



# Chapter 4 Circulation Element





## 4.1. Introduction

### BACKGROUND AND PURPOSE

Fairfield's network of roads, bikeways, sidewalks, transit, and rail facilitates the movement of people and goods throughout the city. A comprehensive, multimodal transportation network is essential for the success of Fairfield and the surrounding region. This includes maintaining a vehicular network that minimizes congestion and traffic conflicts, adapts to changing conditions and technologies, and enhances the safety and accessibility of alternative transportation modes.

The Circulation Element establishes goals and policies to enhance transportation options for Fairfield residents, workers, and visitors, and to improve mobility through increased connectivity and efficient management of existing infrastructure.

It aims to reduce vehicle miles traveled (VMT), greenhouse gas emissions, and reliance on single-occupancy vehicles while promoting pedestrian, bicycle, and transit systems as equally viable alternatives to cars. This element addresses various modes of transportation—automobiles, biking, walking, and public transit—with topics on roadway network performance, the transit system, travel demand management, and bicycle and pedestrian systems. It includes an inventory of the existing conditions of the roadway system under various performance metrics, bicycle and pedestrian facilities, public transit, and the local freight system in the Planning Area.

Solano Transportation Authority (STA), the countywide congestion management agency, has produced a number of plan-

ning documents that complement the goals and policies presented in this General Plan. These include the Active Transportation Plan (ATP) of a countywide Comprehensive Transportation Plan (CTP), the Arterials, Highways and Freeways element of the CTP, Countywide Bicycle and Pedestrian Plans (2012), and an Alternative Fuels Plan (2013), among others. STA also works closely with the California Department of Transportation (Caltrans) on plans and improvements to State and County roadways. This includes the Comprehensive Multi-Modal Corridor Plan, intended to close gaps between freeways and local systems. This General Plan builds upon and complements STA's countywide planning efforts to ensure compatibility with the larger transportation network.

## RELATIONSHIP TO STATE LAW

This Element and topics addressed in others fulfill the statutory requirements for the general plan circulation element by providing a circulation diagram that identifies the city's major thoroughfares and transportation routes, as well as standards and proposals to meet the demands resulting from the General Plan Land Use Framework. It establishes a policy framework to balance walking, bicycling, transit service, and driving within a multimodal network. Additionally, it addresses the regional movement of people and goods by road, rail, and air. The Public Services and Utilities Element contains policies required of Circulation elements, including the location and necessity of utilities such as water, sewers, storm-water systems, telecommunications and broadband, electric vehicle charging stations, electricity, and natural gas lines. Finally, the Circulation Element addresses State laws that address the switch to Vehicle Miles Traveled (VMT) and requirements of the Complete Streets Act.

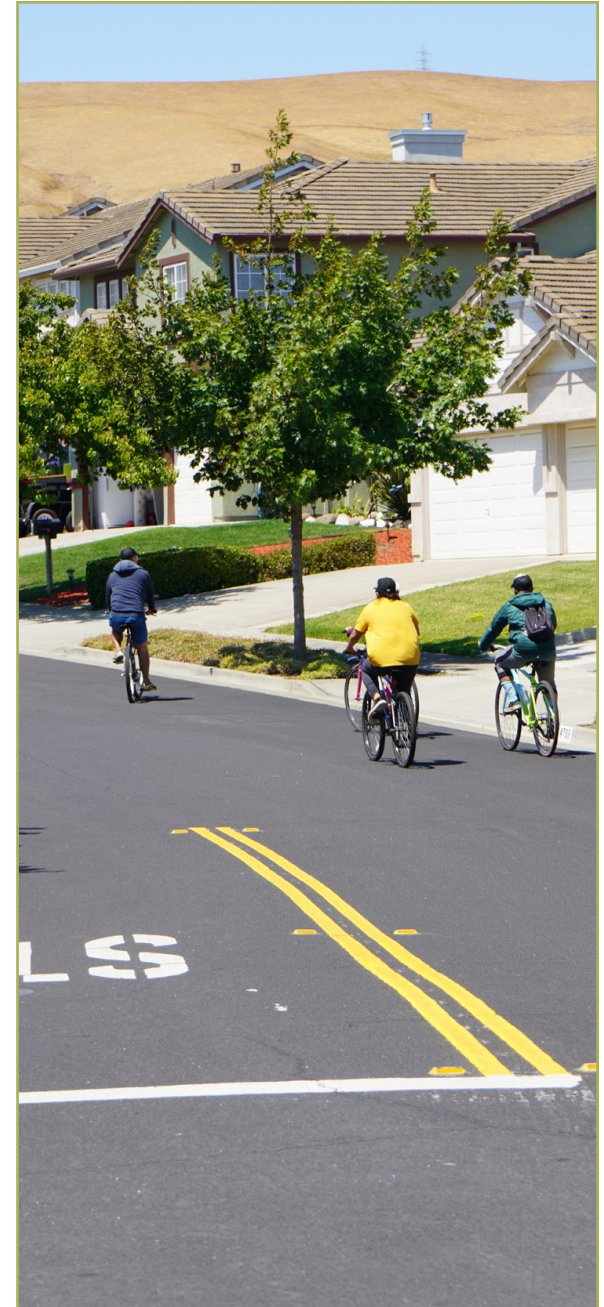
## RELATIONSHIP TO OTHER ELEMENTS

The Land Use and Urban Design Element covers land use synergies with transit, including transit-oriented development. The Open Space, Conservation, and Recreation Element, as well as the Environmental Justice Element, discuss access

to parks, recreational facilities, and the promotion of active, healthy lifestyles. The Health and Safety Element handles the transport of hazardous materials and emergency evacuation. This element also relates closely to the Travis Air Force Base Protection element, which covers military airport compatibility, as well as the Sustainability Element, which covers reducing emissions and electric vehicle charging infrastructure. Many of the policies in the Circulation Element related to VMT reduction, reducing single-occupancy vehicle trips, and improving bicycle and pedestrian infrastructure are directly supportive of Fairfield's Climate Action Plan (CAP).

In combination with the other elements mentioned above, the Circulation Element furthers several of the General Plan's Guiding Principles, including the following:

- **Guiding Principle 1:** Promote Fairfield as a community of vibrant, diverse, connected neighborhoods, with easy access to shopping, entertainment, and recreation.
- **Guiding Principle 2:** Improve Fairfield's transportation network with safe and connected walking and biking facilities, accessible and reliable public transit, and new transportation technology.
- **Guiding Principle 6:** Emphasize environmental sustainability.
- **Guiding Principle 7:** Achieve a healthy and safe community for all.



## 4.2. Roadways

### ROADWAY NETWORK

The city's streets and highways are the key elements of the transportation system, serving pedestrians, bicycles, transit vehicles, automobiles, and trucks. **Figure 4-1** illustrates Fairfield's existing roadway network, which includes a series of street classifications designed to inform the planning, design, construction, operation, and maintenance of the network. These classifications vary based on factors such as right-of-way, roadway width, lane count, spacing of intersections and traffic signals, speed limits, and other considerations. Additionally, they may include features like pedestrian or bicycle infrastructure.

### Freeways and Expressways (State Highways)

Fairfield is located at the intersection of several critical state **highways** (freeways and expressways) that serve the movement of people and goods in the local, regional, interregional, and interstate context. Three state highways serve the Planning Area, Interstate 80 (I-80), an eight-to-12-lane east-west freeway, Interstate 680 (I-680), a north-south freeway with four lanes, and State Route 12 (SR 12), a two-to-four-lane east-west highway. Freeways and expressways are managed by the California Department of Transportation (Caltrans), the state agency that manages

the state's highway system, and the STA, an authority created in 1990 to preside over countywide transportation planning, programming transportation funds, overseeing transportation programs and services as needed and requested, delivering transportation projects, and setting transportation priorities. These freeways and expressways connect the Planning Area to regional destinations including the San Francisco Bay area, the Sacramento metropolitan area, San Jose, Contra Costa, Napa, and Sonoma Counties, and others.

### Interchanges

**Interchanges** provide connections between arterials and freeways throughout the Planning Area. Interchanges, especially those on local streets, can experience traffic congestion as they provide the only access routes to freeways. Increased levels of vehicle demand and congestion also reduce the comfort level of pedestrians and bicyclists crossing an interchange.

### Arterials, Collectors and Local Roadways

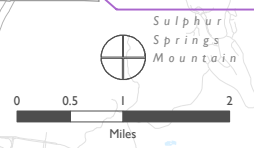
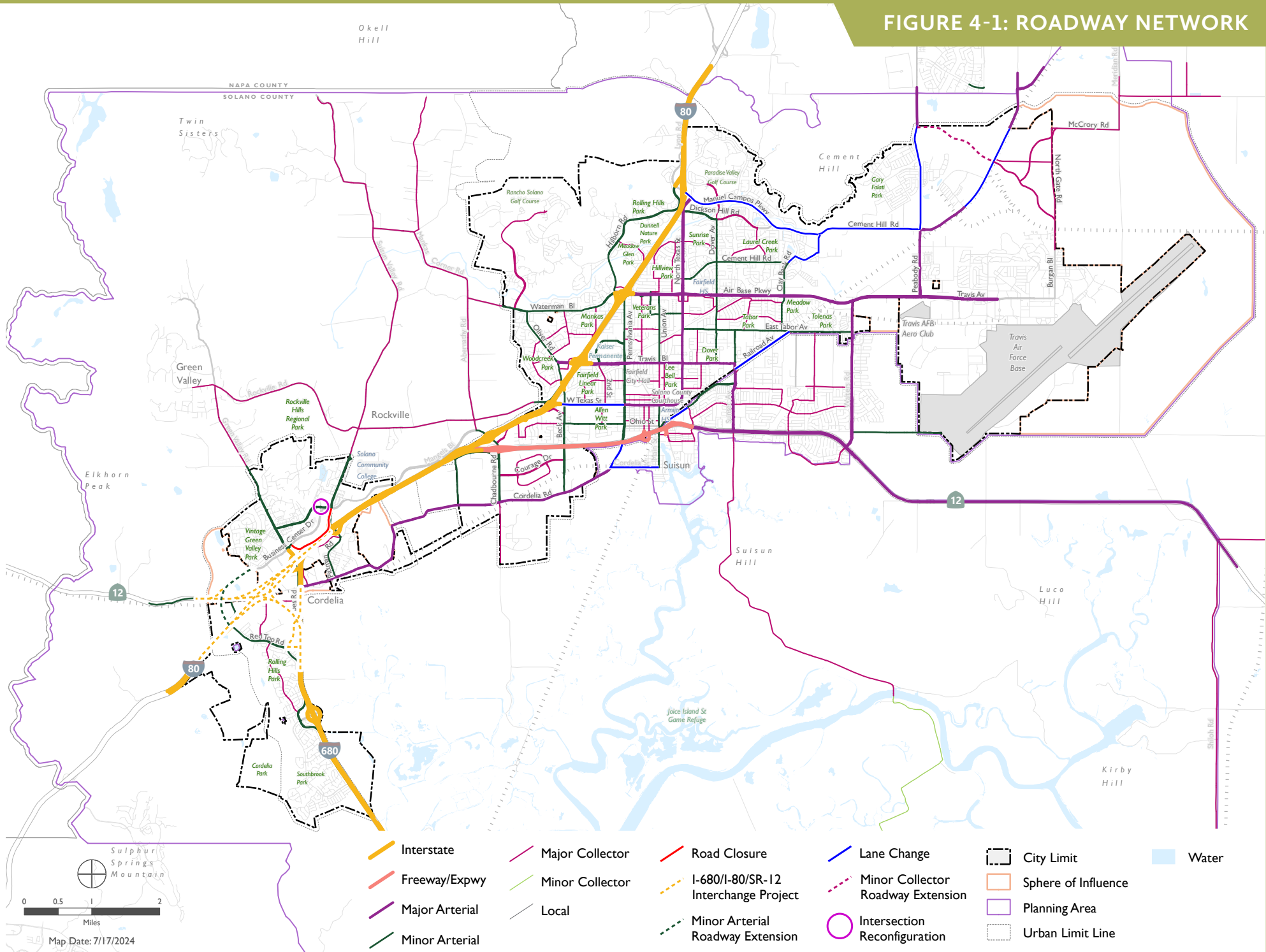
Fairfield's roadway system includes three functional classification types: arterial (major/minor), collector, and local.

