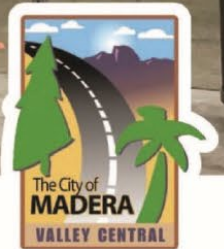


STATE ROUTE 145 YOSEMITE AVENUE AS DOWNTOWN MAIN STREET PROJECT



EXISTING CONDITIONS REPORT

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JULY 31, 2019

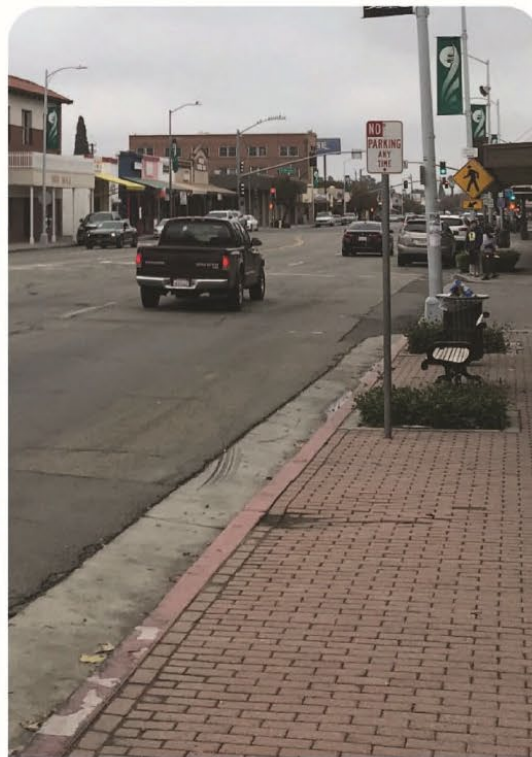


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1. INTRODUCTION

The State Route 145 (Yosemite Avenue) as Downtown Main Street Feasibility Study initiated by the City of Madera, seeks to identify improvements that address the safety and use of a proposed multi-modal transportation plan while also reducing congestion, vehicle miles traveled by City residents, and greenhouse gas emissions. This study has an ultimate goal of making Downtown Madera an attractive destination for its residents by integrating prior studies, plans, and projects with bicycle and pedestrian safety improvement projects identified later in following reports.

2. BACKGROUND

Yosemite Avenue has served as the geographical, commercial, and social center of the City of Madera since its incorporation in 1907. In recent years, the community surrounding the downtown area has taken necessary steps to revitalize this undervalued area by identifying active improvements. Since 2005, the City of Madera has engaged in the implementation of the Vision Madera 2025 program. Through efforts to achieve this vision as a community, multiple plans have been identified including DOMA (Downtown Madera) beautification project and Madera County Arts Council's Performing Arts Center project.

2.1 Project Location

The project study area looks at Downtown Madera along Yosemite Avenue's corridor, including its surrounding facilities 4th, 5th, and 6th Streets between their cross streets H and High. This downtown area has the SR-99 to the West, Fresno River to the North, and Union Pacific Railroad crossing through between Gateway Drive and E Street in a North-South direction. The project area also holds multiple government buildings including the Madera County Library, Sheriff Department, and Madera County Government Center, with the Madera City Hall and Madera County Superior Court along the perimeter.

