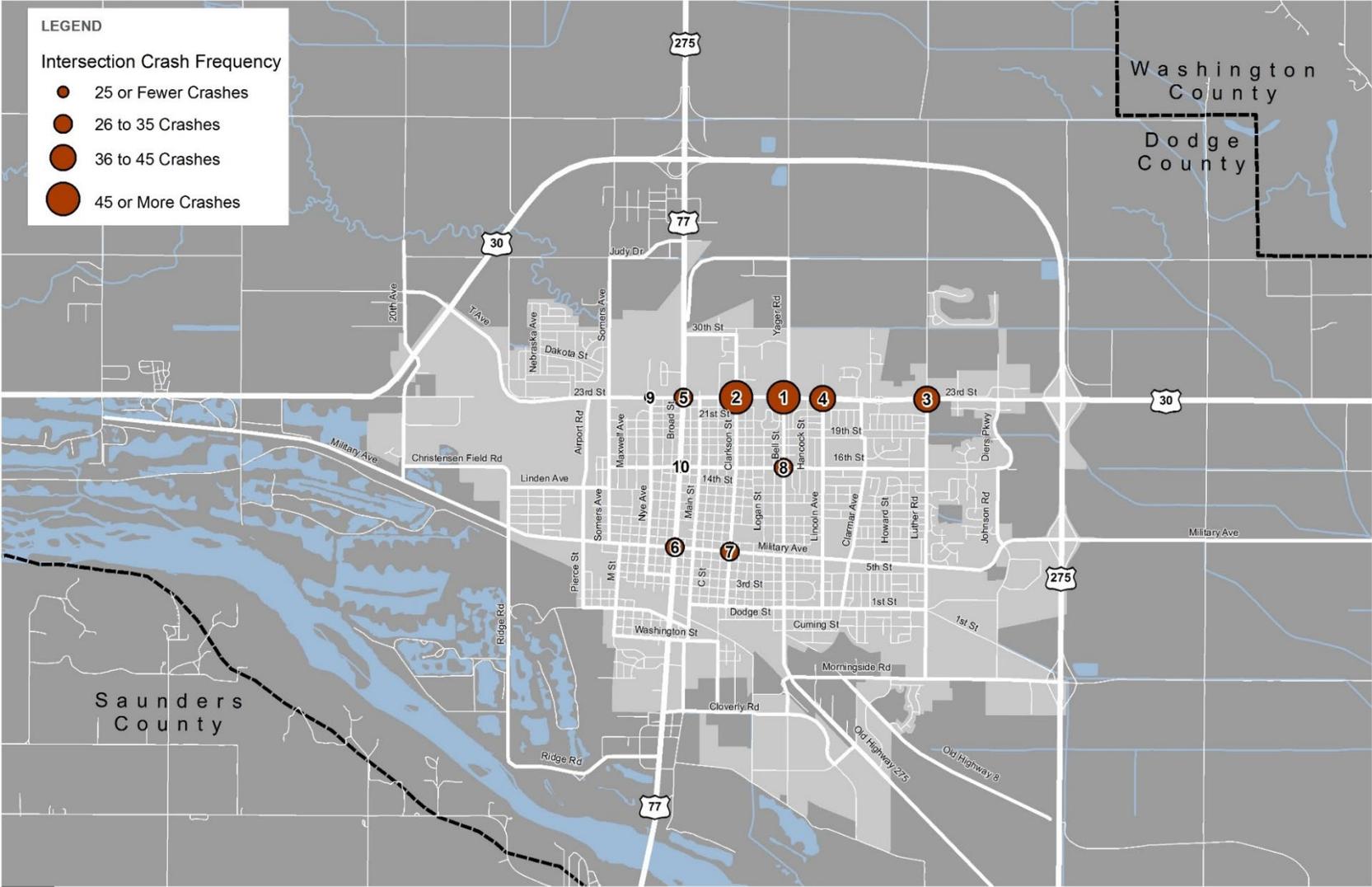
Rank	Intersection	Fatal Injury Crash	Suspected Serious Injury Crash	Visible Injury Crash	Possible Injury Crash	Property Damage Only Crash	Total
1	23rd St & Bell St	0	2	6	18	29	55
2	23rd St & Clarkson St	0	3	7	16	29	55
3	23rd St & Luther Rd	0	1	9	13	22	45
4	23rd St & Lincoln Ave	0	3	5	11	21	40
5	Broad St / (US 77) & 23rd St	0	0	2	16	17	35
6	Broad St / (US 77) & Military Ave	0	1	1	11	22	35
7	Military Ave & Clarkson St	0	1	6	12	11	30
8	16th St & Bell St	0	0	7	8	14	29
9	23rd St & Nye Ave	0	0	3	6	12	21
10	Broad St / (US 77) & 16th St	0	1	2	4	14	21
Total for Top 10 Intersections		0	12	48	115	191	366

* CONFIDENTIAL INFORMATION: This document is exempt from discovery or admission in court under 23 U.S.C. § 409. The State of Nebraska has not waived any privilege it may assert during litigation proceedings by the dissemination of this document and is not responsible for further disbursement of this document to anyone other than the intended recipient.

The crash data shows that 23rd Street is involved in 6 of the top 10 crash intersections and Broad Street is involved in 3 of the top 10. Most crashes happening at the top 10 intersections are categorized as “Property Damage Only,” while 3 percent of reportable crashes resulted in a serious injury. There were no fatal injury crashes at these 10 intersections between 2015 and 2019.

Figure 5 illustrates the locations of these intersections within the City of Fremont.

Figure 5: Top 10 Crash Intersections in the City of Fremont, 2015–2019



TOP CRASH FREQUENCY INTERSECTIONS

Fatal and Serious Crash Trends

Figure 6 shows annual crash frequencies for fatal and serious injury crashes that occurred within the City of Fremont between 2015 and 2019. During this 5-year period, there were 6 fatal crashes and 60 serious injury crashes. As shown in **Figure 6**, fatal crash collisions fluctuated between 1 and 2 per year until 2019, when there were no fatal crashes. Serious injury crashes saw more variation, peaking at 17 in 2017 before dropping to a 5-year low of 5 in 2018. This crash type increased more than 100 percent in 2019, with 12 serious injury crashes occurring during the year.

Figure 6: Fatal and Serious Injury Crash Trends, 2015–2019.



Bicycle and Pedestrian Safety

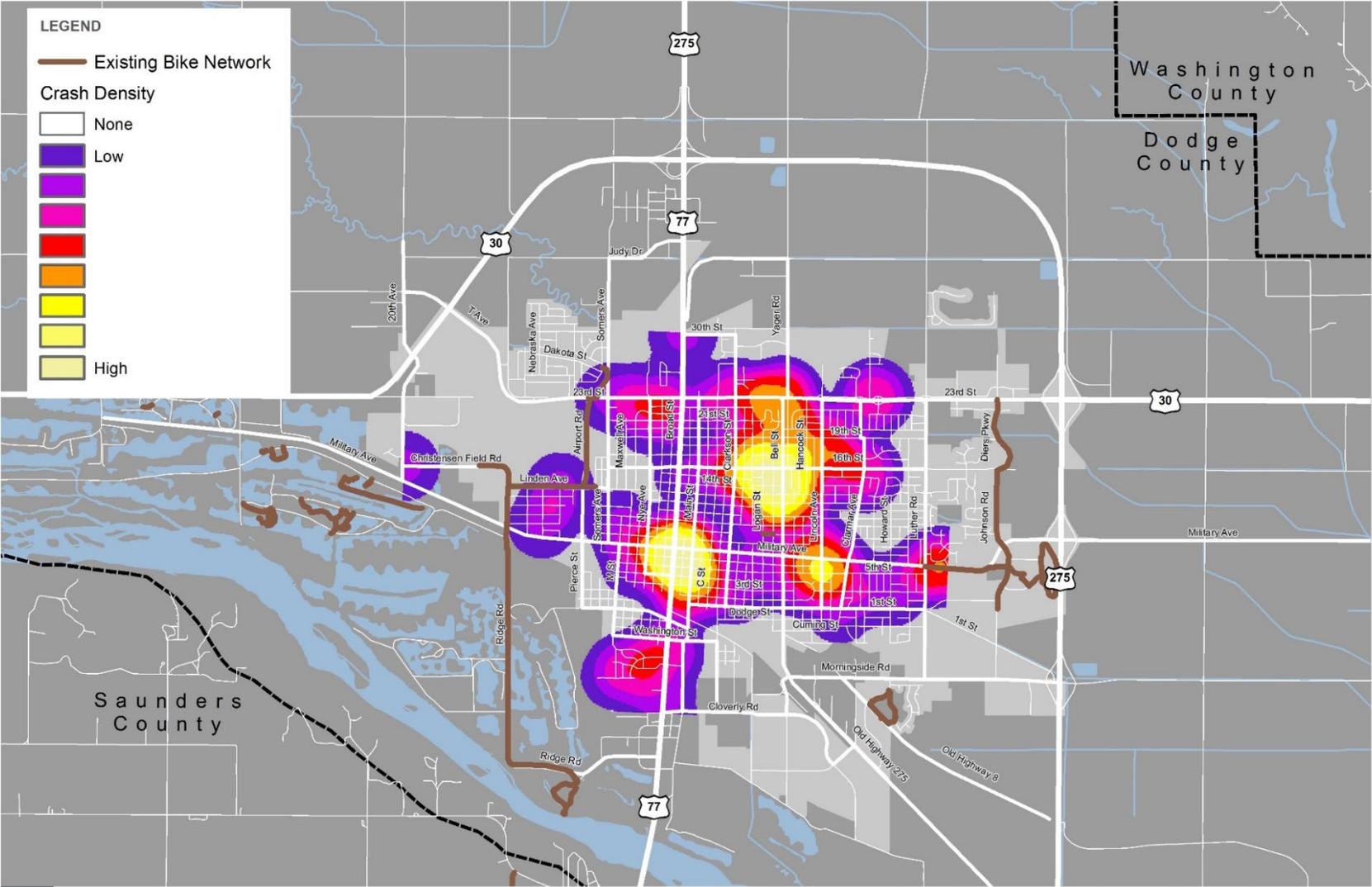
63 bicycle and pedestrian related crashes occurred in Fremont between 2015 and 2019, with 43 of these crashes involving a bicyclist and 20 involving a pedestrian. As shown in **Table 12**, the majority of bicycle and pedestrian crashes resulted in visible injury. 1 fatal crash and 5 serious injury crashes occurred during the 5-year period.

Table 12: Bicycle and Pedestrian Crash Severity, 2015–2019

	Fatal Injury Crash	Serious Injury Crash	Visible Injury Crash	Possible Injury Crash	Property Damage Only Crash	Total
Bicycle	0	3	22	15	3	43
Pedestrian	1	2	11	5	1	20
Total	1	5	33	20	4	63

Figure 7 shows the density distribution of bicycle and pedestrian crashes that occurred between 2015 and 2019.

Figure 7: Bicycle and Pedestrian Crash Density, 2015–2019

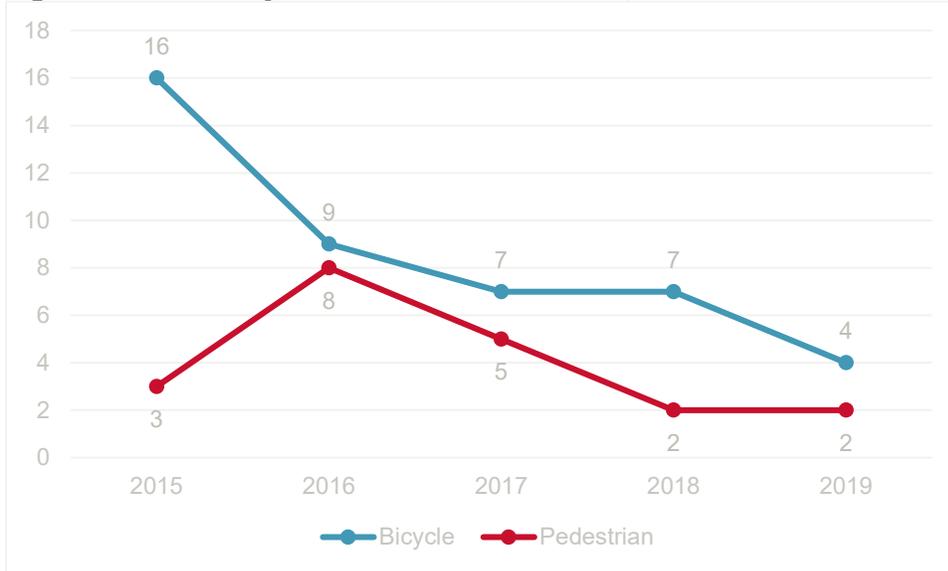


BICYCLE AND PEDESTRIAN CRASH DENSITY



Figure 8 shows annual bicycle and pedestrian crash trends for all crash severity types. Overall, the number of annual bicycle and pedestrian crashes declined between 2015 and 2019, with a peak of 16 bicycle crashes in 2015 and 8 pedestrian crashes in 2016 and a low of 4 bicycle and 2 pedestrian crashes in 2019.