- **Arterials** provide higher capacity mobility between destinations in the Planning Area and the region. They include freeways, multi-lane highways, and other important roadways that supplement the Interstate System.

They connect, as directly as practicable, to principal urbanized areas, cities, and industrial centers. Land access is limited. Posted speed limits on arterials usually range between 50 and 70 mi/h. In Fairfield, major arterials include North Texas Street, Peabody Road, Cordelia Road, and Manuel Campos Road, among others. Minor arterials include Beck Avenue, Pennsylvania Avenue, Union Avenue, and Dover Avenue, among others.

- **Collectors** are major and minor roads that connect local roads and streets with arterials. Collectors provide less mobility than arterials at lower speeds and for shorter distances. They balance mobility with land access. The posted speed limit on collectors is usually between 35 and 55 mi/h. In urban areas, major collectors allow for longer distance travel than smaller neighborhood roads and usually extend for 3/4 of a mile or more. Collectors include roads like Fairfield Avenue, Union Avenue, Courage Drive, and others.
- **Local roadways** provide limited mobility and are the primary access to residential areas, businesses, farms, and other local areas. Local roads, with posted speed limits usually between 20 and 45 mi/h, are the majority of roads in the U.S.

**FIGURE 4-1: ROADWAY NETWORK**



- Interstate
- Major Collector
- Freeway/Expwy
- Major Arterial
- Minor Collector
- Local
- Road Closure
- I-680/I-80/SR-12 Interchange Project
- Minor Collector Roadway Extension
- Minor Arterial Roadway Extension
- Lane Change
- Intersection Reconfiguration
- City Limit
- Sphere of Influence
- Planning Area
- Urban Limit Line
- Water

Source: Solano County GIS, 2020; City of Fairfield, 2020; Dyett & Bhatia, 2020



## REGIONAL CONNECTIVITY AND COORDINATION

Because of its location at the convergence of three major freeways, passenger rail, and freight rail lines, Fairfield's circulation network is intricately linked with travel patterns and infrastructure projects in neighboring and regional jurisdictions. This influences traffic flow and congestion levels within the city. For example, Caltrans is primarily responsible for designing, building, and maintaining the state's highway system and will oversee implementation of the I-680/I-80/SR-12 Interchange project, which will have a major effect on Fairfield's roadway network.

STA is responsible for countywide transportation planning, programming transportation funds, transportation programs and services as needed and requested, delivering transportation projects, and setting transportation priorities. As the congestion management agency, STA maintains and implements the CMP, a tool used to monitor and mitigate congestion on state-owned roadways as well as Fairfield's principal arterials, as identified in the roadway classifications, with the ultimate goal of lessening congestion.

Close collaboration with local and regional jurisdictions is crucial to align Fairfield's transportation strategies with broader regional plans. This approach ensures Fairfield effectively contributes to regional transportation goals to improve overall connectivity and mobility across the area. Alignment with these plans is also an important eligibility criterion to fund needed infrastructure projects.

### Goods Movement

Fairfield's three major state and federal highways function as vital interregional transportation corridors for the movement of goods. Both current and prospective businesses in Fairfield derive significant advantages from the efficient circulation of goods, materials, and products within the city. Specifically, there are three areas where the efficient transportation of freight and goods plays a crucial role in supporting the overall success of the land use pattern:

- **Cordelia area between Red Top Road, Lopes Road, and I-80:** This portion of the Cordelia area includes various commercial and industrial uses that rely on Lopes Road, Red Top Road, I-80 and I-680 for goods movement and distribution.
- **South Fairfield Industrial Area:** This area of the City includes the Anheuser Busch Brewery, Jelly Belly factory, various industrial uses, and other businesses that produce various goods that rely on imports of materials. This area relies on SR-12, Chadbourne Road, Beck Avenue, Pennsylvania Avenue and Cordelia Road for the movement of goods.
- **Travis Air Force Base (AFB):** Travis AFB handles more cargo and passenger traffic through its airport than any other military terminal in the United States. The base also hosts the 60th Air Mobility Wing and the David Grant USAF Medical Center. The Travis AFB Force Base relies on Air Base Parkway, Peabody Road, and I-80 for the movement of goods.

| Table 4-1: Roadway Improvements Underway  |   |  |                                     |
|---|---|--|-------------------------------------|
| ROADWAY                                   | EXTENTS   | CHANGES  |                                     |
| <b>Intersections</b>                      |   |  |                                     |
| Mangels Blvd/<br>Westamerica Dr           |   | N/A  |                                     |
| <b>Segments- Closures and Extensions</b>  |   |  |                                     |
| Neitzel Rd                                | I-680 to Business<br>Center Dr                  | N/A  |                                     |
| Canon Rd                                  | N Gate Rd to<br>Peabody Rd                      | N/A  |                                     |
| Business Center<br>Dr                     | Western extension<br>to Red Top Rd<br>extension | N/A  |                                     |
| Red Top Rd                                | I-80 to Business<br>Center Dr extension         | N/A  |                                     |
| <b>Segments- Directional Lane Changes</b> |   | <b>Existing Lanes (Directional)</b>  | <b>2050 Lanes<br/>(Directional)</b> |
| West Texas St                             | Rockville Rd to<br>Pennsylvania Ave             | 2  | 1                                   |
| Cordelia Rd                               | Eastern extension to<br>Main St and SR-12       | 1  | 2                                   |
| Railroad Ave                              | Main St to east of<br>Marina Blvd               | 1  | 2                                   |
| Railroad Ave                              | Sunset Ave to E<br>Tabor Ave                    | 1  | 2                                   |
| Manuel Campos<br>Pkwy                     | I-80 to Peabody Rd                              | 2  | 3                                   |
| Clay Bank Rd                              | Cement Hill Rd to<br>Manuel Campos<br>Pkwy      | 1  | 2                                   |
| Peabody Rd                                | Air Base Pkwy to city<br>limits                 | 2 (3 lanes each direction from Air Base<br>Parkway/Cement Hill Rd/Vanden Rd, then<br>transitions north to 2 lanes) | 3                                   |
| Vanden Rd                                 | Peabody Rd to city<br>limits                    | 1 (Peabody to one Lake is 2 lanes each<br>direction, and one lane each direction to<br>city limits)                | 2                                   |

Source: Fehr & Peers, 2024; City of Fairfield, 2024; Dyett & Bhatia, 2024

## ROADWAY IMPROVEMENTS

### Interchanges

The I-80/I-680/SR 12 West interchange is expected to be substantially reconfigured and widened as part of the STA's ongoing I-80/I-680/SR 12 interchange improvement project, which is expected to be substantially complete by 2040 (pending funding availability). Improvements at this system interchange will also include addition of missing ramps at the I-80/Green Valley Road and I-80/Pittman Road-Suisun Valley Road interchanges.

The I-80/I-680/SR 12 interchange improvement project proposes new interchanges at I-680/Red Top Road and SR 12/Red Top Road. In coordination with STA, the City of Fairfield will explore future funding sources and will coordinate land use planning efforts as more specific roadway geometries for improvements become available.

### Roadway Improvements Underway

In addition to the interchange improvement project, several improvements to Fairfield's roadway network are currently underway in the Planning Area, as shown in **Table 4-1**. The City expects these projects to be complete by the General Plan's 2050 horizon, barring any funding issues. The City will work closely with STA as this project is implemented.

## ROADWAY OPERATIONS

This General Plan employs two distinct metrics to evaluate current and projected traffic conditions within the Planning Area: Level of Service (LOS) and VMT. LOS, traditionally used for California Environmental Quality Act (CEQA) assessments before 2013, gauges traffic flow, congestion, and roadway capacity from the driver's perspective.

Since the enactment of SB 743 in 2020, CEQA analyses now prioritize VMT to assess traffic impacts, emphasizing reductions in greenhouse gas emissions and other statewide goals related to vehicular traffic.

While this General Plan aligns its CEQA analysis with VMT requirements mandated by State law, it also acknowledges the continued relevance of LOS as a critical indicator of roadway performance within the Planning Area. The City will continue to require evaluation for projects over a certain size for contributions to LOS deficiencies. Local transportation analysis will continue to require pedestrian and bicycle circulation, parking, traffic control warrant analysis, site distance, and other operational topics, as appropriate. The following sections comprehensively address both metrics.







## Level of Service (LOS)

LOS provides a qualitative assessment of traffic flow based on factors like speed, travel time, delay, and maneuverability. It categorizes traffic conditions into six levels from LOS A (free-flow) to LOS F (over capacity), with LOS E indicating operations are at capacity. When traffic volumes exceed capacity, conditions deteriorate to stop-and-go traffic, categorized as LOS F.