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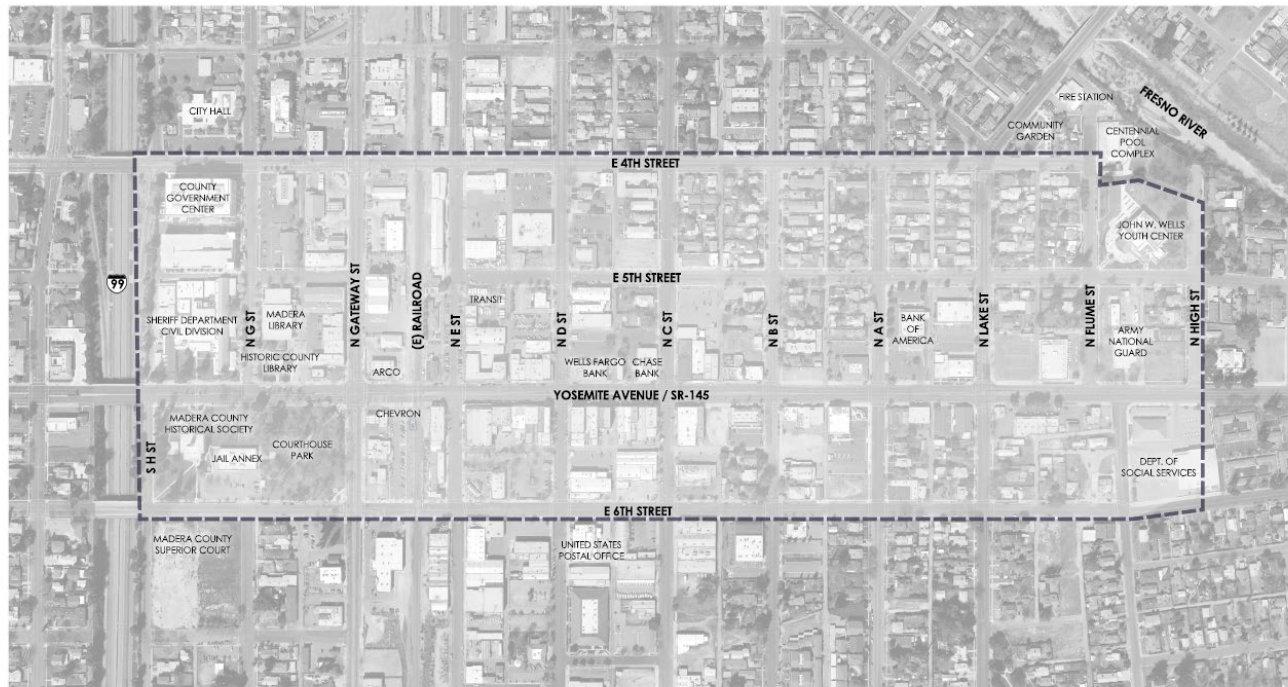


Image above shows the Project area within Downtown Madera



The City of Madera serves as the urban center of the County of Madera and its population is steadily growing. Within 30 years from 1980 to 2010, The City of Madera's population had nearly tripled from 21,732 to 61,416. Within the next 30 years, the population is expected to double again, rising to 120,000. This population increase will understandably require safe and reliable transportation networks into and around the City's urban center, Downtown Madera. With a revitalized downtown core, the City of Madera can provide a safe and desirable destination for its growing residents to use as their social and economic hub.

2.2 Existing Opportunities - Smart Mobility Framework

Smart Mobility Frameworks utilize locations within the framework, or project area, to anchor and link with multi-modal systems. Within the downtown core of the City of Madera, there are key areas that can fall within a Smart Mobility Framework demographic. These locations can fall within either the "Anchored" or "Transitional" categories. "Anchored" locations are already established, may need improvements, but will not transition into another type of usage, while a "Transitional" area can be changed into a different type of use. Downtown Madera has "Anchored" locations such as: City Hall, County of Madera Government Center, Historic Madera County Library, Courthouse Park, John Wells Youth Center, and the downtown core area between E Street and C Street on Yosemite

Avenue. Downtown Madera also has "Transitional" areas like 5th Street and C Street, the future site of the Veterans and Family Housing Project, and Yosemite Avenue between C Street and A Street. These transitional areas have the potential of being important links within the chain of Downtown Madera, and multi-modal connections will be important in strengthening these links.

3. EXISTING CONDITIONS

Exhibits A through J are graphical representations of the following existing conditions section and should be referenced for more information about the following topics:

- Exhibit A - Land Use Relationship Map
- Exhibit B - Collision Data Map 2014-2018
- Exhibit C - Crosswalk Analysis Map
- Exhibit D - Urban Canopy Map
- Exhibit E - Parking Analysis Map
- Exhibit F - Site Lighting Map
- Exhibit G - Preliminary Utility Map
- Exhibit H - Green Space Accessibility Map
- Exhibit I - Sidewalk Analysis Map
- Exhibit J - Map of Network Deficiencies

3.1 4th Street

4th Street is a collector acting in many capacities for the downtown area. Within the project limits, 4th street serves as a major off/on ramp for SR-99 and provides access to Madera City Hall, Madera County Government Center, local business including a hotel, residential areas, a community garden, and John Wells Youth Center at the East end of the street. 4th Street also intersects 3 collectors with bridge crossings of the Fresno River to the North. Traveling East from the project limit of work, 4th Street is classified as a 4-lane Collector with no on-street parking. At D Street, 4th Street transitions into a 2-Lane Collector with parallel on-street parking