Figure 8: Annual Bicycle and Pedestrian Crashes, 2015–2019



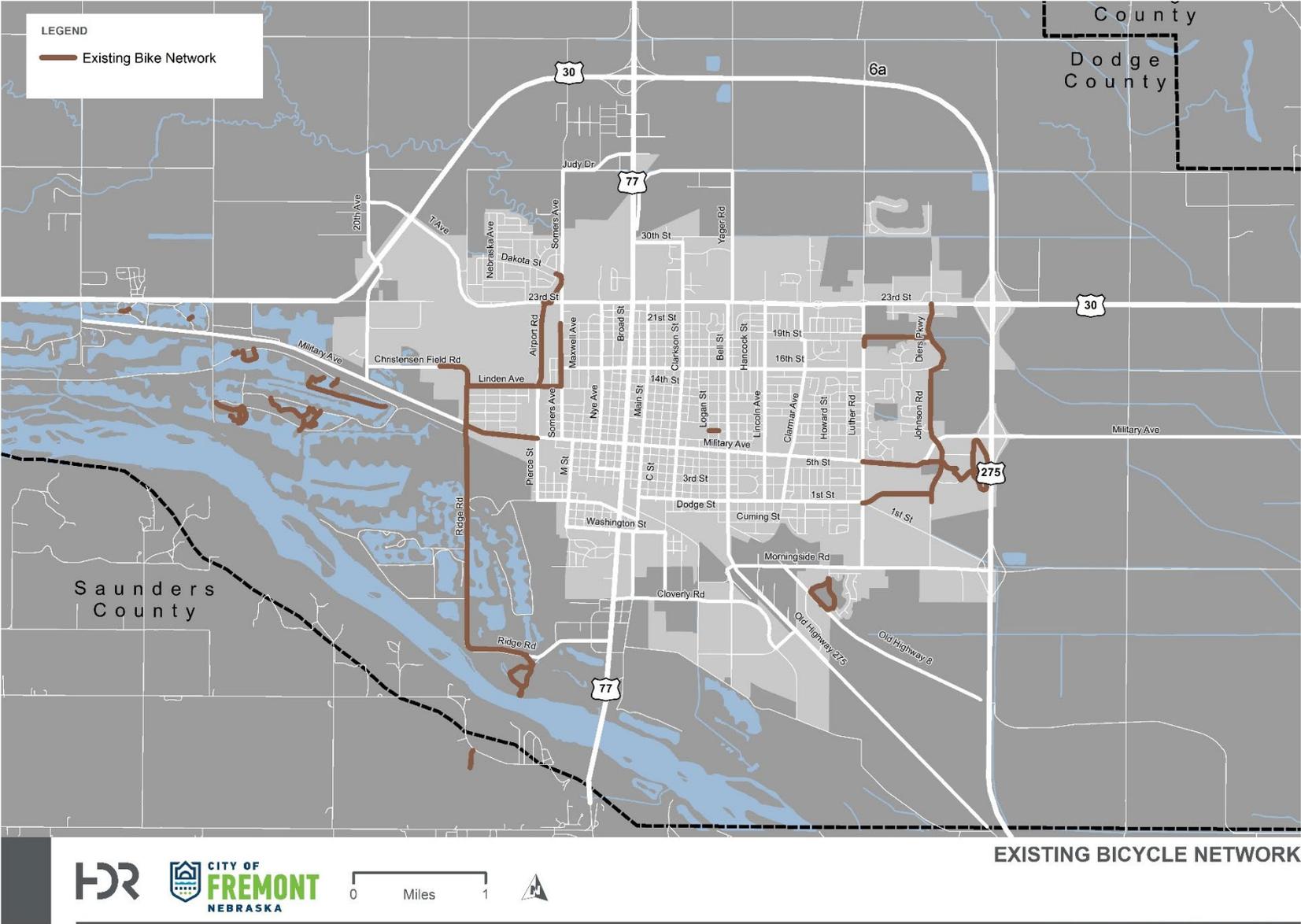
Bicycle and Pedestrian System

The existing bicycle and pedestrian system in the City of Fremont consists of multi-use trails and the sidewalk system. Bicycles can also operate on streets, but there are no designated on-street bike routes in the city. The 2012 parks and recreation master plan, *Greenprint for Tomorrow*, developed a systemwide plan for multi-use trail improvements. Some of those trail recommendations have already been implemented, including:

- **Ridge Road Trail**
- **Johnson Road Trail**

The addition of these two improvements to the existing trail network would result in a system total of 8.8 miles of trails. The recreational trail system located in Fremont Lakes Park supplements the bicycle and pedestrian trails. **Figure 9** shows the existing bicycle and pedestrian system.

Figure 9: Bicycle and Pedestrian System



Public Transit Operations

The City of Fremont does not currently operate a fixed-route public transit service. There is a Rural Transportation Program, administered by the Eastern Nebraska Office on Aging (ENOA), that is offered to residents of Dodge County. The service offers mini vans and Americans with Disabilities Act (ADA) accessible vans for elderly riders, persons with disabilities, and the general public for medical appointments, business appointments, shopping, and airport transportation. Other trip purposes can be accommodated based on seating availability. Reservations require at least 48 hours of notice. ENOA also administers a Car-Go program, a volunteer-operated program that provides private car rides to seniors in Fremont.

Aviation

Regional aviation is provided by the Fremont Municipal Airport, which is owned and operated by the City of Fremont as a public-use facility. The Federal Aviation Administration (FAA) classifies the Fremont Municipal Airport as a general aviation (GA) facility. The FAA's National Plan of Integrated Airport Systems (NPIAS) considers the Fremont Municipal Airport to be a Nonprimary Regional Airport. The airport code for the facility is FET.

Existing aeronautical facilities at the Fremont Municipal Airport include a 6,353-foot runway, four taxiways, and navigational aids such as an airport beacon and an automated weather observation system. Existing GA facilities include a terminal building, aircraft parking apron, and hangars.¹ The main services offered at the Fremont Municipal Airport include aircraft maintenance, aircraft rentals, aircraft restoration, flight training, fuel depot, and hangar rental. Overnight indoor parking is available for those who use the facility. Approximately 50 aircraft are based at the Fremont Municipal Airport, which is contracted as a fixed base operator. The runway facility is capable of accommodating aircraft up to the size of corporate jet.²

Annual operations at the Fremont Municipal Airport, which include take-offs and landings, totaled 22,250 in 2019. The breakdown of annual operations includes:

- **Air Taxi:** 3,600 annual operations
- **Local GA:** 12,200 annual operations
- **Itinerant GA:** 6,350 annual operations
- **Military:** 100 annual operations

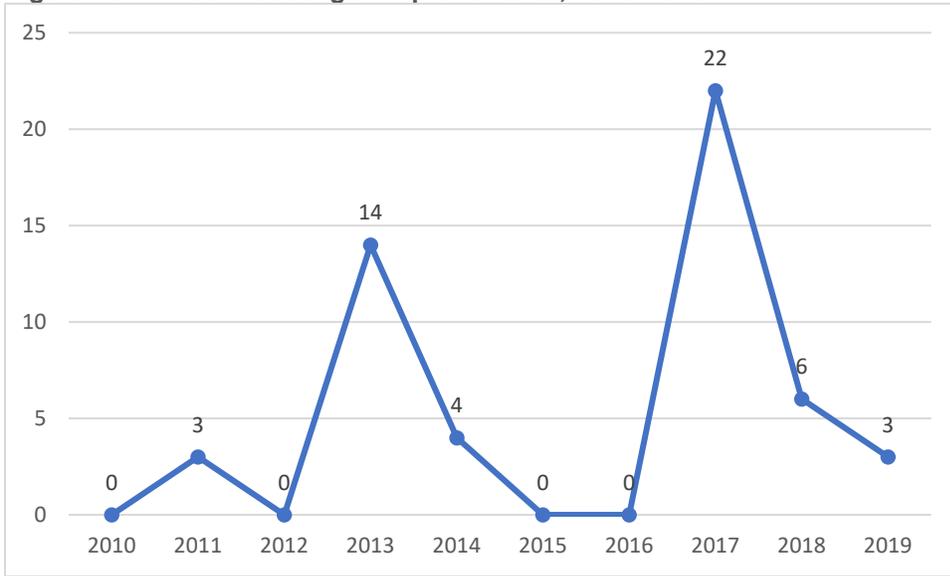
There are a small number of passenger boardings (enplanements) from year to year, as shown in **Figure 10**. Between 2010 and 2019, the number of annual passenger enplanements varied. During this 10-year span, there were 4 years in which no passenger enplanements were recorded. The number of annual passenger enplanements during this same period peaked at 22 in 2017.

¹ City of Fremont, Terminal Area Master Plan.

<https://www.fremontne.gov/DocumentCenter/View/4895/Airport-Terminal-Area-Plan?bidId=>

² City of Fremont, Fremont Municipal Airport. <https://www.fremontne.gov/398/Airport>

Figure 10: Annual Passenger Enplanements, 2010–2019

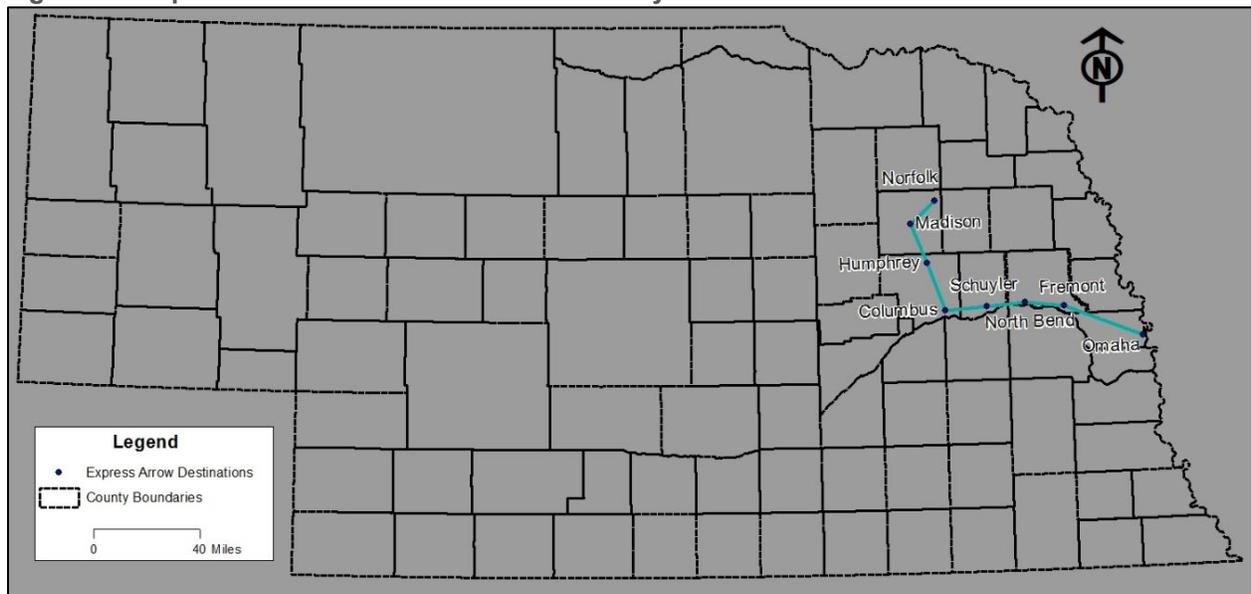


Source: FAA

Intercity Bus

Intercity bus service in the City of Fremont is offered by Express Arrow lines as part of the Omaha to Norfolk route shown in **Figure 11**. Riders can schedule to be picked up or dropped off at the Sapp Bros. Truck Stop in north Fremont at 8:25 a.m. or 12:35 p.m. during regular operations and visit any destination along the route shown. The bus service begins in downtown Omaha at 7:30 a.m. and arrives in Norfolk at 10:15 a.m.; the bus then departs Norfolk at 10:45 a.m. and arrives at its final stop in Omaha by 1:30 p.m.³

Figure 11: Express Arrow Omaha to Norfolk Intercity Bus Routes



³ Express Arrow Route Schedules, <http://expressarrow.com/route-schedules/>

Intercity Rail

There is no intercity rail service available within the City of Fremont. The nearest passenger rail facilities are located in the cities of Omaha and Lincoln, which are approximately 40 and 50 miles from Fremont, respectively.

Emerging Mobility Services

There are several newer forms of mobility offered in surrounding cities that are not currently based in Fremont. These emerging mobility providers include:

- **Bike share:** bicycles that are made available for shared use to rent or reserve for individuals on a short-term basis.
- **Electric Scooters:** electric motorized scooters are made available, typically by private companies, for short-term rental for short trips in urban neighborhoods.

Ride hailing services are available in Fremont and use mobile device apps to connect passengers with local drivers and their personal vehicles to provide “for hire” trips.

Existing Freight Conditions

Freight plays an important role in Fremont’s economy. Maintenance and improvement of the highway, rail, and air freight network in Fremont is critical to facilitating the efficient movement of goods through the region.

Highway Freight

The City of Fremont has designated several local routes in the community that facilitate truck movements into and out of key freight destinations, including the industrial areas in the southern part of Fremont and local deliveries in the downtown area.

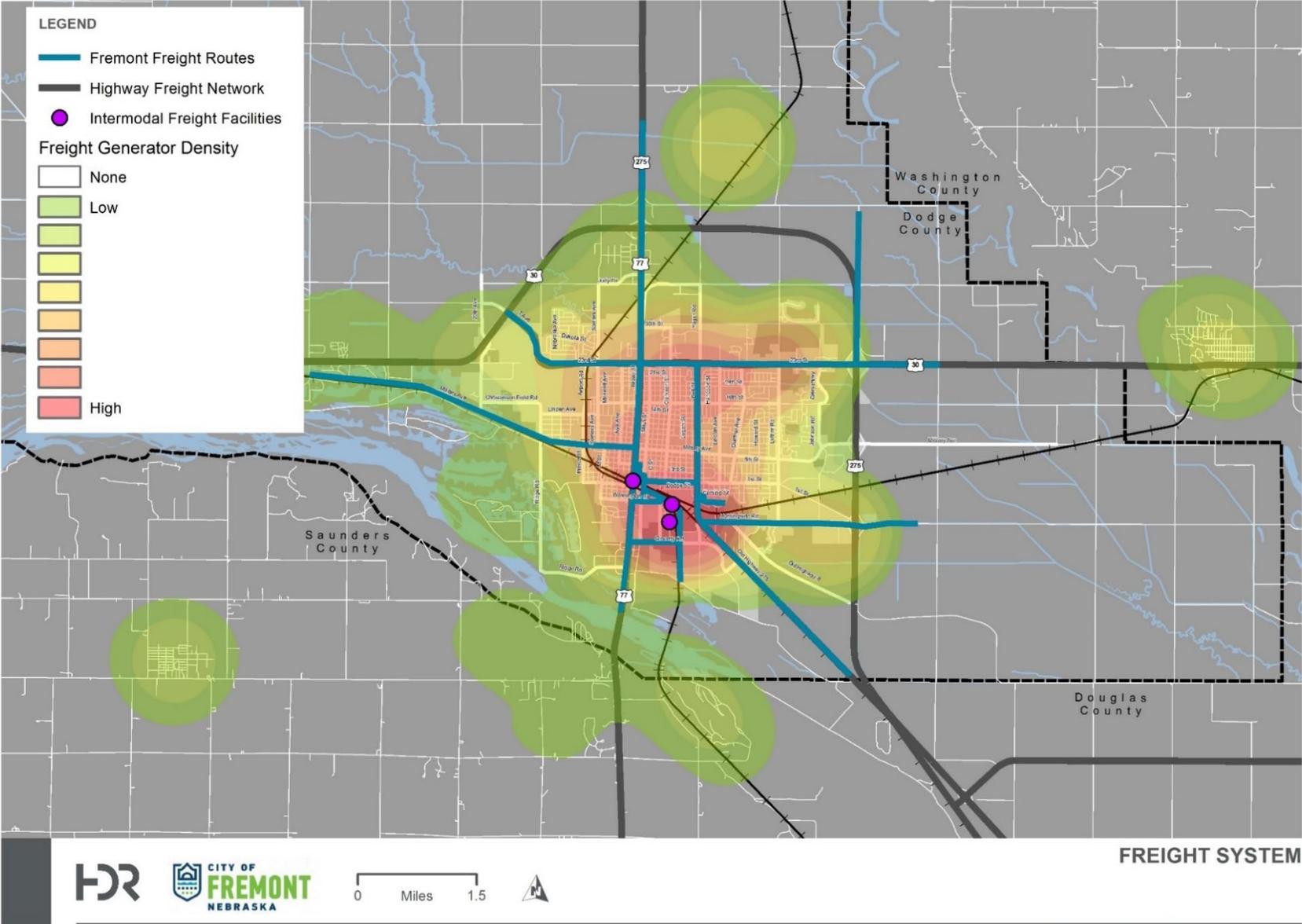
Three intermodal facilities are currently in use in the City of Fremont. All three intermodal facilities facilitate critical transfers between highway truck and rail modes and serve both the Union Pacific Railroad (UPRR) and Burlington Northern Santa Fe (BNSF) railroad. These intermodal facilities are:

- **Americold Logistics**
- **Scoular Grain Company**
- **Conagra, Inc.**

Figure 12 shows local freight routes within the City of Fremont as well as the locations of the intermodal facilities. It also includes an analysis of the locations and intensity of freight traffic generation within Fremont. As **Figure 7** shows, the highest freight-generating industries are concentrated in the southern and central portions of the city.