This General Plan sets a performance target of LOS D during peak hours for both intersections and roadway segments within the Planning Area. Any intersections or segments that fall below this standard require evaluation for potential improvements unless exempted.

Some roadway segments are designated as Routes of Regional Significance and have a minimum LOS standard of LOS E, except for segments that were already at LOS F when the CMP was first implemented. If the LOS of a segment or intersection falls below the accepted standard for two consecutive monitoring cycles, it may be deemed deficient, unless exemptions apply. These exemptions include interregional travel and trips generated from low and very low-income housing. If, after applying these exemptions, the segment still fails to meet the accepted LOS standard, the CMP requires a deficiency plan with planned improvements to address congestion and restore the segment to an acceptable LOS.

## Visualizing LOS

|   |                 |   |  |
|---|-----------------|---|--|
| <b>FREE FLOW</b>  |                 |   |  |
| Low volumes and no delays   | LOS<br><b>A</b> |  |  |
| <b>STABLE FLOW</b>  |                 |   |  |
| Speeds restricted by travel conditions, minor delays  | LOS<br><b>B</b> |  |  |
| <b>STABLE FLOW</b>  |                 |   |  |
| Speeds and maneuverability closely controlled because of higher volumes   | LOS<br><b>C</b> |  |  |
| <b>STABLE FLOW</b>  |                 |   |  |
| Speeds considerably affected by change in operations conditions. High density traffic restricts maneuverability; volume near capacity | LOS<br><b>D</b> |  |  |
| <b>UNSTABLE FLOW</b>  |                 |   |  |
| Low speeds; considerable delay; volume at or slightly over capacity   | LOS<br><b>E</b> |  |  |
| <b>FORCED FLOW</b>  |                 |   |  |
| Very low speeds; volumes exceed capacity; long delays with stop-and-go traffic  | LOS<br><b>F</b> |  |  |

LOS calculations follow the methodology outlined in the Highway Capacity Manual (HCM), using existing or projected future traffic volumes. Due to the COVID-19 pandemic and subsequent State of California Shelter-in-Place orders, turning movement counts for AM and PM peak hours reflect pre-pandemic conditions (pre-March 2020).



**Table 4-2: Existing and Projected Level of Service for Key Intersections**

| INT # | INTERSECTIONS   | LOS THRESHOLD |         | PEAK HOUR | EXISTING    |     | 2050 - NO OPTIMIZATION |     | 2050- WITH OPTIMIZATION |                |
|-------|---|---------------|---------|-----------|-------------|-----|------------------------|-----|-------------------------|----------------|
|       |   | EXISTING      | 2050 GP |           | DELAY (SEC) | LOS | DELAY (SEC)            | LOS | DELAY (SEC)             | LOS            |
| 4     | Clay Bank Rd & Air Base Pkwy <sup>1</sup>                         | D             | E       | AM        | 39.4        | D   | 97.7                   | F   | 42.7                    | D              |
|       |   |               |         | PM        | 41.8        | D   | 379.6                  | F   | 53.2                    | D              |
| 5     | Dover Ave & Air Base Pkwy <sup>1</sup>                            | D             | E       | AM        | 60.2        | E   | 70.8                   | E   | 70.8                    | E              |
|       |   |               |         | PM        | 62.1        | E   | 76.8                   | E   | 76.8                    | E              |
| 6     | N Texas St & AB Pkwy WB On-ramp/AB Pkwy WB Off-ramp <sup>1</sup>  | D             | E       | AM        | 30          | C   | 31.6                   | C   | 31.6                    | C              |
|       |   |               |         | PM        | 24.1        | C   | 30.3                   | C   | 30.3                    | C              |
| 7     | N Texas St & AB Pkwy EB Off-ramp <sup>1</sup>                     | D             | E       | AM        | 29.4        | C   | 30.7                   | C   | 30.7                    | C              |
|       |   |               |         | PM        | 35.1        | D   | 67.5                   | E   | 67.5                    | E              |
| 14    | N Texas St & Travis Blvd  | D             | D       | AM        | 37.5        | D   | 56.2                   | E   | 38.8                    | D              |
|       |   |               |         | PM        | 38.2        | D   | 62.3                   | E   | 39.9                    | D              |
| 22    | Pennsylvania Ave/Pennsylvania Ave & Travis Blvd                   | D             | D       | AM        | 50.6        | D   | 54                     | D   | 51.3                    | D              |
|       |   |               |         | PM        | 54.5        | D   | 93.8                   | F   | 52.7                    | D              |
| 33    | Pennsylvania Ave & W Texas St/Texas St                            | D             | D       | AM        | 43          | D   | 70.9                   | E   | 48.1                    | D              |
|       |   |               |         | PM        | 51.8        | D   | 58.2                   | E   | 47.8                    | D              |
| 42    | Suisun Valley Rd & Business Center Dr                             | D             | D       | AM        | 19          | B   | 83.3                   | F   | 50.3                    | D              |
|       |   |               |         | PM        | 22.2        | C   | 142.4                  | F   | 66.0                    | E <sup>3</sup> |
| 46    | Green Valley Rd & Business Center Dr                              | D             | D       | AM        | 22.2        | C   | 65.4                   | E   | 53.5                    | D              |
|       |   |               |         | PM        | 39.2        | D   | 118.2                  | F   | 54.6                    | D              |
| 63    | Peabody Rd & Cement Hill Rd/Vanden Rd <sup>1</sup>                | D             | E       | AM        | 58.8        | E   | 180.4                  | F   | 96.2                    | F <sup>3</sup> |
|       |   |               |         | PM        | 19.5        | B   | 122.6                  | F   | 72.1                    | E              |
| 90    | N Texas St/Nelson Rd & Manuel Campos Pkwy                         | D             | D       | AM        | 42          | D   | 72.7                   | E   | 50.6                    | D              |
|       |   |               |         | PM        | 43.3        | D   | 45.2                   | D   | 45.2                    | D              |
| 202   | I-80 WB On-Ramp/Hilborn Rd & Waterman Blvd <sup>2</sup>           | D             | D       | AM        | 28.7        | C   | 45.6                   | D   | 45.6                    | D              |
|       |   |               |         | PM        | 47.7        | D   | 46.2                   | D   | 46.2                    | D              |
| 205   | I-80 Westbound On/Off Ramp & Rockville Rd/W Texas St <sup>2</sup> | D             | D       | AM        | 43.1        | D   | 44.1                   | D   | 44.1                    | D              |
|       |   |               |         | PM        | 48.2        | D   | 46.9                   | D   | 46.9                    | D              |
| 207   | Beck Ave & W Texas St <sup>2</sup>                                | D             | D       | AM        | 41.7        | D   | 33.9                   | C   | 31.2                    | C              |
|       |   |               |         | PM        | 85.2        | F   | 118.2                  | F   | 44.9                    | D              |

Notes:

Yellow highlighted intersections denote where optimization is required.

1. Denoted as an STA Route of Regional Significance, 2020.

2. Intersections are owned and maintained by Caltrans.

3. Intersection exempted. See [Table 4-4](#).

Table 4-3: Projected Roadway Segment LOS

| SEGMENT # | ROADWAY SEGMENT                           | ROADWAY CLASSIFICATION FROM PREVIOUS GP | # OF LANES | 2050 AM PEAK HOUR VOLUMES | AM LOS | 2050 PM PEAK HOUR VOLUMES | PM LOS         |
|-----------|---|---|------------|---------------------------|--------|---------------------------|----------------|
| 1         | Pennsylvania between Tabor and Canterbury | Minor Arterial                          | 2          | 590                       | C      | 570                       | C              |
| 2         | Suisun Valley between Campus and Oakwood  | Minor Arterial                          | 4          | 1,110                     | C      | 1,120                     | C              |
| 3         | Suisun Parkway at Suisun Creek            | Major Arterial                          | 4          | 1,400                     | C      | 1,250                     | C              |
| 4         | Manuel Campos east of Clay Bank           | Minor Arterial                          | 6          | 3,670                     | D      | 4,600                     | D              |
| 5         | Air Base between Heath and North Texas    | Major Arterial                          | 4          | 2,910                     | D      | 3,140                     | D              |
| 6         | Oliver between Travis and Woodcreek       | Minor Arterial                          | 4          | 720                       | C      | 750                       | C              |
| 7         | Hilborn south of Vista Grande             | Minor Arterial                          | 4          | 1,400                     | C      | 1,600                     | C              |
| 8         | North Texas at Putah South Canal          | Major Arterial                          | 4          | 1,270                     | C      | 1,530                     | C              |
| 9         | Dover between Cement Hill and Marigold    | Minor Arterial                          | 4          | 850                       | C      | 940                       | C              |
| 10        | Air Base between Dover and Clay Bank      | Major Arterial                          | 4          | 2,610                     | D      | 2,800                     | D              |
| 11        | Clay Bank north of Cement Hill            | Minor Arterial                          | 4          | 1,840                     | D      | 2,130                     | D              |
| 12        | Travis between Flamingo and Phoenix       | Major Arterial                          | 4          | 1,690                     | C      | 2,270                     | D              |
| 13        | Cordelia between Beck and Chadbourne      | Major Arterial                          | 2          | 490                       | C      | 670                       | C              |
| 14        | Travis between Monroe and Adams           | Major Arterial                          | 4          | 1,480                     | C      | 1,990                     | D              |
| 15        | Texas between Utah and Tennessee          | Major Arterial                          | 4          | 1,440                     | C      | 1,620                     | C              |
| 16        | Waterman west of 10 Gate                  | Minor Arterial                          | 4          | 1,590                     | C      | 1,910                     | D              |
| 17        | Tabor between Falcon and Sunset           | Minor Arterial                          | 2          | 1,040                     | D      | 1,100                     | D              |
| 18        | Red Top between Watt and I-80             | Minor Arterial                          | 4          | 1,340                     | C      | 1,380                     | C              |
| 19        | Lopes between Brittany and Silver Creek   | Minor Arterial                          | 2          | 760                       | C      | 820                       | C              |
| 20        | West Texas between 1st and 2nd            | Major Arterial                          | 2          | 1,420                     | D      | 2,090                     | F <sup>1</sup> |

**Notes:**

1. Segment exempted. See Table 4-3.

Source: Fehr & Peers, 2024; City of Fairfield, 2024; Dyett & Bhatia, 2024

### Intersection LOS

**Table 4-2** summarizes various intersections selected to represent existing and future intersection operations conditions. The future intersection operational analysis assumes that population and employment growth has occurred as anticipated through 2050. The analysis reports results for intersections both with and without signal timing optimization, with details reported in the Circulation Appendix. The projected future operations also assume that the transportation network improvements listed in the **Table 4-1** are completed and are operational. One intersection, Suisun Valley Road and Business Center Drive, falls below the General Plan standard of LOS D, even when optimized, and requires exemption. Another intersection at Peabody Road and Cement Hill Road/Vanden Road falls below the LOS threshold of E in the evening.