Image above shows 4th Street from the intersection of Gateway Drive facing South West

ending in a tee intersection at Flume Street. 4th Street has a raised landscaped median with enhanced paving, decomposed granite, and decorative rocks between H Street and Lake Street. This street has 4 signalized intersections: H Street, G Street, Gateway Drive, and D Street, along with a railroad crossing between Gateway Drive and E Street. Pedestrian crossings of 4th Street include 8 controlled crosswalks (cross traffic is stop controlled) at G Street, Gateway Drive, D Street, and Lake Street; and 1 uncontrolled crosswalk (cross traffic is not stop controlled) at E Street. This street has continuous curb, gutter, and sidewalk on the South and North side of the street with an exception between Lake and Flume on the North. The sidewalk is characterized with concrete and a 2-foot strip of enhanced paving matching the paving on the medians at the back of curb all along 4th Street, except where driveways occur. There is no landscape or street canopy on the sidewalks. Most of the curb ramps have been upgraded to be ADA compliant since 2001 and street lighting is continuous except between Lake Street and Flume Street. 4th Street has a right of way of 80', with typical curb to curb measurements of roughly 64', excluding the section between Lake Street and Flume Street where it is reduced to 52'. 4th Street is listed as a Class III bicycle facility in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately residential.

3.2 5th Street

Traveling in an Easterly direction, 5th street is physically divided by Union Pacific Railroad right of way into 2 separate sections: G Street to Gateway Drive, and E Street through High Street and exiting the project limits. 5th Street is classified as a 2-lane Collector with combinations of diagonal on-street parking between E Street and B Street and parallel on-street parking marking the remainder. This street has no signalized intersections and 3 controlled crosswalks at G Street and D Street. This street has continuous curb, gutter, and sidewalk on the South and North side of the street. The sidewalk on the south side of 5th Street has an enhanced paving design traversing across



Image above shows 5th Street from the intersection of E Street facing North East

driveways between D and E street. Planting strips are inconsistent on both sides of the street and are landscaped with a combination of street trees, shrubs, groundcover, bark mulch, grass, and decomposed granite. Street canopy is not continuous along the street. Street lighting is a combination of street pole lights and ornamental pole lights with. Overhead utilities and utility poles are continuous along the north side of 5th Street. Curb ramps have been upgraded to be ADA compliant since 2001 at G Street. 5th Street has a right of way of 80', and typical curb to curb measurements of 54' between E Street and B Street. All other sections of 5th Street is typically 52' curb to curb, and has no listing of a bicycle facility in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately commercial.

3.3 Yosemite Avenue

Traveling along Yosemite Avenue in an Easterly direction and entering the project limits, this facility is classified as a 4-lane Arterial with on-street parallel parking. At B Street, Yosemite Avenue transitions into a 4-Lane Collector with alternating parallel on-street parking and left turn pockets. Between Gateway Drive and continuing East past High Street, Yosemite Avenue is designated as State Route 145 and within California Department of Transportation's jurisdiction. This facility has a raised Landscaped median between H Street and Gateway Drive and 4 signalized intersections: Gateway Drive, D Street, C Street, and Lake Street, along with a railroad crossing between Gateway Drive and E Street. Pedestrian crossings of Yosemite Avenue include 8 controlled crosswalks: Gateway Drive, D Street, C Street, and Lake Street; with 7 uncontrolled marked crosswalks at the midblock of H Street and G Street, G Street, E Street, B Street, and A Street. This street has continuous curb, gutter, sidewalk and street lighting on the South and North side of the street and most of the curb ramps have not been upgraded to be ADA compliant since 2001. Sidewalk and medians have some enhanced paving design.



Image above shows Yosemite Avenue at the intersection of H Street facing North East

Sidewalks on both sides of the street have planting strips behind the curb, landscaped with mature street trees, shrubs, and ground cover. Some planting strips are bare of landscaping or

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have decomposed granite. Street tree canopy is not continuous and resulting in greater sun exposure in some areas. Street is limited in site furniture such as benches and waste receptacles, except for a sheltered bench in front of Madera County Museum. Street lighting is a combination of pedestrian-scale ornamental pole lights or taller street pole lights with banners. Some retail store fronts have structural columns within the sidewalk, limiting the clear area for path of travel in the public walk in some areas. Yosemite Avenue has a right of way of 100' and typical curb to curb measurement of 74' between Gateway Drive and B Street. All other sections are 68' between curbs. Yosemite Avenue is currently listed as having no existing bicycle facilities and is planned to have a Class IV cycle track in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately commercial.

3.4 Alleyway Between Yosemite Avenue and 6th Street

Traveling in an Easterly direction, this alleyway has 2 physically separated sections: between E Street and B street, and between Lake Street and Vineyard. The first section is a paved alleyway with concrete valley gutters and concrete alley approaches. The second section is a combination of gravel and dirt, with a single concrete mountable curb entrance at Vineyard Avenue. Lighting is sporadic along alleyway. Zoning for this alleyway is predominately commercial.