Figure 12: Key Freight Corridors and Intermodal Facilities within the City of Fremont



RAIL FREIGHT

UPRR and BNSF operate rail freight lines in Fremont. The UPRR line runs east-west through the city, while BNSF operates a freight rail line running north-south through Fremont. The currently inactive Fremont & Elkhorn Valley Railroad (FEVR) line also runs north from Fremont to the town of Hooper.

According to 2020 data from the Federal Railroad Administration (FRA), there were 10 trains a day on the BNSF lines. The UPRR line to Omaha carried 20 trains a day and the UPRR line to Blair carried 40 trains a day. These two lines come together in Fremont, and the line carries 51 trains a day west of the junction. ⁴

Rail crossings often conflict with vehicular traffic, causing delay and reliability issues for at-grade rail crossings. While options to improve these facilities exist, grade separations and similar improvements are often costly projects that require a long and detailed planning process. The existing at-grade crossings within the City of Fremont are shown in **Figure 13**.

If not improved to higher “quiet zone” standards, at-grade crossings also require approaching trains to sound their horns as a warning to crossing traffic, which can be considered a sound nuisance to adjacent residents and businesses. Fremont does not currently have quiet zones.

Several locations where higher volume roads intersect active rail lines have been grade-separated to alleviate impacts arising from vehicle-train conflicts. The locations of existing grade-separations within the City of Fremont are also shown in **Figure 13**.



AIR FREIGHT

Fremont Municipal Airport is not currently classified as a commercial service airport, nor does it support air cargo operations. However, the Nebraska State Freight Plan identifies the need for expanding airfield infrastructure to serve commercial aircraft, as well as to receive expedited air freight shipments, as a major issue facing the state’s air freight network. With the anticipated increase in industry and the proximity to major global companies, a significant rise in air freight activity is expected to occur.

⁴ FRA, *Highway-Rail Crossing Database Files and Reports*, 2020-21 Crossing Data.

Future Conditions

While understanding the existing issues of the community’s transportation system is a critical step in the planning process, it is important to also anticipate issues that could arise over the planning horizon so solutions to these issues can be planned. The Future Conditions section of the LRTP discusses the analysis done to identify potential transportation issues as Fremont continues to grow and develop.

Future Growth in Fremont

Fremont experienced modest growth between 1990 and 2019, as reflected by the historic population and employment trends described in the Community Profile. These trends serve as the backdrop for developing projections of future population, household, and employment growth in the community and the locations this growth is expected to occur. The projections used to support the LRTP are based on a range of historic trends and economic forecasts from Woods and Poole Economics and assume a boost in economic development levels outlined in the 2021 Fremont Housing Study. **Table 13** summarizes the overall changes in household, population, and employment levels projected between 2018 and 2045.

Table 13: Projected Growth in Households, Population, and Jobs in Fremont, 2018–2045

	Households	Population	Employment
2018	13,326	31,991	15,065
2045	16,188	38,860	19,985
Percent Change	21.5%	21.5%	32.3%

Future growth areas were identified during the development of the Comprehensive Plan and reflect where development is expected to occur. Based on input from city staff, estimated growth in households and employment were allocated to these growth areas based on the corresponding future land uses planned for 2045.

Household growth is concentrated mostly in northeast and northwest Fremont, with additional growth in the southeast, as shown in **Figure 14**. Some household growth due to infill development is anticipated to occur in downtown and central Fremont.

Employment growth areas are expected to follow a similar pattern as household growth, with a large portion of new jobs in the northeast, northwest, and southeast parts of Fremont. The southeast is expected to see an especially high amount of employment growth due to the industrial nature of the area. **Figure 15** shows the future employment growth areas.

Figure 14: Future Household Growth Areas

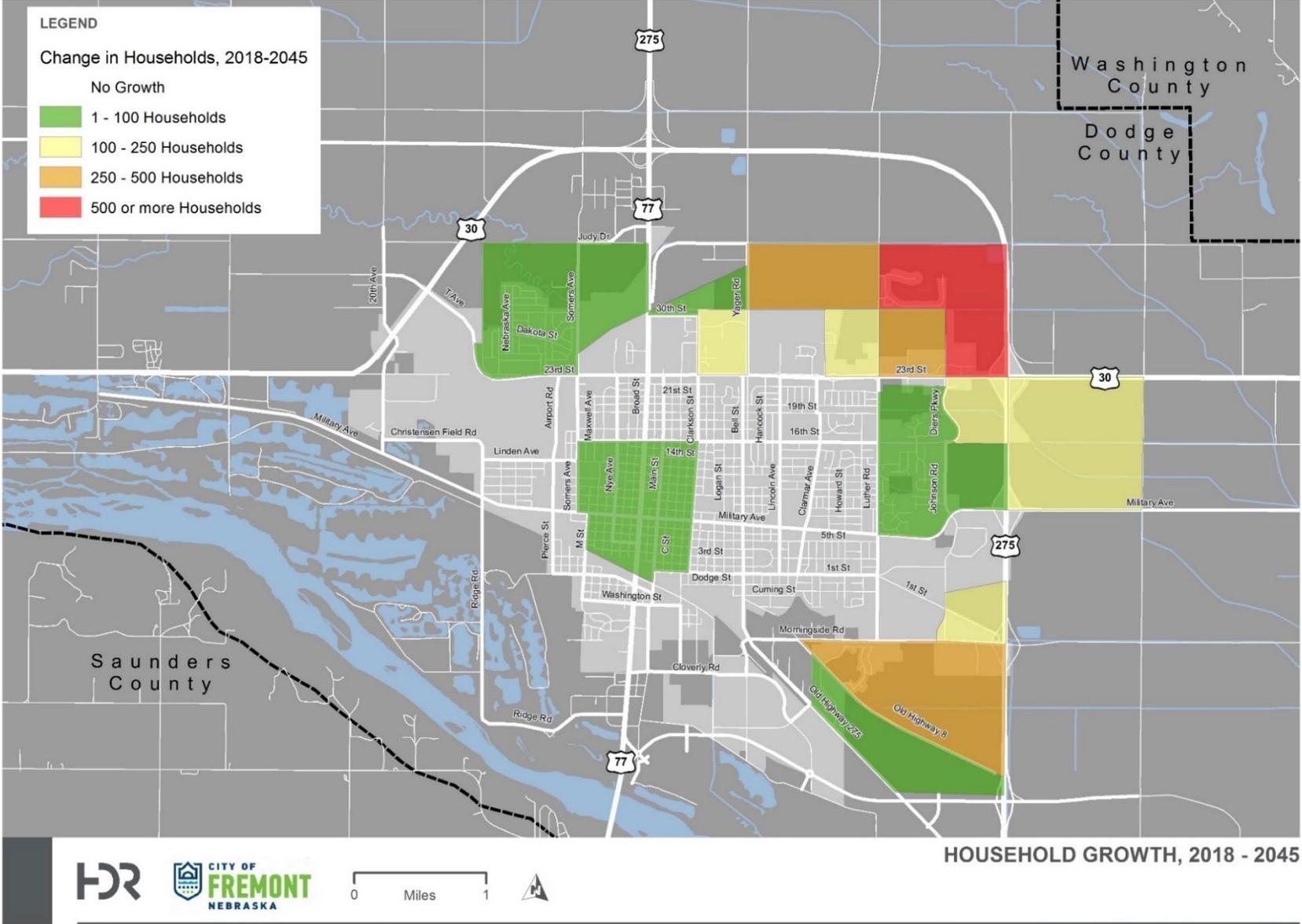
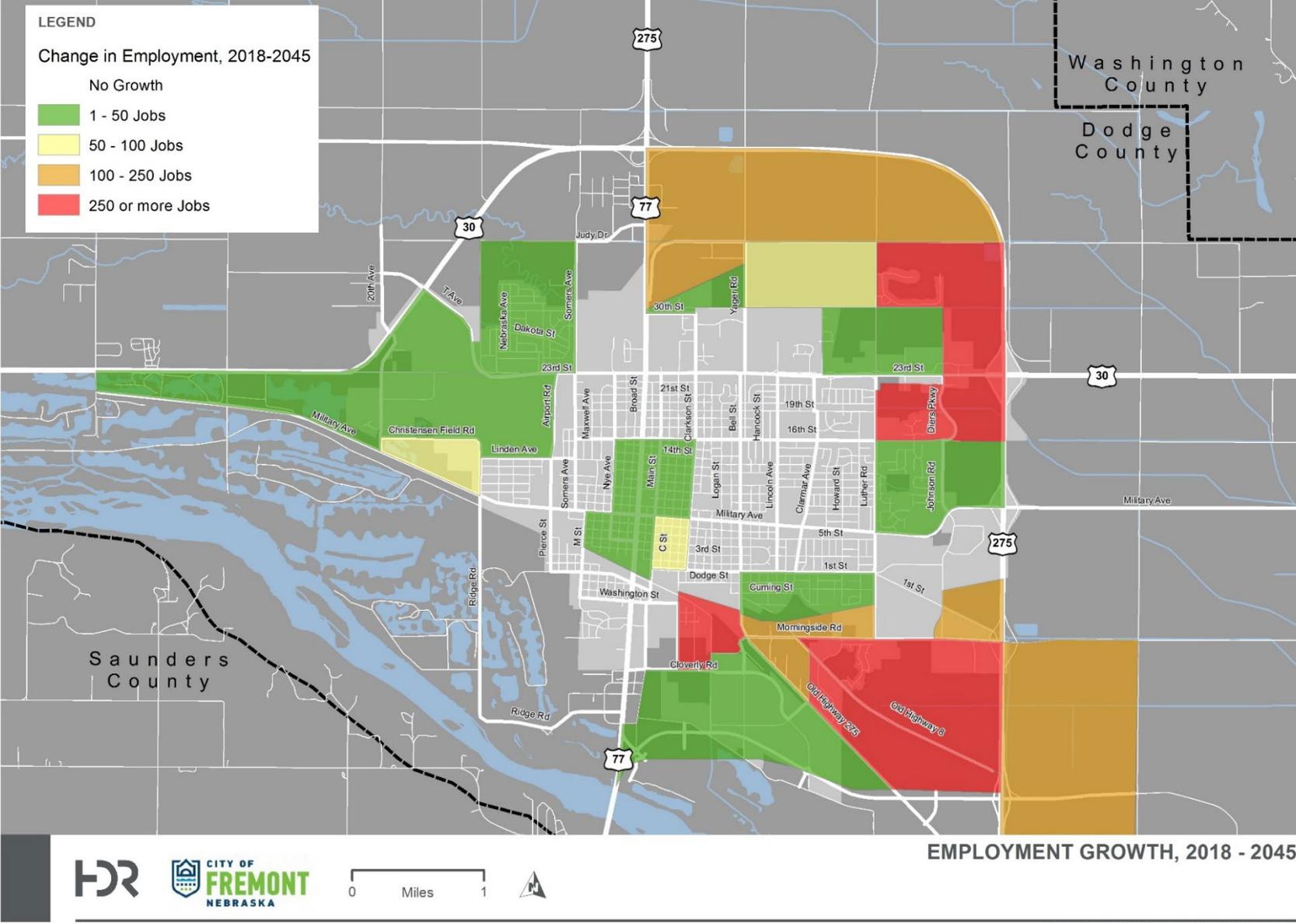


Figure 15: Future Employment Growth Areas



Travel Demand Model

The travel demand model (TDM) is the main tool used for forecasting future traffic volumes and shaping transportation decision-making in Fremont. Using a complex set of mathematical procedures, the TDM estimates daily travel based on current land use and employment data. To understand the impacts of future transportation improvements on future travel, several scenarios are run through the TDM. The scenarios provide a basis for comparison while helping prioritize system investment. The main scenario used for evaluating travel demand as part of the LRTP is:

- 2045 Existing plus Committed plus Planned (Plan Scenario):** The Plan Scenario models travel demand by incorporating committed improvements as well as those recommended as part of this LRTP.