### Roadway Segment LOS

Of twenty roadway segments analyzed for performance under future conditions, only one roadway segment would fall to an LOS less than D, shown in **Table 4-3**. This indicates that the planned improvements will generally allow the roadway network to continue meeting the performance standards set by this General Plan. The City will continue to coordinate with regional agencies to reduce roadway congestion and provide alternative modes to improve LOS.

**Table 4-4: Planning Area LOS Exemptions**

| LOCATION  | RATIONALE   |
|---|---|
| Roadways included as part of Route of Regional Significance | Roadways of Regional Significance have their own LOS thresholds in STA's biennial Congestion Management Plan. See Table 4-2 footnote for exempted intersections.  |
| Heart of Fairfield area                                     | The primary goal of the plan is to create a pedestrian- and bicycle-friendly environment through a reduced number of travel lanes in some locations, traffic calming measures, and other improvements that may result in conditions that fall beyond the LOS D threshold. |
| Areas within one-quarter mile radius schools                | School pickup and drop-off times result in increased congestion. However, exemption allows for slower speeds and safer conditions for students.   |
| Suisun Valley Rd and Business Center Dr                     | While some signal timing optimization can improve delay, LOS D is not achievable without right-of-way acquisition.  |

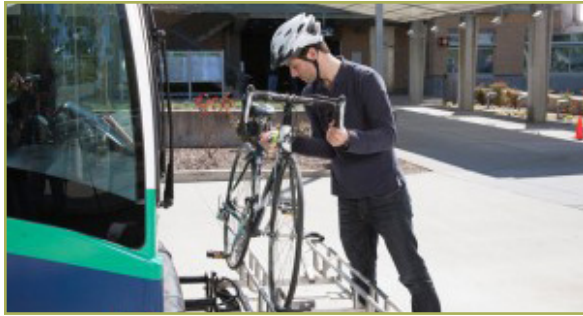
Source: Fehr & Peers, 2024; City of Fairfield, 2024; Dyett & Bhatia, 2024

### LOS Exemptions

Fairfield's other goals include creating more walkable, bikeable communities, reducing VMT, and improving transit within the city. At times, these goals may be at odds with prioritizing driver comfort that is implicit in meeting an LOS threshold. Because traditional LOS metrics use the perspective of the driver convenience, increased speeds and improved vehicle flow may take precedent over the needs of pedestrians, cyclists, and transit users. Improvements to achieve higher LOS may include road widening, which can reduce green space or pedestrian amenities, and increase traffic noise closer to residences. In some cases, there may be no feasible improvements that can be made, including lack of right-of-way. Additionally, LOS

thresholds influencing travel speeds can increase driving, contributing to higher air pollutants and greenhouse gas emissions, which in turn affect air quality and public health.

These factors will guide decisions on LOS thresholds for specific roadways as conditions evolve during the General Plan's implementation. In cases where meeting LOS standards conflicts with broader community goals, the City may exempt certain intersections or segments. **Table 4-4** summarizes exempted intersections and locations. The City Engineer shall update list periodically, to be included with the traffic impact study guidelines and adopted by ordinance.



### Vehicle Miles Traveled

VMT is a measure of the transportation system's impact on the climate, the environment, and human health. Public Resources Code Section 21099 of the California Environmental Quality Act (CEQA) aligns local environmental review methodologies with statewide objectives to reduce greenhouse gas (GHG) emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl, and reduce vehicle-miles traveled in California. Increases in VMT lead to various direct and indirect impacts on the environment and human health, including increases in greenhouse gas emissions as well as air and noise pollutants. Transportation is a major contributor to greenhouse gas emissions in California, Solano County, and Fairfield—Fairfield's Climate Action Plan (CAP) GHG inventory indicates that 65.7 percent of its current greenhouse gas emissions are associated with transportation.

The City of Fairfield adopted the Fairfield Senate Bill 743 Implementation Procedures in 2020, which outlines the requirements for evaluation of potential VMT impacts and mitigations based on certain thresholds of significance. Small projects, those within a half mile of high-quality

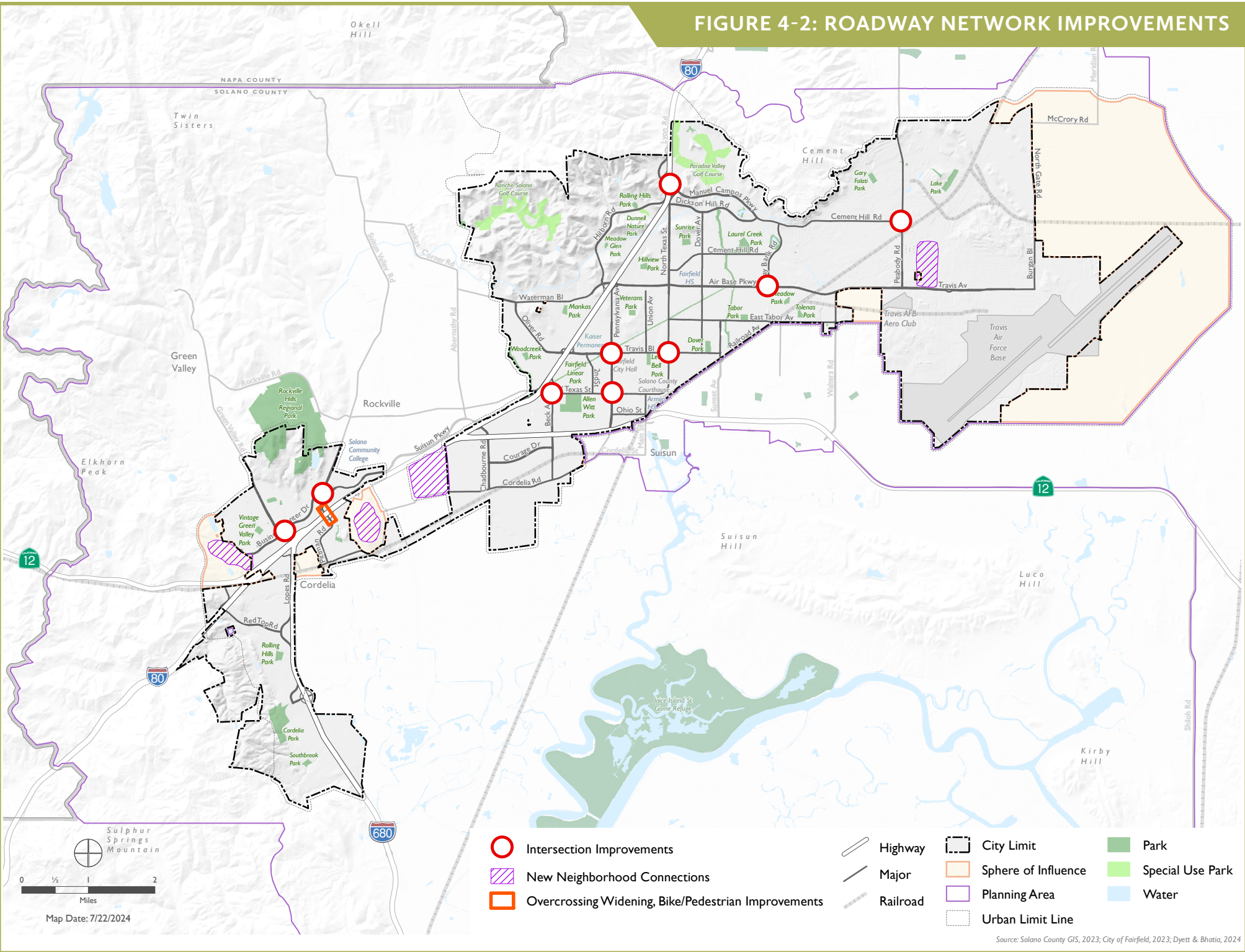
transit, affordable housing projects, and projects in areas that currently generate VMT below the threshold of significance can be presumed to have less than significant VMT impacts, eliminating the need for further VMT analysis.

**Table 4-5. Roadway Improvements**

| LOCATION   | DESCRIPTION   |
|--|---|
| <ul style="list-style-type: none"> <li>New Cordelia Residential Neighborhood</li> <li>Nelson Hill</li> <li>Hale Ranch Study Area</li> <li>Travis AFB Enhanced Use Lease Area (study required)</li> </ul>   | New multimodal roadway networks to connect new neighborhoods. Designs are required as part of site plans  |
| Suisun Valley Road and Pittman Road  | Potential overcrossing widening, including improved bicycle and pedestrian access over I-80, as well as improvements to the westbound on-ramp at Suisun Valley Road   |
| Gold Hill and Ramsey Road  | Potential overcrossing widening over I-680, including need for improved bicycle/pedestrian  |
| <ul style="list-style-type: none"> <li>N Texas St and Travis Blvd</li> <li>Pennsylvania Ave and Travis Blvd</li> <li>Pennsylvania Ave and W Texas St/Texas St</li> <li>Suisun Valley Rd and Business Center Dr</li> <li>Green Valley Rd and Business Center Dr</li> <li>Peabody Rd and Cement Hill Rd/Vanden Rd</li> <li>N Texas St/Nelson Rd and Manuel Campos Pkwy</li> <li>Beck Ave and W Texas St</li> </ul> | Intersection improvements to improve congestion. Details of needed improvements are included in the Circulation Appendix; any needed modifications to improvements do not constitute a General Plan amendment |

Source: Fehr & Peers, 2024; City of Fairfield, 2024; Dyett & Bhatia, 2024

**FIGURE 4-2: ROADWAY NETWORK IMPROVEMENTS**



Source: Solano County GIS, 2023; City of Fairfield, 2023; Dyett & Bhatia, 2024



### *Roadway Improvements to Accommodate Buildout*

The General Plan provides the City with an opportunity to identify strategic long-term improvements to enhance or maintain existing capacity and improve safety for all modes of travel. Roadway improvements within the Planning Area will help ensure that the roadway system continues to function under the General Plan's anticipated buildout scenario.

**Figure 4-2** illustrates general roadway improvements anticipated in this General Plan, described in more detail in **Table 4-5**. Some of the improvements may require additional study and identification of funding in order to be implemented. The Circulation Appendix describes specific recommendations for planned improvements, including intersection improvements. Amendments to the Appendix do not represent General Plan modifications and give the City flexibility in assessing and adapting future improvements to any changing conditions.

### **REDUCING RELIANCE ON SINGLE OCCUPANCY VEHICLES**

Reducing reliance on single-occupant vehicles will not only require infrastructure improvements like bikeways, sidewalks, and transit stations; it will also require programs, regulations, and investment in updated technology to incentivize a shift.

### **Transportation Demand Management**

Transportation Demand Management (TDM) involves implementing programs and policies designed to reduce reliance on single-occupant vehicles, thereby decreasing VMT, traffic congestion, and greenhouse gas emissions. Common TDM strategies include carpooling, car-sharing, bike-sharing, flexible work hours, telecommuting, shuttle services to transit stations, employee transit subsidies, and installing bicycle facilities such as lockers, racks, and showers at work sites. These measures aim to minimize the need for single-passenger vehicle use, especially during peak commute hours, and are essential for the City to reduce contributions to VMT and accommodate growth without extensive expansion of transportation infrastructure.

In 1994, the City of Fairfield adopted an ordinance requiring large employers to develop TDM plans encouraging employees to use collective transportation for commuting. Updates to this ordinance will align with the Bay Area Air Quality Management District's Commuter Benefits Program requirements and will require documentation and tracking of any needed VMT mitigation efforts.. Fairfield also participates in Solano County's TDM program, Solano Mobility, which offers a range of TDM services, including a Mobility Call Center, Travel Training, ADA eligibility programs, medical trip concierge services for older adults, taxi card and rideshare subsidies, veteran support programs, bike incentives, a guaranteed ride home service, community transportation plans, vanpool programs, and a vehicle share program.

## Improved Environments

One way to reduce trips made in single-occupant vehicles (SOVs) is by increasing the number of trips made through alternative transportation means, such as public transportation, walking, and bicycling. Public education and incentive programs to encourage transit ridership and by improving connections between transit stops and destinations, known as first- and last-mile connections, can encourage people to make the switch. Enhancing the safety and usability of pedestrian, bicycle, and transit facilities can further motivate individuals to opt for these alternatives. Coordinating with school districts and other agencies to plan effective drop-off times and necessary safety improvements for walking and biking can also decrease SOV reliance.

Additionally, promoting the development of dense, walkable neighborhoods where destinations are close together can reduce SOV trips. Encouraging higher density residential uses, infill development, and mixed-use developments helps create walkable areas where residents and visitors can access their needs without a car. Reducing parking requirements supports higher density and pedestrian-friendly developments.

## CURB MANAGEMENT AND PARKING

The curbside serves as a vital public space with a number of competing functions. Traditionally used for private vehicle storage and on-street parking, curbside space must now accommodate a variety of users, including transit riders, emergency vehicles, pedestrians, cyclists, taxis, rideshare companies, and delivery vehicles, all while adhering to federal and state disability access laws. The General Plan envisions determining the feasibility of a Curbside Management Plan that addresses the diverse demands on curbside space and incorporates best practices. These may include gathering data to assess curbside use, strategically placing pick-up and drop-off zones, designing roadways to avoid interference with bike lanes, considering general parking needs, and implementing “flex spaces” that can serve multiple purposes, such as loading, parking, parklets, or public space. Development of guidelines for curbside space management can help ensure continued safe access to curbside space for all users, especially in commercial and mixed-use areas.

Park-and-ride lots offer a convenient and safe location to transfer from a single passenger vehicle to a local or regional transit bus, carpool, or vanpool. Currently, Fairfield’s two park-and-ride lots are located at Oliver Road and Red Top Road. The General Plan focuses on integrating park-and-ride facilities with various modes of transportation, such as buses, trains, bicycles, and walking paths, providing seamless pedestrian and bicycle connections to reduce trips.

Adequate parking for private vehicles remains a key part in maintaining economic vibrancy of many commercial districts. However, prioritizing space for car parking can constrain opportunities for housing, businesses, parks, and other land uses that benefit residents and contribute to the local tax base. With increasing numbers of people working from home and shopping online, declining car ownership rates among younger generations, and the potential advent of driverless cars, the demand for parking spaces is likely to decrease in the future, especially in areas well-served by public transit with frequent and reliable service. Conducting a parking demand assessment in areas envisioned for mixed use development will help the City to determine where there are opportunities to incrementally reduce parking requirements and supply without impeding the ability for residents to access destinations and safe parking areas.





### 4.3. Transit

Transit service provides an alternative to automobile travel and is a critical mode of transportation for those who cannot drive (such as the elderly, youth, or disabled) or do not have access to a vehicle. Fairfield is served by a variety of public transportation options that include buses, rail systems, casual carpool, and vanpool.

#### TRANSIT AGENCIES

The City of Fairfield's transit system, FAST, provides general public fixed route bus service in the City of Fairfield. FAST also operates FAST Connect, and FAST Connect ADA, which are on-demand microtransit and paratransit services.

Several transit agencies provide local and regional transit service to the City of Fairfield, with many lines culminating at the Fairfield Transportation Center (FTC), a hub for local, commuter, vanpool, and

long-distance bus travel. Solano County Transit (SolTrans) operates intercity and commuter bus services to the Vacaville Transportation Center, City of Dixon, UC Davis, and Walnut Creek and El Cerrito del Norte BART stations. Suisun City provides microtransit services, and Rio Vista Delta Breeze offers deviated route bus service. Napa Vine Transit provides fixed route transit service between the FTC and Napa, and City Coach provides transit service to the Fairfield-Vacaville Hannigan Train Station.



## RAIL

The Capitol Corridor Joint Powers Authority (Capitol Corridor) is an intercity passenger railroad service that provides service between Auburn and San Jose via Sacramento and Oakland. There are two Capitol Corridor stations serving Fairfield: Fairfield-Vacaville Hannigan Station (near the intersection of Peabody Road/Vanden Road-Cement Hill Road) and Suisun-Fairfield Station (near the SR-12 overhead of the Capitol Corridor line). These stations provide critical interregional rail connections to other destinations in the 21-County Northern California megaregion. In addition to passenger rail service provided by Capitol Corridor, Union Pacific Railroad (UPRR) and California Northern Railroad (Cal Northern) serve freight customers in Fairfield.

## TRANSIT IMPROVEMENTS

By investing in the public transit system and integrating new development with transit improvements, Fairfield aims to increase transit ridership and enhance the overall experience for passengers. Previous planning efforts, such as the Heart of Fairfield Specific Plan (HOF SP) and the Train Station Specific Plan (TSSP), have focused on improving transit infrastructure and connectivity. The HOF SP emphasizes downtown Fairfield as one

of the city's main transit-oriented hubs, aiming to boost rail and local transit usage by promoting higher density mixed use development. The TSSP, centered around the Fairfield Hannigan Train station, aims to create a transit-oriented community with walkable, multi-modal, mixed-use living. The TSSP includes establishing a Town Center adjacent to the train station to serve as a focal point for the community.

Looking ahead, Fairfield plans to enhance transit experiences by strategically planning routes that serve key destinations

and integrating local and regional transit systems. The General Plan supports additional transit infrastructure to provide easy access to public facilities, employment centers, and attractions. It also explores options for express and micro-transit services to link different areas, ensuring a seamless and efficient transit network. Should potential rail operations expand, the city will collaborate with regional transit planners to identify optimal locations for new stations and rail lines, further improving regional connectivity.



## 4.4. Bicycle and Pedestrian Infrastructure

Fairfield's bike and pedestrian infrastructure plays a crucial role in promoting sustainable and healthy modes of transportation throughout the city. Maintaining and expanding this network is vital for several reasons. It encourages physical activity, contributing to public health and well-being while reducing traffic congestion and vehicle emissions. By providing safe and accessible routes for cyclists and pedestrians, Fairfield enhances mobility options to key destinations. Investing in bike and pedestrian infrastructure aligns with broader environmental goals by promoting alternative transportation methods that reduce reliance on cars, thus supporting sustainable urban development practices.

### BICYCLE NETWORK AND IMPROVEMENTS

Bicycle facilities are an important component of the City's transportation system. Fairfield has a 415-mile vehicular roadway network, with 42 miles of designated bicycle facilities. This includes 11 miles of multi-use paths and 31 miles of bicycle lanes, as shown in [Figure 4-3](#).

Bicycle facilities fall into one of four categories, as described below:

- **Class I Bikeways (Shared-Use Path)** provide a completely separate right-of-

way and are designated for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian crossflow minimized. In general, bike paths serve corridors where on-street facilities are not feasible or where sufficient right-of-way exists for construction.