2045 Existing plus Committed plus Planned Scenario Performance

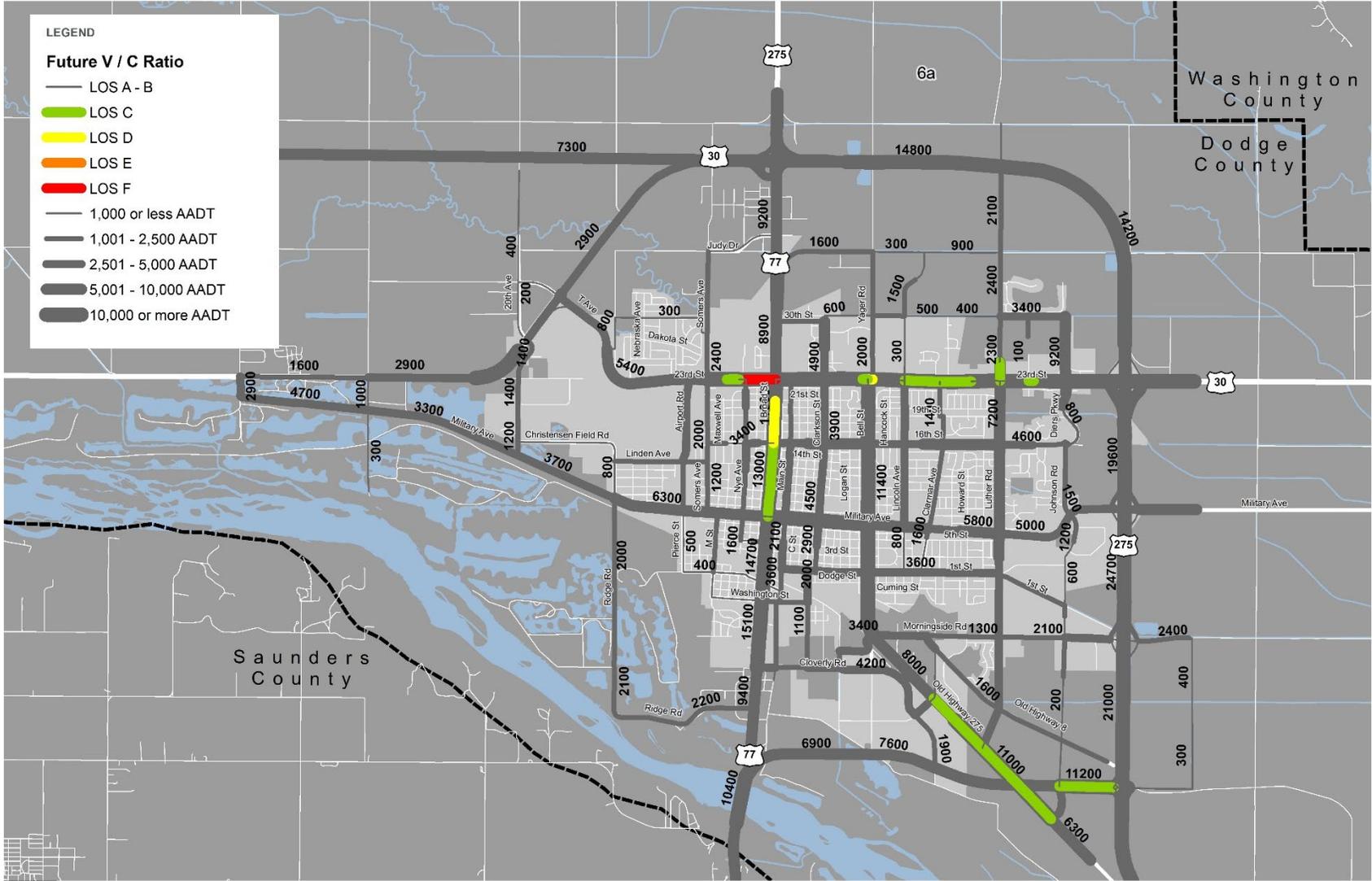
System-wide performance for the Plan Scenario is summarized in **Table 14**. Under the Plan Scenario, vehicle miles traveled (VMT) and vehicle hours traveled (VHT) are expected to increase by 28 percent and 25 percent, respectively, while average trip speed is expected to see a slight increase over the Base scenario. Average trip length is estimated to increase while average trip time is estimated to remain constant between the Base and Plan scenarios.

Figure 16 shows the forecasted traffic levels and planning-level LOS for the Plan Scenario. Under this scenario, the worst congestion is anticipated along 23rd Street between Broad Street / Highway 77 and Nye Avenue and along Old Highway 275. Diers Parkway, north of 23rd Street, is also expected to see congestion issues under the Plan Scenario.

Table 14: System Performance for the Base and Plan Scenarios

	2018	2045 Plan Scenario	
		Growth	Percent Change
Vehicle Miles Traveled	578,938	742,350	28.2%
Vehicle Hours Traveled	15,647	19,601	25.3%
Average Trip Speed (MPH)	37	37.87	
Average Trip Length (Miles)	3.56	3.68	
Average Trip Time (Hours)	0.1	0.1	

Figure 16: Plan Scenario Traffic Operations



PLAN ROADWAY SCENARIO FUTURE TRAFFIC OPERATIONS

Funding

This section provides an overview of past transportation system funding within Fremont and a potential future funding scenario developed as part of the LRTP. The analysis is based on the fiscal years (FY) 2015 through 2021. Funding trends were developed based on a review of Fremont’s previous and current budgets, as well as the current 1-year and 6-year plan for city streets. The future transportation funding forecasts are based on the historical trends and will serve as the basis for the future funding scenario that guides LRTP project recommendations.

Fremont Funding Sources

Transportation projects, maintenance, and operations in Fremont are funded through a mix of federal, state, and local sources. Several of the funding sources are considered “competitive funding opportunities” as they are awarded through a competitive bid process each year.

Fremont’s typical funding sources include:

Local Sources

- **Street Fund:** This is the primary source of funding for roadway operations, maintenance, and capital investments within Fremont. The Street Fund draws from gas tax and motor vehicle tax revenues, with approximately 25–40 percent of the street funding spent on operations and 60–75 percent spent on capital investments each year.
- **Sales Tax Fund:** This is a secondary source of funding for roadway operations and capital investments within Fremont. The Sales Tax Fund is comprised of revenues from the city’s Local Option Sales Tax (LOST), which levies an additional 0.5 percent tax on sales. Fremont dedicates a portion of LOST revenues for infrastructure and street maintenance purposes.
- **Special Projects Fund:** Fremont maintains a Special Projects Fund for various capital expenditures. Sources contributing to the Special Projects Fund include:
 - Federal and state grants
 - Fees, grants, and miscellaneous contributions received for specific capital projects
 - Capital transfers from other city funds

Federal and State Sources

- **Federal Funds Purchase Program (FFPP):** This program allows local agencies to enter into purchase agreements with Nebraska DOT to exchange federal transportation funds at a discount rate for state funds. The purchase agreement allows for greater flexibility in how local agencies spend their transportation dollars by removing federal funding requirements and oversight.



- **State Highway Allocation Fund:** This is a State program that collects user fees, including gas tax from fuel sales, vehicle registration fees, and sales tax on vehicles. These user fees are pooled into the State Highway Trust Fund, which is the primary source for highway allocation funds that are distributed to Nebraska’s counties and cities each year.
- There are federal funds that represent competitive funding opportunities for local jurisdictions like Fremont, including:
 - **Highway Safety Improvement Program (HSIP):** These funds are for addressing transportation safety issues, particularly reducing fatalities and serious injuries. HSIP funds go toward safety improvements for vehicles or pedestrians at locations with frequent and/or high severity crashes.
 - **Transportation Alternatives (TA):** This is a federal set-aside funding source for smaller-scale bicycle and pedestrian projects. Local agencies compete for TA funds through a competitive bid and selection process.

Historical Funding Trends

Local Funds

Historical local funding levels from the three main sources of transportation improvements are shown in **Table 15**. Street Fund levels stayed relatively constant between 2017 and 2020, rising from \$4.1 million in 2017 to nearly \$5 million in 2020. Sales Tax Fund levels reflect a similar trend, although the increase between 2017 and 2020 was less significant than for the Street Fund. Special Projects Fund levels saw a gradual increase, from a 2017 total of \$1.8 million to over \$2.7 million in 2020.

Table 15: Historical Local Funding Levels for Transportation Improvements, 2017–2020

Year	Street Fund	Sales Tax Fund	Special Projects Fund	Total
2017	\$4,160,000	\$7,030,000	\$1,830,000	\$13,020,000
2018	\$4,160,000	\$7,540,000	\$2,350,000	\$14,050,000
2019	\$4,460,000	\$8,760,000	\$2,450,000	\$15,670,000
2020	\$4,970,000	\$10,360,000	\$2,740,000	\$25,180,000

Source: City of Fremont

State and Federal Funding

Highway User Revenue distributed to Fremont from the state between FY 2016 and 2020 is shown in **Table 16**. Annual amounts distributed to Fremont saw an increase each FY, from a FY2016 level of \$2.4 million to just over \$2.8 million in FY2020.

Table 16: State Highway Allocation Fund Levels, FY2016–2019

FY2016	FY2017	FY2018	FY2019	FY2020
\$2,400,000	\$2,540,000	\$2,630,000	\$2,840,000	\$2,830,000

Source: NDOT



FFPP funding is summarized in **Table 17** for the city of Fremont for the years 2013 through 2020. Since participation began, Fremont’s FFPP amounts increased substantially between 2015 and 2020. Surface Transportation Program (STP) and Bridge funds are two distinct categories of NDOT’s FFPP.

Table 17: FFPP Amounts, 2013–2020

Year	STP (Roads) FFPP Funds	Bridge FFPP Funds
2013*	-	\$62,300
2014*	-	\$81,900
2015	\$471,500	\$90,200
2016	\$492,100	\$95,700
2017	\$499,600	\$94,100
2018	\$515,000	\$97,500
2019	\$526,300	\$107,600
2020	\$550,800	\$126,900

Source: NDOT

*FFPP funds were not available for municipalities until 2015

SOUTHEAST BELTWAY FUNDING

The Southeast Beltway, connecting US-77 to US-275 and US-30, is currently underway and marks a significant investment from the State in the Fremont area’s transportation system. NDOT estimates the total cost of the project to be \$60 million; the majority of this project will be funded by state sources while a portion of costs will be borne by the city. The Southeast Beltway represents a significant investment, and it should be noted that it represents an atypically high level of state investment over a 6-year historical trend.

Historical Funding Allocations

Past local funding allocations for operations and capital improvements are shown in **Table 18**. During the 5-year period, Fremont spent just over \$15 million, with an average of roughly \$2.5 million each year. Total investment in capital projects exceeded \$44 million during this period, but there was significant variation in the amount programmed each year, with a high of \$18 million budgeted in FY2019 and a low of \$540 thousand in FY2015. Other capital costs totaled \$8.3 million while other expenditures amounted to \$21.5 million between FY2019 and FY2020.

Table 18: Historical Funding Allocations for Transportation Improvements

Fiscal Year	Operations	Capital Projects	Other Capital	Other	Total
2015–16	\$2,370,000	\$540,000	\$350,000	\$620,000	\$3,880,000
2016–17	\$2,350,000	\$2,170,000	\$650,000	\$520,000	\$5,690,000
2017–18	\$2,570,000	\$1,190,000	\$590,000	\$1,560,000	\$5,910,000
2018–19	\$2,820,000	\$16,010,000	\$560,000	\$12,830,000	\$32,220,000
2019–20*	\$2,600,000	\$18,060,000	\$4,260,000	\$2,500,000	\$27,420,000
2020–21*	\$2,680,000	\$6,250,000	\$1,940,000	\$3,520,000	\$14,390,000
Total	\$15,390,000	\$44,220,000	\$8,350,000	\$21,550,000	\$89,510,000

Source: City of Fremont

*Reflect budgeted amounts



A breakdown of funding allocations by project type, based on the current city budget for FY2019 through FY2024, is shown in **Table 19**. Project types consist of:

- **Existing corridor investment:** improvements to existing facilities such as preservation activities like resurfacing or reconstruction and potentially widening projects that add new travel lanes or turn lanes to an existing street.
- **New corridor investment:** improvements that create new facilities, such as the construction of a new street. These could also include a new trail, but the spending in our analysis period was all street focused.
- **Preliminary engineering (PE):** analysis and design work related to transportation improvements.

Table 19: Breakdown of Funding Allocations by Project Type, 2019–2024

Project Type	Funding Level Allocation	Share of Funding Allocation
Existing Corridor Investments	\$33,796,218	81%
New Corridor Investments	\$5,650,000	14%
Preliminary Engineering	\$1,645,000	5%

Source: City of Fremont

As shown in **Table 19**, over 80 percent of funding for transportation has traditionally been invested in existing corridors while 14 percent is budgeted for new corridor investments.

Future Funding Projections

Future funding levels were developed based on an extrapolation of historical trends for local and state sources. These projections are organized into time bands to illustrate the future funding available for Fremont and to establish a systematic approach to planning transportation improvements. The time bands are:

- **Short-term:** 2022 through 2026
- **Mid-term:** 2027 through 2035
- **Long-term:** 2036 through 2045

Funding forecasts, shown in **Figure 17** and **Table 20**, assume a 3 percent budget growth per year.



Figure 17: Forecasted Funding Levels by Time Band

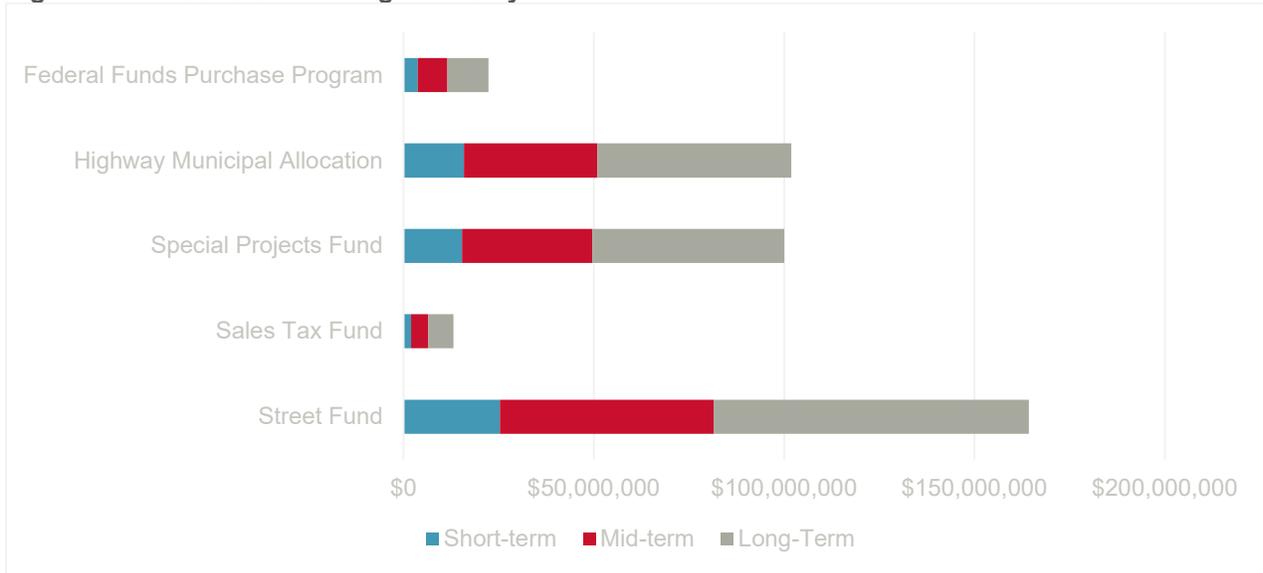


Table 20: Projected Local, State, and Federal Funding Levels by Time Band

Time Band	Local Sources			State Sources	
	Street Fund	Sales Tax Fund	Special Projects Fund	Highway Municipal Allocation	Federal Funds Purchase Program
Short-term (2022–2026)	\$25,300,000	\$2,000,000	\$15,400,000	\$15,900,000	\$3,700,000
Mid-term (2027–2035)	\$56,200,000	\$4,500,000	\$34,200,000	\$35,000,000	\$7,800,000
Long-term (2036–2045)	\$82,800,000	\$6,600,000	\$50,400,000	\$51,000,000	\$10,800,000
Total	\$164,400,000	\$13,100,000	\$100,100,000	\$101,800,000	\$22,300,000

Source: City of Fremont, NDOT. Assumes 3% annual budget growth.