- **Class II Bikeways (Bicycle Lanes)** are dedicated lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are typically at least five feet wide, and lanes permit adjacent vehicle parking and vehicle/pedestrian crossflow. Class II buffered bike lanes provide greater separation from an adjacent traffic lane and/or between the bike lane and on-street parking. Chevron or diagonal striping creates a separation.
- **Class III Bikeways (Bicycle Route)** are designated by signs or pavement markings for shared use with pedestrians or motor vehicles but have no separated bike right-of-way or lane striping. Bike routes serve either to a) provide a connection to other bicycle facilities where dedicated facilities are infeasible, or b) designate preferred routes through high-demand corridors.
- **Class IV Bikeways (cycle tracks or "separated" bikeways)** provide a right-of-way designated exclusively for bicycle travel within a roadway and

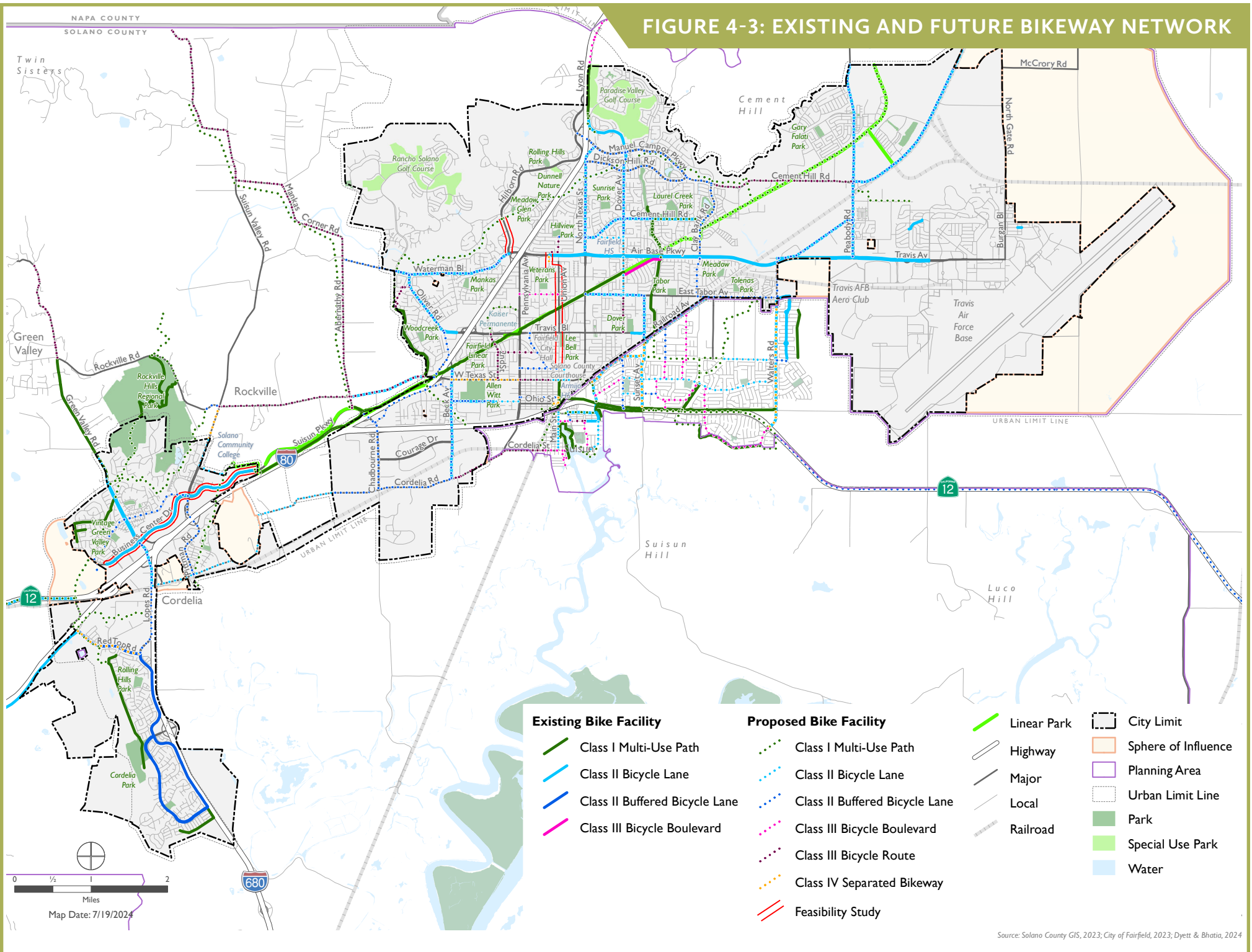
protect cyclists from other vehicle traffic by physical barriers, including, but not limited to, grade separation, flexible posts, inflexible vertical barriers such as raised curbs, or parked cars.

The City of Fairfield has many residential, low-volume, low-speed roadways that do not have designated bicycle facilities, but that can serve as facilities for bicycle travel where most bicyclists would feel comfortable traveling. Closing gaps in the City's bicycle network and providing safer routes helps to facilitate better travel between destinations throughout the Planning Area. Some locations include barriers to travel (such as freeways, creeks, etc.) that could be bridged by additional investments such as an overcrossing or roadway reconfiguration. [Figure 4-3](#) shows bikeway improvements that could help to close the gaps in the network.

Most of these improvements draw from the Solano County ATP, though the City maintains the prerogative to prioritize and evaluate feasibility of projects to meet local needs. Details of these considerations are found in the Circulation Appendix.

In addition to the outlined improvements, ensuring access to supportive amenities and education can help to encourage biking as a safe and pleasant mode of transportation. These may include secure parking areas, high visibility crossing, clear bikeway signage, and educational resources on bike routes, facilities, and safety.

FIGURE 4-3: EXISTING AND FUTURE BIKEWAY NETWORK



## PEDESTRIAN NETWORK AND IMPROVEMENTS

Pedestrian circulation and access within the city consist largely of sidewalk infrastructure supported by roadway crossing treatments, multi-use paved trails, and unpaved recreational trails. The Solano Countywide ATP notes that Fairfield has a total of 564 miles of existing sidewalk infrastructure, which includes a total of sidewalks on both sides of the street. Approximately 830 miles of potential maximum sidewalk coverage could be added (i.e., sidewalks on both sides of a street segment).

Policies in the General Plan support development a comprehensive network of sidewalks, pedestrian paths, and greenway to promote convenient and safer travel options for pedestrians, as well as improved connections between neighborhoods and community centers. The Circulation Appendix includes details of considerations for specific bikeway projects. Modification of the Circulation Appendix does not constitute a General Plan amendment.

## SAFETY, CONNECTIVITY, AND COMPLETE STREETS

Safety is critical for mobility. To ensure a truly varied and viable range of transportation options, people must feel comfortable and secure on the street, regardless

of the mode of travel. In order to improve the safety and connectivity, the City can make infrastructure improvements aimed at minimizing traffic conflicts and enhancing safety features. These improvements may include clearly marked intersections and trail crossings, enhanced street lighting, crossing safety improvements such as wide sidewalks and ADA-compliant ramps, and curbside management features such as designated ridesharing pickup locations and bus pullouts.

The City currently participates in programs to improve safety for alternative modes of transportation, including programs to improve conditions for families choosing to walk or bike to school. The City collaborates with Fairfield Suisun Unified School District (FSUSD), Travis Unified School Dis-

trict (TUSD), STA, Solano Public Health, and public and nonprofit partners to implement the Safe Routes to Schools program, and is participating in the 2023 update to STA's 2008 Safe Routes to School Plan. The Plan is anticipated to be completed by Fall 2024.

The City's Traffic Engineering staff implements a variety of traffic safety programs to encourage the use of alternative modes of transportation. The department is in the process of installing High Intensity Activated Crosswalk (HAWK) crossing signals that pedestrians can use to trigger vehicle stops at key crossings. Traffic Engineering also facilitates the City's 3E (Engineering, Enforcement and Education) Committee, a program to implement safe access to schools. The committee is comprised of

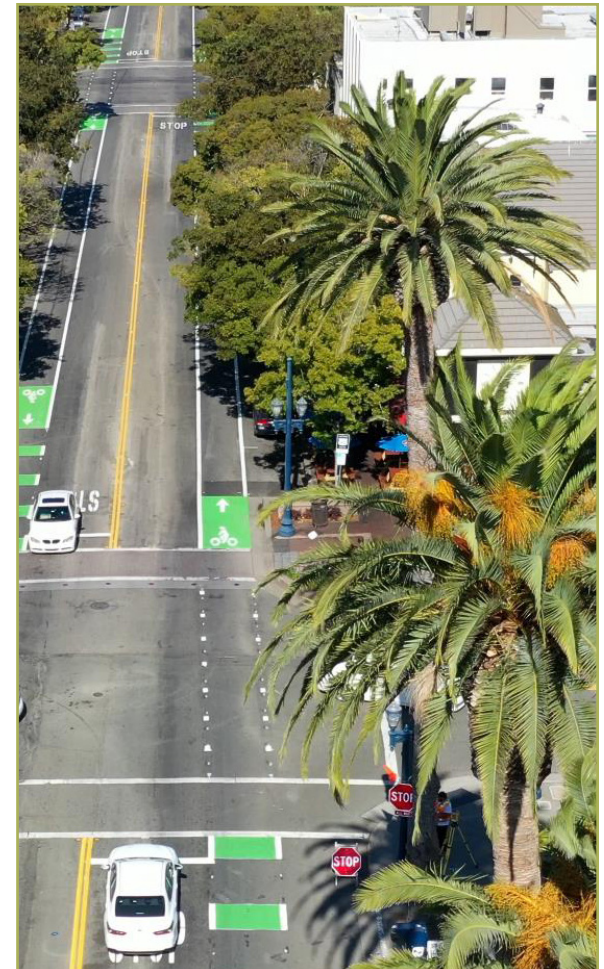


the FSUSD, STA, and representatives from the Fairfield Police Department, Public Works Traffic Engineering, and Public Works Transportation Division. The committee works to enhance and implement Safe Routes to School features through improved safety engineering such as crossing and roadway improvements, education on traffic safety, and enforcement of all traffic laws.

City Traffic Engineering will continue to monitor school intersections to plan for future improvements. The city will also continue to collaborate closely with schools, public health agencies, and community partners to secure funding and implement Safe Routes to Schools initiatives, thereby ensuring safe and equitable access for students to local schools.

The city aims to actively enhance safety and accessibility throughout its transportation network by implementing streamlined decision-making processes to prioritize safety in all transportation programs and policies, aligned with the Safe System Approach.

Efforts will focus on improving signage, design, and separation measures at intersections and along trails to minimize conflicts between bicycles, pedestrians, and motor vehicles. Streetscape enhancements will include integrating safety features such as bus pullouts, enhanced street lighting, and advanced crossing technologies like rectangular rapid flashing beacons (RRFBs) and high-visibility crosswalks. Traffic calming techniques and Complete Streets principles will guide the design of city capital and maintenance projects, prioritizing improvements that maintain or improve emergency vehicle response times. These traffic calming techniques will prioritize the development of horizontal displacement and prohibit the use of vertical displacement traffic control tools to prevent the inhibition of Fire and emergency vehicle response times.



## 4.5. Intelligent Transportation Systems and New Technologies

Evolving technology continues to change the way we travel, inform our travel choices, and expand our options. Technology also helps the City manage the transportation system more effectively.

Advanced transportation technologies can enhance mobility, improve safety, and reduce traffic congestion for residents and visitors. The City currently uses an integrated intelligent transportation system (ITS) to optimize traffic flow and enhance safety. Current ITS infrastructure consists of cameras, electronic message boards and changeable message signs, ramp metering lights, road sensors and command centers. By monitoring inputs and adjusting outputs such as ramp metering and traffic signage, ITS helps to alleviate traffic congestion in real time. Further investments in ITS could expand its utility into other City applications, such as incident management and emergency response/evacuation planning.