Future Funding Allocations

The funding amounts for each time band shown in **Table 20** were further analyzed and categorized into project type to gain a better understanding of Fremont’s future funding picture. The forecasting approach assumes 3 percent of annual sales tax revenues will be spent on transportation. These allocations by project type are shown in **Table 21**. The allocations below reflect an 86 percent split for existing corridor investments, and 14 percent for new corridor investments.

Table 21: Future Funding Allocations by Time Band

Time Band	Existing Corridor Investments	New Corridor Investments	Total
Short-term (2022–2027)⁵	\$53,578,000	\$8,722,000	\$62,300,000
Mid-term (2028–2036)	\$118,422,000	\$19,278,000	\$137,700,000
Long-Term (2037–2045)	\$173,376,000	\$28,224,000	\$201,600,000
Total	\$345,376,000	\$56,224,000	\$401,600,000

Source: City of Fremont, HDR

Given past historical funding trends and allocations, it is anticipated that \$345.3 million will be invested in existing corridors over the next 25 years. These levels comprise 86 percent of the total forecasted transportation expenditures during the life of the LRTP. New corridor investment is expected to have a potential capacity of \$56.2 million, which is the remaining 14 percent of the \$401.6 million in transportation funding that is expected to be available through 2045.



⁵ Note that the majority of the funds in the short-term will be designated to funding currently programmed or “committed” projects from the 1- and 6-year plan.

Alternatives Development

The Alternatives Development process seeks to prioritize investment in Fremont's transportation system through the identification and evaluation of a set of potential future transportation system improvements. The alternatives developed include a range of improvement types to the existing roadway system and bicycle and pedestrian improvements that strengthen the community's multimodal transportation network.

Several sources guided the development of the roadway and bicycle and pedestrian improvement alternatives described in this memorandum. These sources include:

- **Review of Previous Plans:** improvements identified in the previous Long Range Transportation and Parks and Recreation Master plans that fit the 2045 LRTP goals and vision.
- **Existing and Future Conditions Analysis:** improvements developed as a response to the issues and needs identified during the 2045 LRTP Existing Conditions technical analysis.
- **City Staff and Officials Input:** improvements identified through interviews with city staff and elected officials regarding current issues and needs.
- **Public Input:** improvements identified through feedback during LRTP public engagement events.

Appendix A discusses potential crash countermeasures applicable to the top crash frequency intersections identified in the existing conditions analysis. These countermeasures serve as supplemental projects to be considered for future implementation (potentially near term). Planning-level costs for implementing these countermeasures are not provided. These projects are supplementary as larger capital projects might supplant the need for these smaller safety projects. It is recommended that city staff review these potential projects and evaluate their appropriateness for Fremont.

Committed Projects

Projects identified as part of Fremont's 1- and 6-Year Plan are considered "committed projects" with dedicated funding and are scheduled for implementation in the near term. The majority of projects listed in the 1- and 6-Year Plan are roadway-focused, but some multimodal projects are identified, including the Rawhide Creek Trail.

Major roadway committed projects are shown in **Figure 18** along with roadway alternatives while major bike and pedestrian committed projects are shown in **Figure 19**. Overall, nearly \$100 million is planned for investment in the transportation system by 2026, with a large portion of that being the Southeast Beltway project. Major committed projects are shown in **Table 22**.



Table 22: Major Committed Projects

ID	Name	From	To	Type
101	Luther Road	Military Avenue	23rd Street	Roadway Reconstruction and Widening
102	Military Avenue	Luther Road	Highway 275	Roadway Reconstruction and Widening
104	NW Fremont	Jones Road	Highway 30	New Roadway Connection
105	Rawhide Creek Trail	Linden Avenue	Johnson Road	New Bicycle and Pedestrian Trail

Source: City of Fremont

Roadway Alternatives

The overarching goal of the roadway alternatives developed as part of the LRTP is to provide a safer transportation system that limits significant congestion and provides access, reliability, and multimodal connections. The roadway alternatives also seek to strengthen the resiliency of the transportation system while encouraging economic growth and enhancing community character.

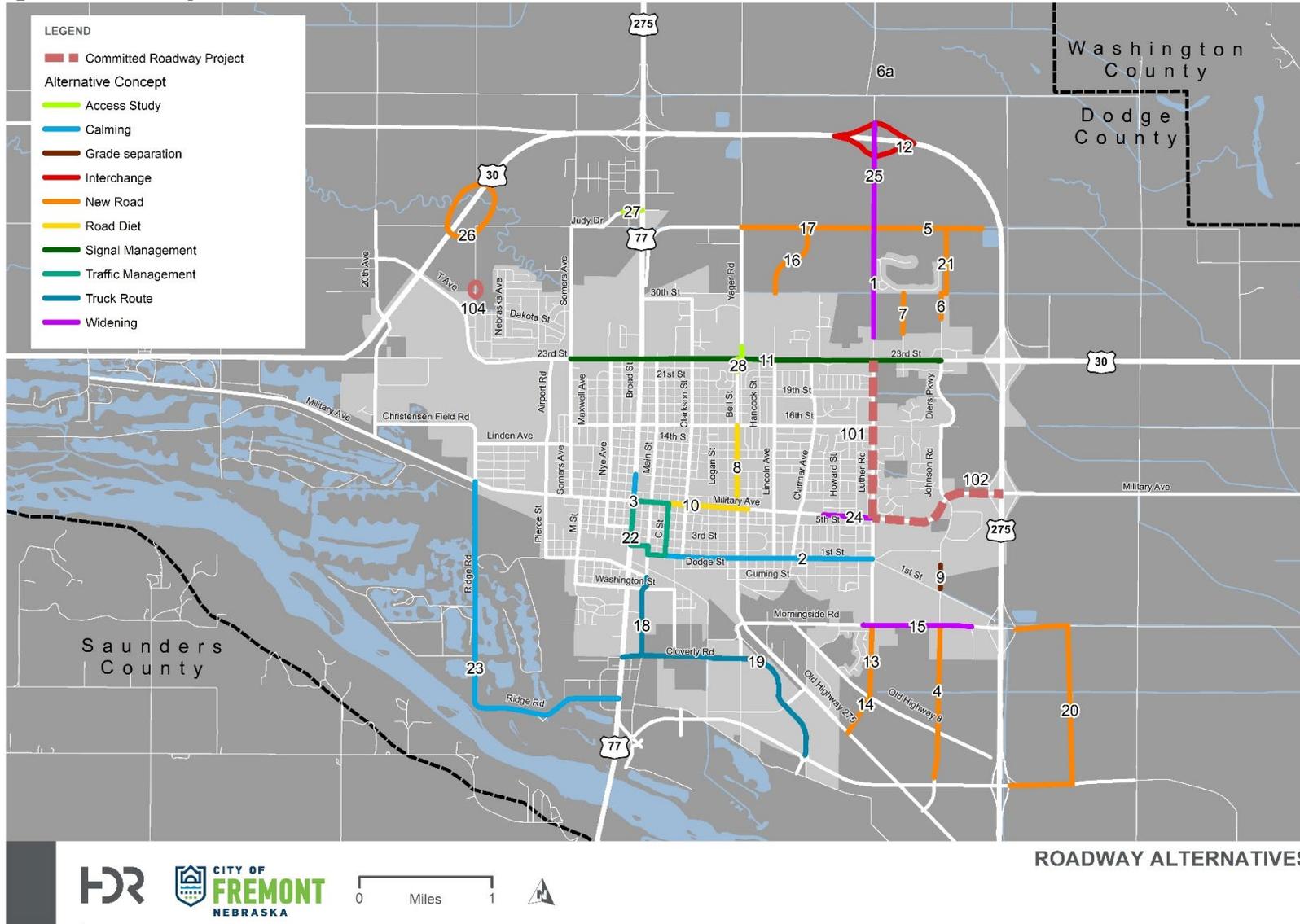
Figure 18 shows the proposed roadway alternatives. Planning-level unit costs, shown in Table 23, were developed based on recent project costs elsewhere in the region and are in terms of 2022 dollars. Using those unit costs, the roadway alternatives are summarized in **Table 24**.



Table 23: Estimated Unit Costs for Roadway and Bicycle and Pedestrian Alternatives

Alternatives	Cost (2022 \$)	Unit
Roadway Improvements		
New 2-lane roadway	\$3,500,000	per mile
New 3-lane urban roadway	\$5,000,000	per mile
Add turn lane at intersections	\$400,000	per turn lane
Widen to 3-lane urban facility (includes reconstruction)	\$5,000,000	per mile
New bridge	\$225	per sq ft
New traffic signal	\$400,000	per signal
New interchange	\$25,000,000	per interchange
Traffic signal upgrades (signal)	\$75,000	per signal
Traffic signal upgrades (communications)	\$30	per foot
Bicycle and Pedestrian		
Crosswalks, pavement markings and warning signs (typical)	\$3,000	each
Construct ADA Ramp	\$10,000	each
Concrete curb extension (typical)	\$60,000	each
Rectangular Rapid-Flashing Beacon (RRFB)	\$30,000	each
8' x 20' concrete median island with refuge (typical)	\$100,000	each
Install 5' concrete sidewalk and curb and gutter	\$85	per LF
Shared lane markings / sharrows	\$4,000	per block
Shared lane signage (In lieu of sharrows)	\$400	per block
Shared use paths / trails (in Right-of-Way)	\$750,000	per mile

Figure 18: Roadway Alternatives



Estimated planning-level costs for each alternative are included in the summary table; these roadway alternative costs are categorized by improvement type, which include the following:

- **Access Study**: Two studies fall in this category:
 - Explore options to improve access onto Broad Street / Highway 77 from Judy Drive, which was noted during the LRTP process to be a significant issue for eastbound to northbound movements at this location. A detailed safety and operations study is recommended to identify recommendations for this location after the construction of the Southeast Bypass.
 - Identify improvement alternatives for the adjacent intersections of 23rd Street / Bell Street and 23rd Street / Yager Road.

Due to uncertainty in estimating cost for these studies, there is no YOE cost information available at this time.

- **Grade Separation**: Construction of a structure that separates vehicle traffic from rail traffic as an underpass or overpass.
- **Interchange**: Construction of an interchange where the main route has free-flow traffic and ramps onto the minor cross-street to improve highway access and safety.
- **New Road**: Construction of new road facilities or an extension of an existing facility.
- **Road Diet**: A road with a reduced number of travel lanes. This reduction of travel lanes is often paired with bicycle and pedestrian improvements, the addition of on-street parking, and improvements to pedestrian crossings.
- **Signal Management**: Improvements to the traffic signal system, including retiming and deployment of new or upgraded technologies.
- **Traffic Calming**: Measures implemented to slow traffic and improve the walkability and pedestrian safety of a roadway.
- **Traffic Management**: Conversion of one-way to two-way streets in the downtown area.
- **Truck Route**: Improvements to existing roadways to support designation for heavy commercial truck use.
- **Widening**: Construction of additional travel lanes to existing roadways.





Table 24: List of Proposed Roadway Alternatives

Project ID	Name	Improvement Type	From	To	Cost (2022 \$)
1	Luther Road	Turn Lanes	27th Street	County Road T	\$2,400,000
2	1st Street	Traffic Calming	Luther Road	Main St	\$300,000
3	Broad Street	Traffic Calming	4th Street	10th Street	\$300,000
4	Johnson Road	New Road	Morningside Road	SE Beltway	\$5,800,000
5	County Road T	New Road	Luther Road	U.S. 275	\$4,100,000
6	Diers Parkway	New Road	27th Street	32nd Street	\$1,000,000
7	Milton Road	New Road	27th Street	32nd Street	\$1,500,000
8	Bell Street	Road Diet	Military Avenue	19th Street	\$3,200,000
9	Johnson Road Viaduct	Grade Separation	UPRR	UPRR	\$6,700,000
10	Military Avenue	Road Diet	Broad Street	Bell Street	\$4,300,000
11	23rd Street	Study / Corridor Management	Somers Avenue	Diers Parkway	\$700,000
12	Luther Road / U.S. 275 Interchange	New Interchange	U.S. 275	Luther Road	\$25,000,000
13	Luther Road	New Road	Morningside Road	Old Highway 8	\$2,800,000
14	Luther Road	New Road	Old Highway 8	Old Highway 275	\$1,600,000
15	Morningside Road	Road Widening	Luther Road	1st Street	\$4,100,000
16	Lincoln Avenue	New Road	32nd Street	County Road T	\$3,100,000
17	County Rd T	New Road	Yager Road	Luther Road	\$5,000,000
18	Main Street	Truck Route	Boulevard Street	Factory Street	\$4,000,000
19	Cloverly Road	Truck Route	Main Street	SE Beltway	\$6,100,000
20	Inland Port Loop	New Road	SE Beltway	Morningside Road	\$7,200,000
21	Diers Parkway	New Road	32nd Street	County Road T	\$1,700,000
22	Downtown One-Way to Two-Way Streets Conversion	Traffic Management			\$1,000,000
23	Ridge Road	Traffic Calming	Military Avenue	Highway 77	\$400,000
24	Military Avenue east	Road Widening	William Avenue	Luther Road	\$7,000,000
25	Luther Road	Road Widening	County Road T	Highway 30	\$4,000,000
26	County Road T	New Road	Ridge Road	Highway 30	\$700,000
27	Judy Drive	Study	Judy Drive	Highway 77	TBD
28	23rd Street / Bell St and Yager Rd	Study	Bell St	Yager Rd	TBD

Bicycle and Pedestrian Alternatives

Proposed bicycle and pedestrian improvements focus on developing connections between existing bicycle and pedestrian facilities while safely improving access to major community destinations. The community provided significant input on bicycle and pedestrian opportunities during public engagement activities, and this input played a role in shaping the alternatives shown in **Figure 19** and summarized in **Table 25**.