In addition to continuing to implement and expand the use of ITS, the City will continue to assess and, where feasible, implement new technologies and mobility services. For more information on new technologies related to renewable energy transportation technology, including electric and zero emissions vehicles, please see the Sustainability Element.



## GUIDING AND IMPLEMENTING POLICIES

### Roadway Network

**CIR-1. Establish and maintain a comprehensive, multimodal roadway system that is well-integrated with the City's land use pattern.**

**CIR-1.1. Roadway Network.** Work to implement the roadway improvements described in Table 4-5, and shown in Figure 4-2. Coordinate with neighboring agencies as needed for project implementation. Necessary roadway network additions for growth areas include:

- **New Cordelia Residential Neighborhood.** Coordinate with the Solano Transportation Authority and CalTrans to plan for specific I-680/I-80/SR-12 interchange improvement geometry, and connect the new neighborhood at Business Center Drive and/or Mangels Road.
- **Nelson Hill.** Plan for adequate safe ingress and egress to development in the "bowl"

of Nelson Hill from Cordelia Road. A complete traffic study must be completed prior to annexation to assess the project's potential impacts on nearby roadways and identify mitigation measures. Studies must provide design elements that maintain and improve safety, walkability, visibility/clear lines of sight, and connectivity, including any establishment of right and left turn pockets to assist with visibility issues. The study shall be prepared in a manner directed by the City's Traffic Engineer, and at a minimum, include/address the following:

1. Trip generation and Level of Service at the project's frontage on Cordelia Road as well as other impacted intersections, including, but not limited to, the Lopes Road/Cordelia Road/Bridgeport Avenue intersection;
2. Analysis of the appropriate local and collector intersections that may be affected by the development;
3. Impacts of the project and the project's road improve-

ments on pedestrian and bicycle circulation and safety. It should propose mechanisms for mitigating such impacts and improving access for bicyclists and pedestrians;

4. Identify the quantity and location of access points needed to accommodate the project's vehicular volume and determine the length left/right turn pockets on Cordelia Road using standards acceptable to the city's Traffic Engineer; and
  5. Incorporate traffic calming elements along the project's frontage and access points and at key connectors throughout the project.
- **The Travis Air Force Base Enhanced Use Lease Area.** As part of Enhanced Use Lease Area development, a traffic study should evaluate the need for connections at Markeley Lane and Peabody Road, Markeley Lane and Twin Peaks Drive, and a through-connection at Forbes Street and Markeley Lane.

**CIR-1.2. Address Gaps.** Enhance the scope of the multimodal transportation system by addressing deficiencies in roadways, bikeways, and pedestrian networks, expanding transit coverage in underserved areas and new subdivisions, and eliminating obstacles, both natural and humanmade, to improve accessibility and connectivity. Strategies include the following:

- Participate in the updates to the Solano Transportation Authority's (STA) Active Transportation Plan and coordinate with STA to refine, maintain, and update prioritized lists of pedestrian and bicycle improvement projects. These include those identified in the Active Transportation Plan, Safe Routes to School Plan, Local Road Safety Plan, and other relevant documents, that the City can feasibly accomplish improvements over a phased timeframe.
- Develop and regularly update the Citywide Transportation Capital Improvement Plan consistent with the General Plan, Congestion Management Plan, and Regional Transportation Plan. The Transportation Capital Improvement Plan shall identify how the improve-

ments identified in the General Plan are to be funded. This shall include identification of City funding sources and amounts (i.e., taxes, assessments, fees), as well as non-City funding sources (i.e., taxes and funding share).

**CIR-1.3. Traffic Volume and Safety Audits.** Continue to monitor traffic volume and conduct annual safety audits of street segments and intersections. When impacts are identified, develop mitigation plans and incorporate/coordinate any needed improvements as part of the Capital Improvement Plan and/or grant-funded programs.

**CIR-1.4. Right-of-Way.** Acquire the ultimate right-of-way for streets during the early stages of development. Include adequate right-of-way for multi-modal use to complete localized improvements.

**CIR-1.5. Access Points.** Seek opportunities for joint access and reduce driveways/conflict points/speed on higher level arterials/corridors (for example, gas stations). Analyze opportunities to remove left turn access -- or incorporate more right in | right out movement to enhance safety.

**CIR-1.6. Financing Improvements.**

Secure fair contributions from new development towards local and regional transportation improvements through the following measures:

- Amend the development impact fee ordinance as needed to help fund needed circulation improvements, as identified in the General Plan, the Transportation Capital Improvement Plan, Specific Plans, Areawide Plans, or Development Agreements. Impact fees shall be set in accordance with the relative share of improvements necessitated by new development.
- Specifically include installation of bus stops and/or turnouts within plans. Require payment for these facilities and related improvements in future development agreements.
- Identify non-fee based funding sources, including special taxes under the Mello-Roos Community Facilities District Act and benefit assessments under the Municipal Improvement Act of 1913 or other similar legislation, consistent with the circulation improvements identified in the General Plan.



## Regional Connectivity and Coordination

**CIR-2.** Achieve a coordinated regional and local transportation system that minimizes traffic congestion and safely and efficiently serves users.

**CIR-2.1. Regional Transportation Plans.** Collaborate with local and regional jurisdictions in the preparation of regional plans.

**CIR-2.2. Highway Improvements.** Work with Solano Transportation Authority and Caltrans and adjacent jurisdictions to identify and implement needed improvements to highway/interstate facilities, including freeway interchanges (including completion of the I-680/I-80/SR-12 interchange project).

**CIR-2.3. Coordination to Minimize Congestion.** Cooperate with adjacent jurisdictions and agencies to minimize congestion on City streets, particularly on Fairfield's principal arterial gateways and Routes of Regional Significance.

**CIR-2.4. Coordination for Transportation Funding.** Collaborate with relevant agencies to align projects with county and regional plans, thereby securing eligibility for funding. In coordination with relevant agencies, ensure projects are aligned with County and regional plans to promote eligibility for funding.

**CIR-2.5. Coordination to Address Gaps.** Collaborate with relevant agencies to reduce or improve pedestrian and bicycle gaps across State-owned networks or rail facilities.



## Roadway Operations

**CIR-3.** Manage the City's transportation system to minimize congestion, improve the flow of traffic, improve air quality, and reduce vehicle miles traveled.

**CIR-3.1. Vehicle Miles Traveled (VMT) Screening Criteria.** Evaluate new development and redevelopment projects for compliance with adopted Vehicle Miles Traveled (VMT) significance thresholds and transportation impact screening criteria. All projects residential projects that generate more than 50 peak hour trips (AM or PM) and nonresidential projects that generate more than 100 peak hour trips must prepare a local transportation analysis. In the event a project is unable to screen for VMT, the developer shall be required to perform an LOS (Level of Service) analysis.

**CIR-3.2. Traffic Study.** When a traffic study is required for an application for new development, require that the study include an analysis of the appropriate arterial, collector, and local intersections, any necessary improvements, and Vehicle Miles Traveled impacts that may be affected by the proposal. The study shall also consider impacts of the project any associated road improvements on multimodal circulation and safety. If impacts are identified, the project shall propose mechanisms for mitigating such impacts and improving access for bicyclists and pedestrians.

**CIR-3.3. Mobility and VMT Balance.** For roadways and intersections, strive to balance objectives of reducing VMT with maintaining automobile flow through use of Level of Service LOS (Level of Service) standards in determining feasible transportation improvements. Allow projects to exceed LOS standards to under the following circumstances:

- Constraints on development as would be required to achieve or maintain these standards

would adversely impede achievement of this Plan's economic, land use and community development, and environmental goals and policies;

- Traffic congestion occurs near specialized land uses such as schools, or in the Heart of Fairfield Specific Plan area;
- Mitigation of congestion would negatively affect transit, bicycle, or pedestrian circulation, or would conflict with General Plan goals for these alternative modes of circulation, for example by increasing crossing distances, increasing pedestrian safety risk, or restricting bicycle or transit access;
- Traffic congestion is a result of an effort to reduce vehicle miles traveled through increased promotion of microtransit and paratransit ridership and/or access, including the development of higher-density development in mixed use areas; or
- A demonstrated significant increase in transit modes that reduce single-occupant vehicle trips, such as microtransit and paratransit ridership, carpooling, bicycling, and/or walking is achieved.



#### **CIR-3.4. Level of Service (LOS) Standard and Exemptions.**

Maintain LOS D during peak hours (AM and PM) as the LOS performance target as the local standard to determine needed improvements. Accept lower levels of service (e.g., LOS E), as outlined in Table 4-4, where right-of-way and other constraints make attainment of LOS D difficult and/or infeasible. Exempt from the LOS policy the following areas/facilities reflecting goals and values of the community:

- Roadways of regional significance
- Heart of Fairfield Specific Plan area
- Areas around schools at pick-up times
- The City Traffic Engineer shall update the exempted intersections and roadway segments list periodically, to be included with the traffic impact study guidelines and to be adopted by ordinance.

#### **CIR-3.5. Improvement Prioritization.**

Use Intelligent Transportation Systems to improve capacity and safety for all modes of transportation prior to identification of any capital improvement program needs to make the best use of funds. Roadways experiencing or forecasted to experience worse than applicable level of service conditions (unstable or forced traffic flows) shall require improvements that also balance “complete streets” considerations for the benefit of pedestrians and bicyclists. Improvements shall be made unless other public health, safety, welfare, or other factors affecting alternative modes of transportation determine otherwise.



#### **Reducing Reliance on SOVs**

**CIR-4. Reduce reliance on single-occupant vehicles and increase share of trips made by alternate modes.**

**CIR-4.1. Transportation Demand Management Plans.** Update the City's Ordinance, Article XIV, to require that all large public and private employers with over 50 employees develop Transit Demand Management (TDM) plans to encourage their employees to use some form of collective transportation to commute to and from work. This includes shared rides, car or vanpools, FAST microtransit, bicycle parking and facilities, teleworking, and other options. These plans should include not only information regarding rideshare lists and available transit, but also provision of transit passes, preferential parking, and other incentives to participating employees.

**CIR-4.2. Regional Transportation Demand Management (TDM) Programs.** Coordinate with and promote regional TDM programs available through Solano Mobility and the Solano Transit Authority to educate the public on commuting options.

**CIR-4.3. Vehicle Miles Traveled Mitigation (VMT) Mitigation Impact Fee.** Support regional efforts for the development of a VMT mitigation impact fee program.

**CIR-4.4. School Circulation.** In partnership with Fairfield Suisun Unified School District, inter-city departments, and other regional and county agencies, promote efficient circulation planning at schools, partner with the local school districts to optimize school drop-off/pick-ups, and continue to conduct annual school walk audits to identify safety solutions.

**CIR-4.5. First and Last Mile Solutions.** Collaborate with FAST, transit agencies, and private mobility providers to implement first-and-last-mile solutions, such as locally-operated on-demand or microtransit

shuttle services, and bike-share programs, to enhance access to alternative transportation options for residents and to reduce reliance on personal vehicles.

**CIR-4.6. Facilitate Infill and Alternative Transportation.** Facilitate a circulation system that complements infill development and is supportive of alternative transportation methods, including walking, transit, paratransit, micro-transit, and bicycles. *See the Land Use and Urban Design Element for the City's broader program and policies for promoting infill development.*



## *Curb Management and Parking*

**CIR-5. Study the feasibility of effective curb management strategies and optimal parking solutions to enhance accessibility, reduce congestion, and promote efficient land use.**

**CIR-5.1. Parking Reductions.** Explore opportunities to adjust parking requirements consistent with demand and availability of other means of transportation:

- In areas envisioned for mixed use development and/or within a certain radius of a train station or high-frequency transit area (such as the Heart of Fairfield and Train Station Specific Plan areas), allow for reduction or potential elimination of minimum parking requirements.
- Permit reductions in on-site parking in exchange for pedestrian and bicycling improvements, such as secure bicycle parking, private shuttle services, or subsidized transit pass programs.

- Provided pedestrians have path of travel to controlled intersections/destinations, permit the use of off-site parking areas, on-street parking, and other alternatives to parking lots and parking garages.

**CIR-5.2. Parking Management.** Review and revise city parking requirement standards based on an assessment of actual demand. Allow project applicants flexibility to deviate from City parking standards upon demonstration to the city that less than the stipulated parking requirement is needed.



**CIR-5.3. Curb Space Management.**

Develop curb space management guidelines that incorporate best practices and strategies for deliveries and drop-offs in commercial and mixed-use areas.

**CIR-5.4. Park-And-Ride Facilities.**

Work to integrate park-and-ride facilities with various modes of transportation, including buses/micromobility vehicles, trains, bicycles, and walking paths. Provide pedestrian and bicycle connections to these facilities in order to promote trip reduction.

**CIR-5.5. Real-Time Information.**

Utilize technology to improve the user experience at park-and-ride facilities, the Fairfield Transportation Center, train stations, City parking garages, and other mobility hubs. Implement real-time information systems for parking availability and transit schedules, mobile payment options for parking fees, and smart technologies to streamline the use of facilities.

**Transit**

**CIR-6. Create an efficient, accessible, and well-utilized public transit network that encourages the use of public transportation as a viable alternative to personal vehicles locally and regionally.**

**CIR-6.1. Well-Connected Transit.** Design transit stops, microtransit venues, and well-defined transit corridors that provide connected access to major public facilities, employment centers, new and existing neighborhoods, and major points of interest, including the Heart of Fairfield Specific Plan area, the Texas Street corridor, and the Solano Town Center, and others.

**CIR-6.2. Potential Transit Ridership.** Continue to implement the Heart of Fairfield and Train Station Specific Plans (including safety and circulation improvements) and encourage higher density developments in closer proximity to major transit infrastructure to increase potential ridership. Promote and advertise the variety of transit options downtown.

- CIR-6.3. Express Transit.** As part of periodic strategic planning efforts, evaluate the potential for express transit service or microtransit options between the western, central, and eastern areas of the city.
- CIR-6.4. Integrated Transit.** Integrate regional transit with local transit to make the entire system more seamless and user-friendly. Coordinate the integration of local and regional transit with Solano Transportation Authority and other Solano County cities' transit agencies.
- CIR-6.5. Fixed Guideway Systems.** Coordinate with regional transit planners to determine feasibility of developing fixed guideway systems for interregional passenger traffic, making use of existing rail lines whenever possible.
- CIR-6.6. Transit Crossings.** Plan, create, and implement safe street crossings at controlled intersections for existing or planned transit stops.

## *Bicycle and Pedestrian Infrastructure*

**CIR-7. Promote a connected pedestrian and bicycle network that provides a safer, more enjoyable, and accessible means of getting to major destinations citywide without a car.**

### **Bicycle Infrastructure**

- CIR-7.1. Bicycle Infrastructure.** Design equitably distributed and designed bike infrastructure for all ages and abilities. Maintain the City's existing network of bicycle paths, lanes, and routes identified in **Figure 4-3**. Strive to maintain new and existing facilities through scheduled maintenance by requiring annexation into a maintenance district or similar funding mechanism.
- CIR-7.2. Bikeway Improvements.** As funding allows, continue to implement, as feasible, bikeway improvements as shown in Figure 4-3 prioritizing those that address gaps in the network. Consult the Circulation Appendix for priority bikeway projects and segments requiring additional feasibility study. Identify and obtain potential

funding sources for construction and maintenance of bicycle facilities, and incorporate bike improvements into planned improvements when feasible. Use these funds to complement local funds wherever possible.

*Modifications to the Circulation Appendix bikeway recommendations, feasibility studies, and infeasible projects are permitted as existing conditions change and do not constitute a General Plan amendment.*

- CIR-7.3. Linear Park Trail Bikeway.** Harness the potential of the Linear Park as a central corridor connecting neighborhoods, promoting recreation, and enhancing overall urban connectivity, and identifying locations for spurs. Where the Trail crosses intersections or streets, improve the trail to meet the street and preserve adequate line of sight. In key locations, implement traffic calming measures along the existing streets to reduce the speeds of vehicles as they approach the crossings, and develop a standard layout for all Linear Park crossings to enhance consistency. *For other information on Linear Park Trail safety and design improvements, please see the Land Use and Urban Design Element.*

- CIR-7.4. Bike Share.** Collaborate with Solano Transportation Authority on implementation of a bike share program to provide on-demand access to a network of rentable bicycles.
- CIR-7.5. Bike Amenities.** Particularly in corridors and centers, work with transit service providers and developers to provide first-rate amenities to support pedestrian, bicycle, and transit usage, such as bus shelters and benches, bike racks on buses, high-visibility crossings, green bike lanes before and after intersections and in conflict zones, and modern bike storage.
- CIR-7.6. Bicycle Education and Information.** Facilitate and promote bicycling by providing adequate information to bicyclists, including wayfinding and signage for routes, facilities, destinations, and guidelines for bicycle safety.
- CIR-7.7. Regional Bikeway Network.** Cooperate with neighboring jurisdictions and regional agencies like Solano Transportation Authority to expand the countywide bikeway network and to provide linkages, where appropriate, with regional networks.

### Pedestrian Infrastructure

- CIR-7.8. Pedestrian Infrastructure.** Create and maintain a continuous system of connected sidewalks, pedestrian paths, and greenways throughout the city that facilitates convenient and safer pedestrian travel, connects neighborhoods and centers, and is free of major impediments and obstacles.
- CIR-7.9. Sidewalk Gaps.** Seek to address sidewalk gaps and create comfortable pedestrian walking environments. *See Land Use and Urban Design Element for additional policies on walkable environments.*

### Safety, Connectivity, and “Complete Streets”

- CIR-7.10. Safety Improvements.** Work towards safer streets to reduce and eliminate fatal and severe injury collisions among vehicles, pedestrians, and bicyclists by identifying opportunities to streamline decision making to prioritize safety and improve internal alignment in programs, practices, and policies consistent with the Safe System Approach.

- CIR-7.11. Minimizing Conflicts.** Minimize bicycle/pedestrian/motor vehicle conflicts by providing proper trail, street and intersection signage, design, and separation. Bicycle trails should cross at marked crosswalks or controlled intersections. Continue to monitor and consider for adoption new tested technologies which improve bicyclist’s mobility and convenience while addressing safety considerations.
- CIR-7.12. Safety Features.** As part of streetscape design, roadway improvements should consult guidance sources and incorporate features that enhance safety for all users and establish effective mode transitions, where appropriate. Examples of these features include bus pullouts and shelters, street lighting, enhanced crossing features such as rectangular rapid flashing beacons, high visibility crosswalk striping, curb extensions, pedestrian refuge islands, and curbside management features.

**CIR-7.13. Layered Network.** Support safe and convenient access for all users, emphasizing “complete streets” that facilitate walking, bicycling and transit use wherever possible. Implement a ‘layered network’ approach by establishing a system of priority for conflicting modes, such as trucks and bicycles, on alternative parallel routes or prohibiting truck travel during certain times of day through key arterials.

**CIR-7.14. Complete Streets Considerations.** Incorporate appropriate traffic calming and Complete Streets considerations during design of City capital and maintenance projects, per City specifications, and ensure improvements do not negatively affect emergency vehicle response times. Traffic calming and Complete Streets programs should tie funding and prioritization of projects back to projects identified in the City’s safety plans.

**CIR-7.15. Traffic Calming.** Require new development implement traffic calming for new development to improve livability. The traffic calming shall consider only passive or horizontal types like roundabouts, bulbouts, and other similar tools used for best practices. Prohibit vertical traffic calming to support adequate emergency response times for health and safety.

**CIR-7.16. Safe Routes to School.** Continue to collaborate with Fairfield Suisun and Travis unified school districts, Solano Transportation Authority, Solano Public Health, and public and nonprofit partners in implementing the Safe Routes to Schools plan and secure dedicated funding to provide safe and equitable access for students to local schools.





*New Technologies*

**CIR-8.** Adopt and integrate emerging technologies to advance sustainability, accessibility, and efficiency in the circulation network.

**CIR-8.1. New Transportation Technologies.** Review and update City policies and plans to maximize the benefit to the public of new technologies and services without adversely affecting the City’s transporta-

tion network. New transportation technologies and mobility services may include connected and autonomous vehicles or shuttles, electric vehicles, electric bicycles and scooters, roadway materials, micro-transit, traffic management systems, and transportation network companies.

**CIR-8.2. Intelligent Transportation Systems.** Continue to implement an integrated intelligent transportation systems (ITS) framework to optimize traf-

fic flow, enhance safety, and provide real-time information to travelers, thereby fostering a more efficient and sustainable transportation network. Seek opportunities to expand use of ITS in other City applications. Partner with neighboring jurisdictions or larger agencies to support routes of regional significance, such as incident management and emergency response/evacuation planning.



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