The types of bicycle and pedestrian alternatives proposed are:

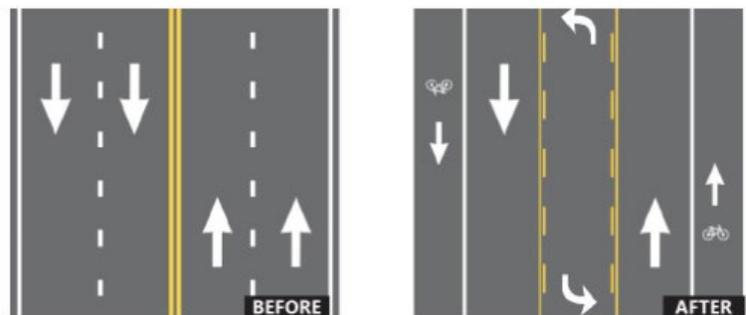
- **Paved trail:** 10-foot paved trail providing recreational opportunities. These facilities differ from side paths in that they have more limited crossings of vehicles via driveways and side streets.
- **Traffic calming:** Measures implemented to slow traffic and improve the bikeability and walkability of a roadway.
- **Shared Road:** Signage and markings to indicate a roadway that is suitable for bicyclists, and to alert motorists to the presence of bicycle users. The applications are typically assigned to low volume, low speed local streets.
- **Side Path:** 10-foot paved trail located in the right-of-way and adjacent to a roadway.



Complete Streets Concepts

There are several strategies discussed in the plan that relate to changing how streets in Fremont are used so that they are safer and more efficient for all users, including motorists, bicyclists, and pedestrians. These concepts are collectively thought of as “complete streets” and include the road diet and traffic calming improvement types identified in this plan.

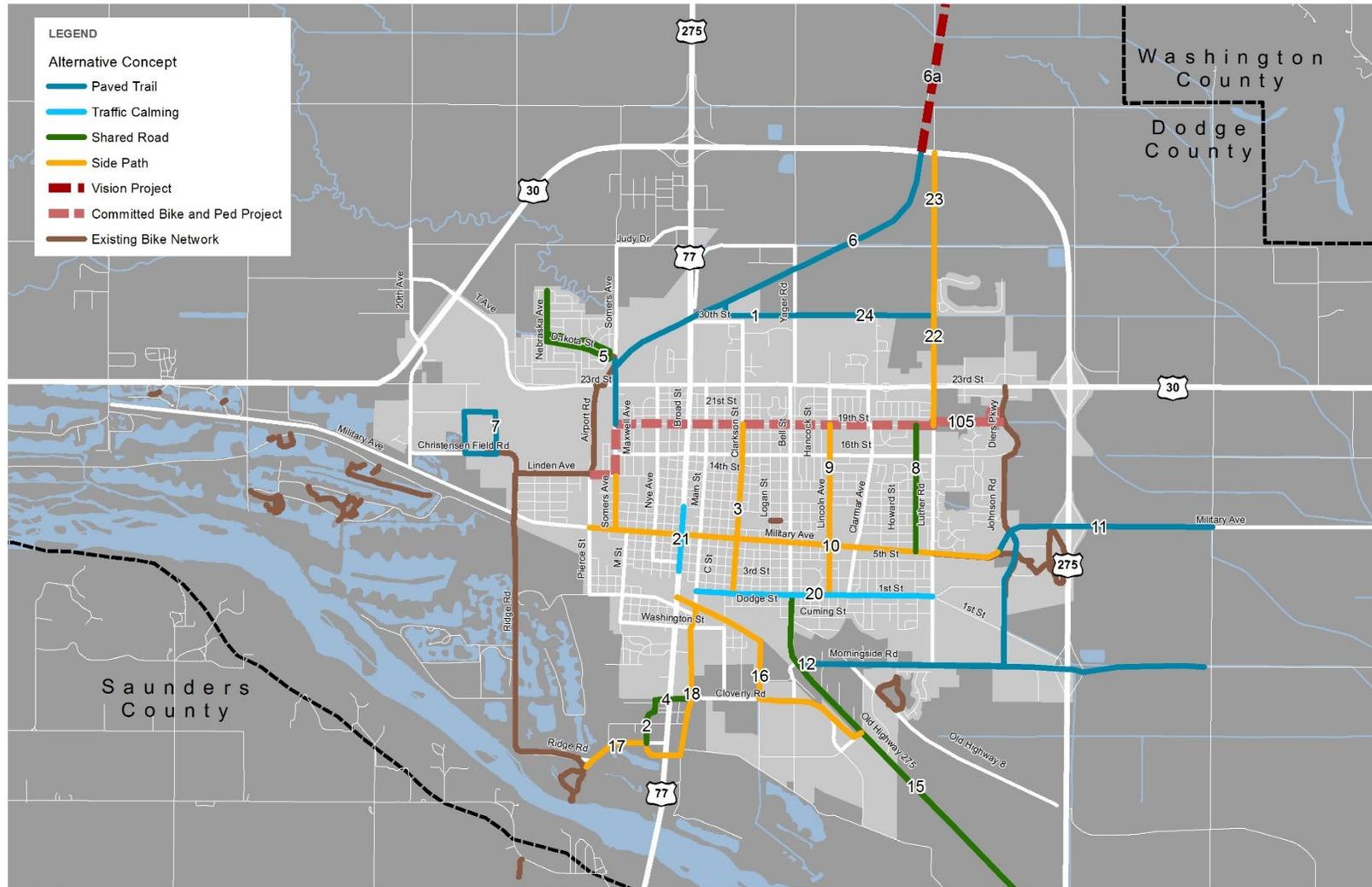
A **road diet** is a street reconfiguration that typically converts a current four-lane undivided street to a three-lane street consisting of two through lanes and a center two-way left-turn lane. An example of a road diet is shown to the right.



Example Road Diet

Source: Federal Highway Administration

Figure 19: Proposed Bicycle and Pedestrian Alternatives



BICYCLE AND PEDESTRIAN ALTERNATIVES





Table 25: List of Proposed Bicycle and Pedestrian Alternatives

Project ID	Name	Improvement Type	From	To	Cost (2022 \$)
1	32nd Street	Paved Trail	Clarkson Street	Yager Road	\$300,000
2	Boulevard Street	Shared Road	Ridgeland Avenue	Cloverly Road	\$10,000
3	Clarkson Street sidewalk	Side Path	1st Street	19th Street	\$500,000
4	Cloverly Road	Shared Road	Boulevard Street	Broad Street / US 77	\$10,000
5	Dakota Street	Shared Road	Nebraska Street	Palmer Drive	\$1,000
6	FEVR	Paved Trail	Sommers Avenue	Luther Road	\$2,300,000
7	Fremont Soccer Club	Paved Trail			\$600,000
8	Garden City Road	Shared Road	Military Avenue	16th Street	\$10,000
9	Lincoln Avenue	Side Path	1st Street	19th Street	\$500,000
10	Military Avenue	Side Path	Luther Street	Somers Avenue	\$300,000
11	Military Avenue	Paved Trail	Johnson Road	County Road 26	\$900,000
12	Morningside Road	Paved Trail	Johnson Road	County Road 26	\$1,800,000
13	Nebraska Street	Shared Road	Nelson Lane	Woods Drive	\$1,000
14	Nelson Lane	Shared Road	Palmer Drive	Wyoming Avenue	\$1,000
15	Old HWY 275	Shared Road	1st Street	County line	\$1,700,000
16	Platte Avenue	Side Path	Factory Street	Cloverly Road	\$1,000,000
17	Ridge Road	Side Path	Luther Hormel Park	Boulevard Street	\$300,000
18	Main Street	Side Path	Ridgeland Avenue	Jackson Street	\$700,000
19	Somers Avenue	Paved Trail	19th Street	Dakota Street	\$200,000
20*	1st Avenue	Traffic Calming	Main Street	Luther Road	\$300,000
21*	Broad Street / US 77	Traffic Calming	3rd Street	10th Street	\$300,000
22	Luther Road	Side Path, Pedestrian Improvements	19th Street	County Road T	\$1,100,000
23	Luther Road	Side Path, Ped Improvements	County Road T	Highway 30	\$300,000
24	Bluestem Trail	Paved Trail	Yager Road	Luther Road	\$500,000

*Also listed with roadway alternatives

The benefits of a road diet street conversion include:

- Separating left-turning traffic from through traffic. This reduces serious rear-end and angle crashes, with the total crash reduction for a four-lane to three-lane conversion ranging from 19% to 47% fewer crashes.
- Fewer travel lanes for pedestrians to cross.
- Opportunity within the existing street to install pedestrian refuge islands, curb extensions, on-street parking, or bicycle lanes.
- Traffic calming and more consistent travel speeds near posted limits.

Road diets can be relatively low-cost improvements that improve safety for all users and create an improved neighborhood environment.

Individual strategies that can support complete streets include:

- **Curb Extensions:** Curb extensions narrow the street to create safer and shorter crossings for pedestrians, while visually narrowing the street to encourage slower vehicular travel speeds. They can be implemented at intersections, or at mid-block locations in conjunction with other mid-block crossing improvements. Examples of curb extensions at an intersection are shown below.

Curb Extensions, downtown Grand Island



- **Mid-Block Crossings:** there are a variety of treatments possible to increase the safety for mid-block pedestrian crossings on long segments of street where traffic is not controlled through a stop sign or traffic signal. These treatments can include pinch points or “chokers”, high visibility cross-walks, and active warning beacons for pedestrians. A range of different mid-block crossing treatments that facilitate safer pedestrian crossings and elements of traffic calming are shown below.

Mid-Block Crosswalk with Active Warning Beacons (Rectangular Flashing Beacons)



Source: NACTO

Mid-Block Crosswalk with Curb Extensions and Active Warning Beacons



Source: University of Louisville

Mid-Block Raised Crosswalk with Median Refuge



Source: FHWA



Plan Recommendations

Plan recommendations were developed based on a screening process that assessed each alternative against the performance measures shown in **Table 2**, with the aim of prioritizing those alternatives with a demonstrated ability to move the transportation system toward the LRTP vision, goals, and objectives. A second element of the screening process looked at each alternative’s year-of-expenditure (YOE) cost to ensure the best fit for each recommendation’s implementation given the anticipated future revenues summarized in **Table 21**.⁶

Plan Implementation

Time bands described in the funding section of the LRTP serve as the guide for implementing the Plan recommendations. Recommendations were categorized based on whether they are considered existing corridor investments or new corridor investments for roadway alternatives and system maintenance investments or system expansion investments for bicycle and pedestrian alternatives.

Short-Term Recommendations

Alternatives recommended for the short-term are considered for implementation between 2021 and 2027. Fremont’s 1- and 6-Year Plan improvements are assumed to be the major projects that will be implemented during the short-term, but this Plan identifies two additional roadway improvements recommended for implementation. Several bicycle and pedestrian improvements were identified for the short-term period as well. Estimated YOE costs for short-term recommendations are in **Table 26** below:

Table 26: Short-Term YOE Costs Summary

	Existing Corridor / System Maintenance Investment	New Corridor / System Expansion Investments	Total
Roadway	\$1,200,000	\$0 ⁷	\$1,200,000
Bicycle and Pedestrian	\$400,000	\$3,100,000	\$3,500,000
Total	\$1,600,000	\$3,100,000	\$4,700,000

Mid-Term Recommendations

Alternatives recommended for the mid-term are considered for implementation between 2028 and 2036. The column labeled “Additional Needed System Preservation Projects” in **Table 27** and **Table 28** shows the portion of reconstruction and preservation projects that are not explicitly listed in the LRTP project list, but reflects the funding level estimated to be required to meet the LRTP goal of maintaining the street system in good repair (as documented in **Table 21**). Estimated YOE costs for mid-term recommendations are shown in **Table 27**:

⁶ Budgets were assumed to grow at a rate of 3.0% annually to meet this YOE funding level.

⁷ As noted in Table 19, the majority of funding and projects for the short-term are included in the current 1- and 6-year plans.

Table 27: Mid-Term YOE Costs Summary

	Existing Corridor / System Maintenance Investment	Additional Needed System Preservation Projects	New Corridor / System Expansion Investments	Total
Roadway	\$15,700,000	\$102,742,000	\$30,200,000	\$45,900,000
Bicycle and Pedestrian	\$552,500	-	\$4,700,000	\$5,252,500
Total	\$16,252,500	\$102,742,000	\$34,900,000	\$51,152,500

Long-Term Recommendations

Alternatives recommended for the long-term are considered for implementation between 2037 and 2045. Estimated YOE costs for long-term recommendations are shown in **Table 28**:

Table 28: Long-Term YOE Costs Summary

	Existing Corridor / System Maintenance Investment	Additional Needed System Preservation Projects	New Corridor / System Expansion Investments	Total
Roadway	\$30,400,000	\$142,976,000	\$50,600,000	\$81,000,000
Bicycle and Pedestrian	\$2,760,000	-	\$12,200,000	\$14,960,000
Total	\$33,160,000	\$142,976,000	\$50,100,000	\$92,360,000

Vision Projects

Several alternatives identified during the development of the LRTP would help Fremont move toward accomplishing the vision, goals, and objectives of the Plan but due to high project costs are unlikely to have funding prior to 2045. Although not included in the Plan recommendations implementation timeframe, these projects are retained for consideration in future planning endeavors. YOE was assumed to be in the long-term time band, which results in \$90.5 million in total project costs for the LRTP vision projects.

Table 29 and **Table 30** summarize the roadway and bicycle and pedestrian implementation timing for Plan recommendations while **Figure 20** and **Figure 21** show the locations of these recommendations. Vision projects are summarized in **Table 31** and shown along with the Plan recommendations in **Figure 20** and **Figure 21**.

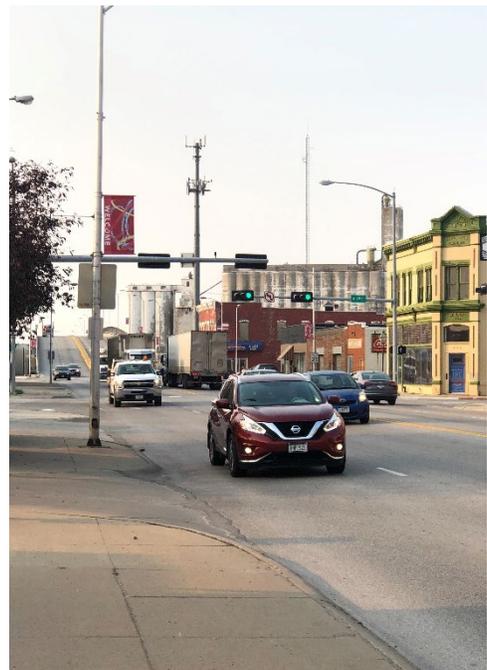
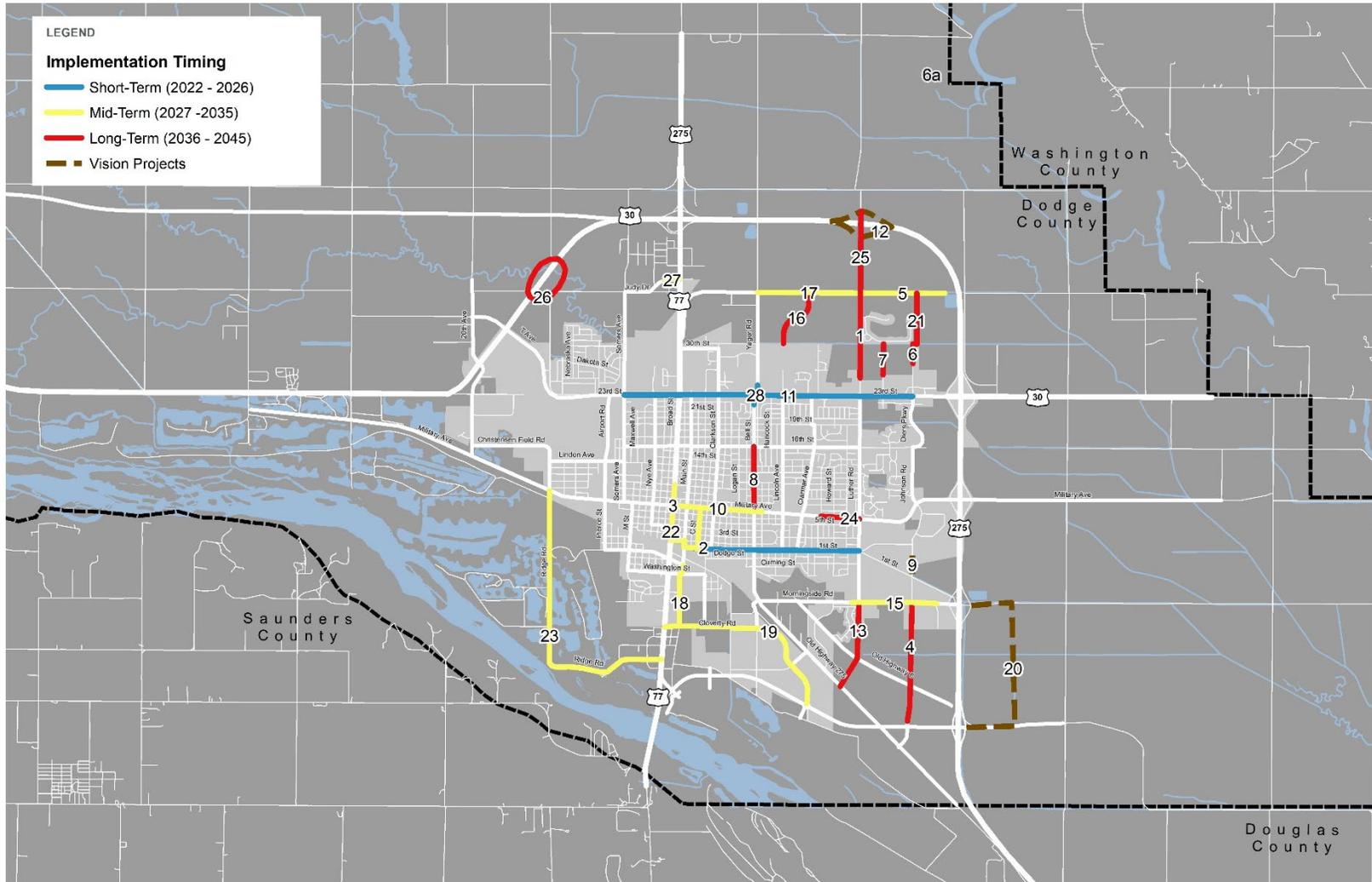


Figure 20: Roadway Alternatives Implementation



ROADWAY ALTERNATIVES IMPLEMENTATION





Table 29: Implementation Timing for Roadway Alternatives

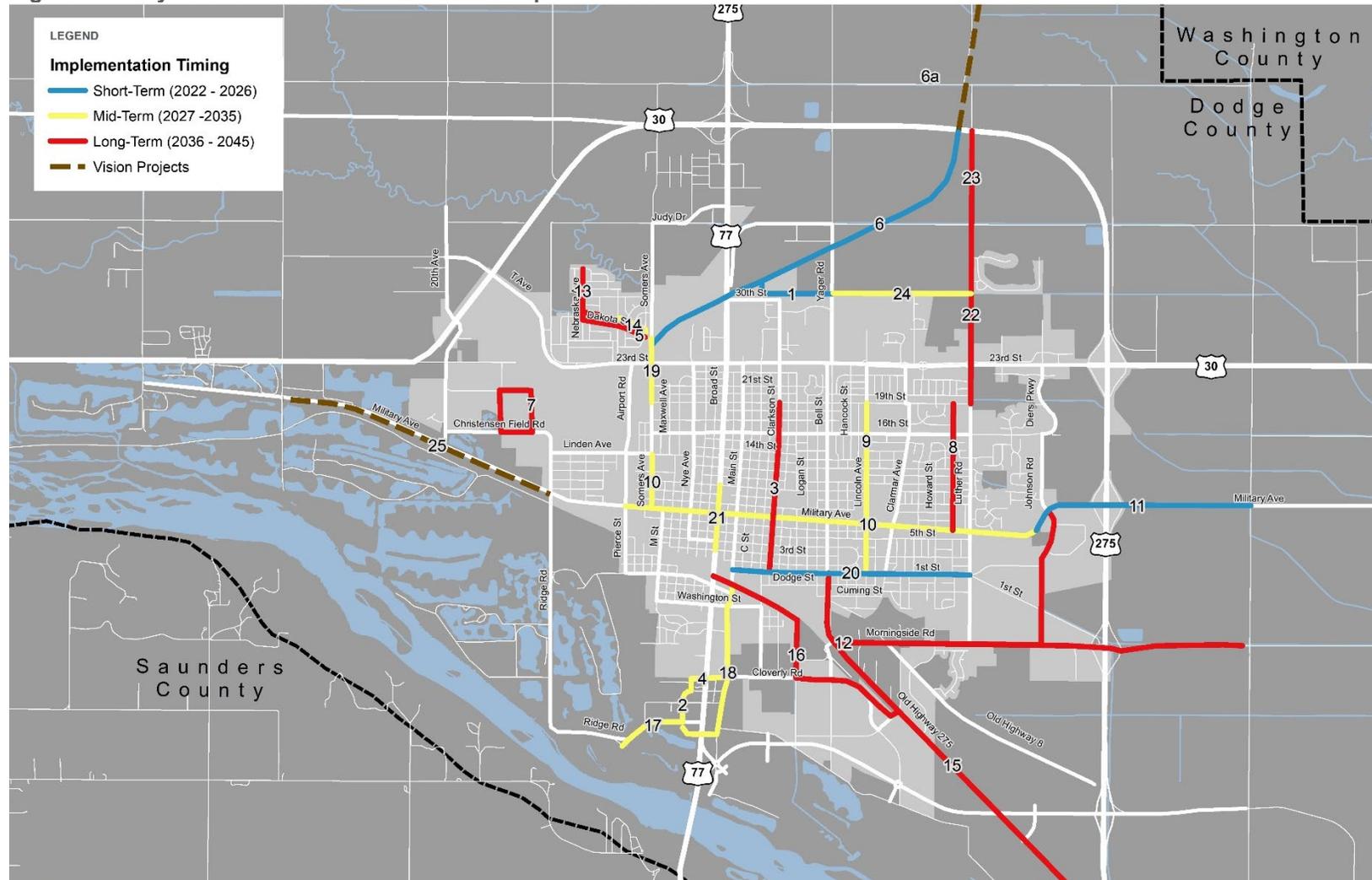
Time Band	Project ID	Name	Type	Project Purpose	Cost (2022 \$)	Cost YOY	Developer Participant	Corridor Maintenance Candidate
Short-term (2021–2027)	2	1st Street	Calming	Improve safety, encourage bike / ped activity	\$300,000	\$400,000	No	Yes
	11	23rd Street	Study / Signal Management	Improve safety and traffic operations	\$700,000	\$800,000	No	Yes
	28	23 rd Street at Bell and Yager	Study	Identify recommended improvement for safety and operations	TBD	TBD	No	No
Total					\$1,000,000	\$1,200,000		
Mid-term (2028–2036)	3	Broad Street / US 77	Calming	Improve safety, encourage bike / ped activity	\$300,000	\$500,000	No	Yes
	5	County Road T	New Road	Provide access to new residential developments	\$4,100,000	\$6,600,000	No	No
	10	Military Avenue	Road Diet	Improve safety and traffic operations	\$4,300,000	\$6,900,000	No	Yes
	11	23rd Street	Signal Management	Improve safety and traffic operations, following short-term study.	\$700,000	\$1,100,000	No	Yes
	15	Morningside Road	Widening	Address capacity issues	\$4,100,000	\$6,600,000	No	Yes
	17	County Rd T	New Road	Provide access to new residential developments	\$5,000,000	\$8,000,000	No	No
	18	Main Street	Truck Route	Manage freight activity	\$2,600,000	\$4,200,000	No	No
	19	Cloverly Road	Truck Route	Manage freight activity	\$6,100,000	\$9,800,000	No	No
	22	Downtown One-Way to Two-Way Streets Conversion	Traffic Management	Manage downtown traffic	\$1,000,000	\$1,600,000	No	No
	23	Ridge Road	Calming	Improve safety	\$400,000	\$600,000	No	Yes
27	Judy Drive	Study	Develop strategies to improve access onto Highway 77	TBD	TBD	No	No	
Total					\$28,600,000	\$45,900,000		



Table 29 continued

Time Band	Project ID	Name	Type	Project Purpose	Cost (2022 \$)	Cost YOE	Developer Participant	Corridor Maintenance Candidate
Long-term (2037–2045)	1	Luther Road	Widening	Address capacity issues	\$2,400,000	\$5,500,000	No	Yes
	4	Johnson Road	New Road	Provide access to new residential developments	\$5,800,000	\$13,200,000	No	No
	6	Diers Parkway	New Road	Provide access to new residential developments	\$1,000,000	\$2,300,000	Yes	No
	7	Milton Road	New Road	Provide access to new residential developments	\$1,500,000	\$3,400,000	No	No
	8	Bell Street	Road Diet	Improve safety and traffic operations	\$3,200,000	\$7,300,000	No	Yes
	11	23rd Street	Signal Management	Improve safety and traffic operations	\$700,000	\$1,600,000	No	Yes
	13	Luther Road	New Road	Provide access to new residential developments	\$2,800,000	\$6,400,000	No	No
	14	Luther Road	New Road	Provide access to new residential developments	\$1,600,000	\$3,600,000	No	No
	16	Lincoln Avenue	New Road	Provide access to new residential developments	\$3,100,000	\$7,100,000	Yes	No
	21	Diers Parkway	New Road	Provide access to new residential developments	\$1,700,000	\$3,900,000	Yes	No
	24	Military Avenue	Road Diet	Improve safety and traffic operations	\$7,000,000	\$16,000,000	No	Yes
	25	Luther Road	Widening	Address capacity issues	\$4,000,000	\$9,100,000	No	No
	26	County Road T	New Road	Provide access to regional highway system	\$700,000	\$1,600,000	No	No
Total					\$35,500,000	\$81,000,000		

Figure 21: Bicycle and Pedestrian Alternatives Implementation



LEGEND

Implementation Timing

- Short-Term (2022 - 2026)
- Mid-Term (2027 - 2035)
- Long-Term (2036 - 2045)
- - - Vision Projects

BICYCLE AND PEDESTRIAN ALTERNATIVES IMPLEMENTATION

0 Miles 1



Table 30: Implementation Timing for Bicycle and Pedestrian Alternatives

Time Band	Project ID	Name	Type	Project Purpose	Cost (2022 \$)	Cost YOE	Developer Participation	System Maintenance Candidate
Short-term (2021–2027)	1	32nd Street	Paved Trail	Expand trail network	\$300,000	\$500,000	No	No
	6	FEVR Rails to Trails	Paved Trail	Expand trail network	\$1,300,000	\$1,500,000	Yes	No
	11	Military Avenue	Paved Trail	Expand trail network	\$900,000	\$1,100,000	No	No
	20	1st Avenue	Pedestrian Improvements	Improve crossing safety	\$300,000	\$400,000	No	Yes
	Total				\$2,800,000	\$3,500,000		
Mid-term (2028–2036)	2	Boulevard Street	Shared Road	Improve bicycle mobility	\$10,000	\$25,000	No	Yes
	4	Cloverly Road	Shared Road	Improve bicycle mobility	\$10,000	\$25,000	No	Yes
	9	Lincoln Avenue	Side Path	Improve bicycle mobility	\$500,000	\$800,000	No	No
	10	Military Avenue	Side Path	Improve bicycle mobility	\$300,000	\$500,000	No	No
	14	Nelson Lane	Shared Road	Improve bicycle mobility	\$1,000	\$2,500	No	Yes
	17	Ridge Road	Side Path	Improve bicycle mobility	\$300,000	\$500,000	No	No
	18	S Main Street	Side Path	Improve bicycle mobility	\$700,000	\$1,600,000	No	No
	19	Somers Avenue	Paved Trail	Expand trail network	\$200,000	\$500,000	No	No
	21	Broad Street / US 77	Pedestrian Improvements	Improve crossing safety	\$300,000	\$500,000	No	Yes
	24	Bluestem Trail	Paved Trail	Expand trail network	\$500,000	\$800,000	No	No
	Total				\$2,821,000	\$5,252,500		



Table 30 continued

Time Band	Project ID	Name	Type	Project Purpose	Cost (2022 \$)	Cost YOE	Developer Participation	System Maintenance Candidate
Long-term (2037–2045)	3	Clarkson Street	Side Path	Improve bicycle mobility	\$500,000	\$1,100,000	No	No
	5	Dakota Street	Shared Road	Improve bicycle mobility	\$1,000	\$5,000	No	Yes
	7	Fremont Soccer Club Trail	Paved Trail	Expand trail network	\$600,000	\$1,400,000	No	No
	8	Garden City Road	Shared Road	Improve bicycle mobility	\$10,000	\$50,000	No	Yes
	12	Morningside Road	Paved Trail	Expand trail network	\$1,800,000	\$4,100,000	No	No
	13	Nebraska Street	Shared Road	Improve bicycle mobility	\$1,000	\$5,000	No	Yes
	15	Old HWY 275	Shared Road	Improve bicycle mobility	\$1,700,000	\$2,700,000	No	Yes
	16	Platte Avenue	Side Path	Improve bicycle mobility	\$1,000,000	\$2,300,000	No	No
	22	Luther Road	Side Path	Improve bicycle mobility	\$1,100,000	\$2,500,000	No	No
	23	Luther Road	Side Path	Improve bicycle mobility	\$350,000	\$800,000	No	No
Total					\$7,062,000	\$14,960,000		

Table 31: LRTP Vision Projects

Project ID	Name	6700Type	Project Purpose	Cost (2022 \$)
Roadway Vision Projects				
9	Johnson Road Viaduct	Grade separation	Reduce train-vehicle conflicts	\$6,700,000
12	Highway 275 / Luther Road	Interchange	Improve access to regional highway system	\$25,000,000
20	Inland Port Loop	New Road	Provide access to new commercial developments	\$7,200,000
Bicycle and Pedestrian Vision Projects				
6a	FEVR Rails to Trails	Paved Trail	Create recreational trail for the region	\$800,000
25	Trail along Old 30 to Lakes	Paved Trail	Create recreational connection between city and lakes.	\$1,500,000
Total				\$41,200,000

Summary of Plan Recommendations

Investment in the multimodal system

Plan recommendations are intended to provide a road map for Fremont when developing future transportation programs. **Table 32** and **Table 33** summarize how the recommendations align with anticipated future revenues for investment in the existing system and investment in expanding the system. **Table 32** shows how much investment in existing corridors the plan accounts for, and what the remaining balance for street preservation projects would be in that time frame. **Table 33** includes the “gap” or difference between estimated costs for the Plan recommendations and the forecasted revenues identified in the Funding section.

For roadway alternatives, the LRTP recommends a total of \$47.3 million in existing corridor investment through the year 2045, which highlights a significant gap between existing corridor investment and the amount of revenue expected to be available for this type of investment. Recommendations that focus on expanding the system total \$80.8 million, which exceeds the anticipated \$47.5 million that is expected to be available for new roadway corridor investment.

Bicycle and pedestrian alternatives follow a similar trend in terms of funding gaps as the LRTP recommends a total of \$3.7 million in existing system investment and a total of \$20 million in system expansion.





While the revenue is expected to be available to Fremont for maintaining the existing system, there is a potential need to divert some of these resources to support system expansion should the need to implement each recommended alternative arise by the year 2045. This need will be dictated mostly by growth pressure in the community that would require rapid construction of new corridors and expansion of existing corridors.

Table 32: Summary of Recommended Investment in the Existing Transportation System

Time Band	Existing Corridor Investment Budget	L RTP Existing Corridor Project Costs (YOE \$)	L RTP Bicycle and Pedestrian Project Costs (YOE \$)	Remaining Budget for Street Preservation
Short-term (2022–2027)	\$9,000,000 ⁸	\$1,200,000	\$400,000	\$7,400,000
Mid-term (2028–2036)	\$118,422,000	\$15,700,000	\$552,500	\$102,169,500
Long-term (2037–2045)	\$173,376,000	\$30,400,000	\$2,760,000	\$140,216,000
Total	\$300,798,000	\$47,300,000	\$3,712,500	\$249,785,500

Table 33: Summary of Recommended Investment in System Expansion

Time Band	New Corridor Investment Budget	L RTP New Corridor Project Costs (YOE \$)	L RTP Bicycle and Pedestrian Project Costs (YOE \$)	System Expansion Gap
Short-term (2022–2027)	\$1,500,000 ⁹	\$0	\$3,100,000	\$-1,600,000
Mid-term (2028–2036)	\$19,278,000	\$30,200,000	\$4,700,000	-\$15,622,000
Long-term (2037–2045)	\$28,224,000	\$50,600,000	\$12,200,000	-\$34,576,000
Total	\$47,502,000	\$80,800,000	\$20,000,000	-\$51,798,000

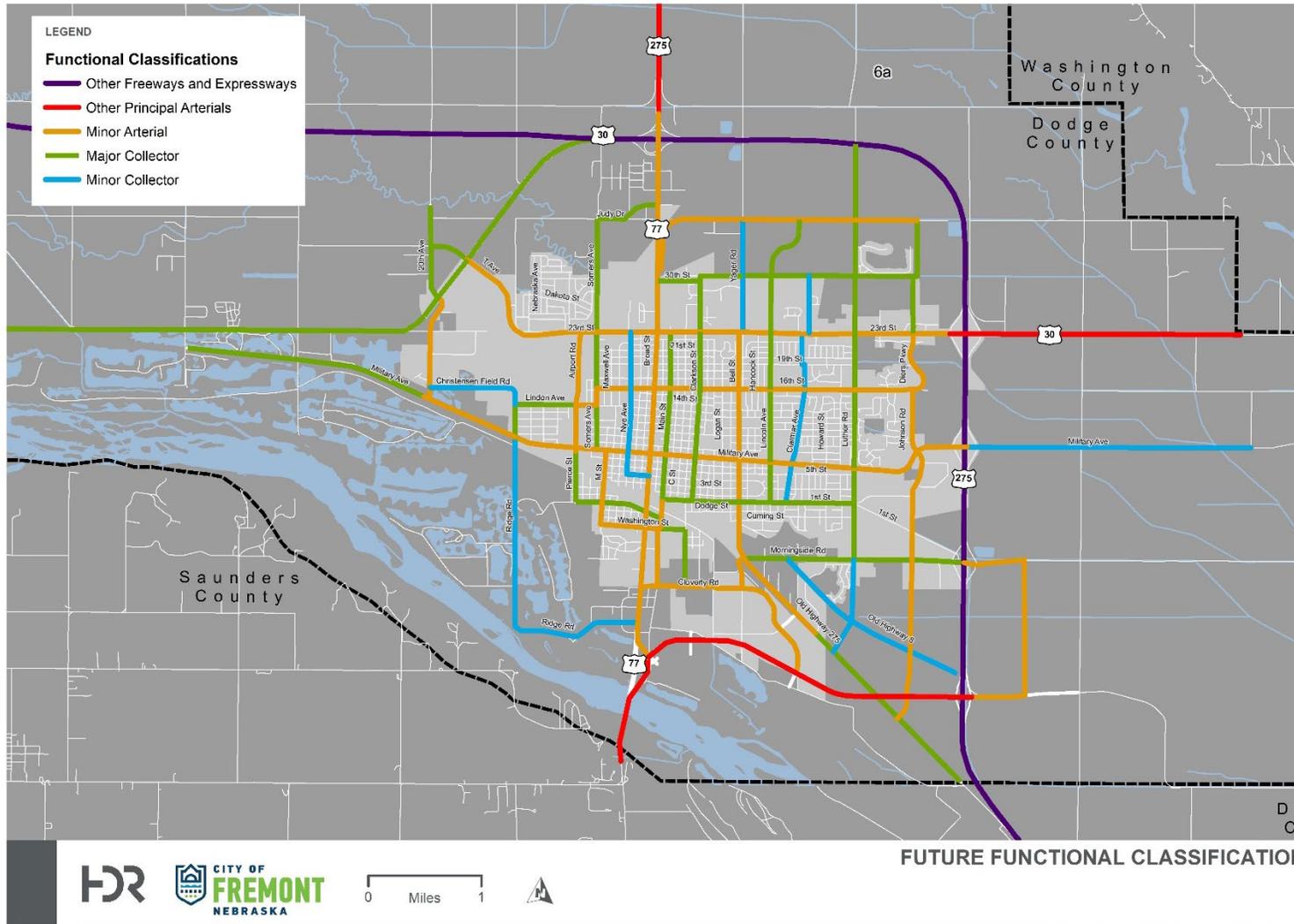
Recommended Functional Classification System

With the growth and investment in the system comes changes in how each part of the system functions. Updates to the functional classification system to accommodate land use growth and new system elements are shown in **Figure 22**.

⁸ This is funding for 2027, after the CIP projects of 2021-2026 are accounted for.

⁹ This is funding for 2027, after the CIP projects of 2021-2026 are accounted for.

Figure 22: Future Functional Classification



Recommended Studies

Some of the issues and project needs identified by the LRTP will require more detailed study to be effectively implemented. These studies should be initiated in the short-term to identify a project development path forward for each of these key areas.

23RD STREET AT BELL STREET / YAGER ROAD

The intersections of 23rd Street / Bell Street and 23rd Street / Yager Road are one of the most significant travel delay and safety issue locations in the Fremont area. The area is a complex issue to solve due to several factors:

- 23rd Street is an east-west minor arterial that crosses most of north Fremont, with the highest traffic volumes inside the city serving a diverse set of commercial businesses.
- Bell Street is a minor arterial south of 23rd, carrying traffic from central Fremont into the 23rd Street commercial corridor. Bell Street ends at 23rd Street, and becomes a driveway into the Fremont Mall area to the north.
- Yager Road is a collector street north of 23rd Street, connecting to the growing residential, commercial and industrial areas in north Fremont. To the south, Yager is a local street that serves as a back side access to businesses fronting Bell and provides unique access to businesses at the corner of Bell and Yager. Yager does not continue south of 16th Street.

The study should involve several elements, including:

- Development of design alternatives for options to improve the intersections
- Engineering assessments of safety and traffic operations associated with the baseline (or “do nothing”) scenario and the potential improvement scenarios
- Assessments of business and community impacts associated with each scenario
- An engagement strategy for involving adjacent property owners, the public, and decision makers in assessing the pros and cons of the various alternatives.

23RD STREET CORRIDOR STUDY

Project 11 in the roadway project list assumes some improvements to traffic signals and potentially minor turn lane adjustments through the 23rd Street Corridor. No significant capacity improvements or street widening is anticipated. Prior to implementing any physical improvements in the corridor, a corridor study is recommended. It is recommended the city complete an overall 23rd Street corridor study focused on long-term management of signals and minor geometrics between Sommers Ave and Diers Parkway. **The study should come after a recommendation for the treatment of the 23rd / Bell / Yager intersections is identified.**

This study would involve elements including:

- Evaluating current and long-range traffic operations in the corridor.
- Evaluating historical crash patterns in the corridor.
- Reviewing and recommending signal technology improvements in the corridor.
- Recommending signal timing improvements and coordination plans for the corridor, including potential protected left turns at Lincoln.

- Recommending potential intersection geometric recommendations for the corridor.
- Consider the role of Yaeger and Lincoln between 23rd and 32nd Street and determine priorities for corridor improvements.
- Review and make bicycle and pedestrian crossing recommendations.

JUDY DRIVE ACCESS STUDY

There are sight distance and safety concerns identified at the intersection of Judy Drive and Broad Street on the north side of Fremont. Speeds on Broad Street (currently Highway 77) and limited sight distance of northbound traffic crossing the bridge over the railroad were noted as safety concerns. It is recommended that an access study be completed to develop strategies for improving safe access onto Broad Street / Highway 77 here from the residential and industrial traffic at Judy Drive.

Freight Strategy Recommendations

Freight movement is key to supporting the vibrant Fremont economy. However, in many communities there are conflicts between the heavy trucks and trains that move freight and community livability. The Plan attempts to find a middle ground and is continuing to provide high levels of freight access while supporting quality neighborhoods and business districts. To strike this balance, the LRTP has developed a set of strategies and recommendations to address freight traffic while attempting to limit any reductions in freight mobility and access.

MONITOR TRUCK PATTERNS AFTER SOUTHEAST BYPASS CONSTRUCTION

High levels of truck traffic are observed in the southern part of Fremont and are associated with the significant amount of industrial activity. As employment grows in this area, truck traffic is expected to increase, which could impact traffic in the southern and downtown areas of Fremont. The construction of the southeast beltway provides a route for trucks to bypass the local road network. It is recommended that truck patterns are evaluated annually for a period after beltway construction is complete to understand its impact.

CLOVERLY AND MAIN STREET TRUCK ROUTES

As a part of the freight traffic monitoring, one recommendation to support enhanced freight access to the Southeast Bypass is truck routes along Cloverly Road and Main Street for locally generated truck traffic south of downtown. A study that evaluates the recommended truck routes along Cloverly Road and Main Street should be initiated, after the bypass opens, to evaluate a set of investment and truck route policies related to these street improvements and their impact and benefits to freight users, the surrounding neighborhoods, and downtown.



With these new investments in freight routes, there are opportunities to better balance the movement of freight with impacts to the community. A **recommended future truck route map** is shown in **Figure 23**.

DOWNTOWN FREMONT STRATEGIES

A second set of strategies is recommended for downtown Fremont to address potential conflicts between passenger and truck traffic. The first strategy builds off the timing of the Cloverly Road and Main Street truck routes implementation. This strategy is to evaluate the timing of the 1-way to 2-way flow conversion based on how locally generated truck traffic in the industrial areas south of downtown react to the Cloverly Road and Main Street truck routes. Should trucks use these routes to access the beltway, it is recommended to prohibit any non-local truck traffic in the downtown area through signage and enforcement. Supplementing this strategy is a recommendation for curb management policies that identify loading zones for truck deliveries with the aim of providing adequate space for temporary truck parking while making deliveries thereby preventing adverse impacts on traffic flows.

BROAD STREET STRATEGIES

The final freight strategy recommendation is to evaluate traffic volumes along Broad Street / Highway 77 after the construction of the beltway and implementation of the Cloverly Road and Main Street truck routes to assess the potential for a lane reduction along this corridor. Reducing the number of travel lanes along Broad Street / Highway 77 could provide neighborhood amenities such as on-street parking, enhanced pedestrian crossings, bicycle infrastructure, and other improvements to increase the attractiveness of this corridor.

QUIET ZONE IMPLEMENTATION

The City is currently implementing a Quiet Zone. A quiet zone is a series of physical improvements at street-rail grade crossings where train horns are not sounded when trains are approaching the crossings. This will further reduce the conflicts between freight and the community.