Image above shows the alleyway between Yosemite Avenue and 6th Street from the intersection of D Street facing North East

3.5 6th Street

Traveling in an Easterly direction and entering the project limits, 6th Street is classified as a 2-lane Collector with on-street parallel parking and painted bicycle lanes that end at Lake Street. This street has 1 signalized intersection at Gateway Drive along with a railroad crossing between Gateway Drive and E Street. Pedestrian crossings of 6th Street include 10 controlled crosswalks at Gateway



Image above shows 6th Street from the intersection of H Street facing North East

Drive, D Street, C Street, B Street, and Lake Street; with 5 uncontrolled crosswalks at G Street, E Street, and A Street. This street has continuous curb, gutter, and sidewalk on the South and North side of the street excluding the North section West of Vineyard Avenue. Street lighting is discontinuous between H Street and Lake Street, and non-existent between Lake Street and High Street. Street canopy is inconsistent, and most planting areas or tree wells are bare of bark mulch or planting other than street trees. In residential areas starting at B Street, planting areas are covered with grass that may be dry, patchy, or dead. Enhanced paving is used in combination with concrete on the sidewalk between Gateway Drive and A Street. Most of the curb ramps have not been upgraded to be ADA compliant since 2001. 6th Street has a right of way of 80' and a typical curb to curb measurement of 54' between E Street and B Street, while other sections having 52' between curbs. 6th Street is listed as a Class II bicycle facility in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately commercial.

3.6 H Street

Traveling in a Northerly direction and entering the project limits, H Street is classified as a 2-lane Residential Access Street and ends in a tee intersection at Yosemite Avenue. This facility has parallel on-street parking along the East side of the street. H street has no signalized intersections and is partially stop-controlled at 6th Street and Yosemite Avenue. Pedestrian crossings of H Street are unmarked and stop-controlled. This street has continuous curb, gutter, and sidewalk on the East side of the street and continuous curb along the West. No street lighting or street canopy is provided along H Street within the project limits. Most of the curb ramps have been upgraded to be ADA compliant since 2001. H Street has a right of way of 45', curb to curb measurement of 34', and is not listed as having bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is entirely public/civil.



Image above shows H Street from the intersection of Yosemite Avenue facing South East

3.7 G Street

Traveling in a Northerly direction, G Street begins at Yosemite Avenue and continues past 4th Street exiting the project limits. It is classified as a 2-lane Collector with parallel on-street parking. This street has 1 signalized intersection at 4th Street. Pedestrian crossings of G Street include 2 controlled crosswalks at 4th Street and Yosemite Avenue, and 2 uncontrolled crosswalks at 5th Street. This street has continuous curb, gutter, and sidewalk on the East and West side of the



Image above shows G Street from the intersection of Yosemite Avenue facing North West

street. Street lighting is provided at intersections along G Street within the project area. Most of the curb ramps have been upgraded to be ADA compliant since 2001. Between 4th Street and Yosemite Avenue, planting strips or tree wells are located on both sides of the street and, if not bare, are landscaped with groundcover, grass, or street trees. G Street has a right of way of 80', curb to curb measurement of 52', and is listed to have no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately public/civil.

3.8 Alleyway Between G Street and Gateway Drive

Traveling in a Northerly direction, this alleyway begins at Yosemite Avenue and continues through 4th Street. It is a paved alleyway with most entrances having concrete alley approaches. Lighting is sporadic along alleyway. Zoning for this alleyway is predominately commercial.

3.9 Gateway Drive

Traveling in a Northerly direction, Gateway Drive is continuous through the project between 6th Street and 4th Street. It is classified as a 2-lane Collector with parallel on-street parking. Between 6th Street and Yosemite Avenue, Gateway Drive is designated State Route 145 and within California Department of Transportation's jurisdiction. This street has 3 signalized intersections:

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6th Street, Yosemite Avenue, and 4th Street. Pedestrian crossings of Gateway Drive include 6 controlled crosswalks at 6th Street, Yosemite Avenue, and 4th Street. This street has continuous curb, gutter, and sidewalk on the East and West side of the street excluding an area along the East side near 5th Street intersection. Sidewalks are characterized by a combination of enhanced paving and concrete. Street lighting along Gateway Drive is continuous within the project limits. Planting strips or tree wells are located on both sides of the street and, if not bare, are landscaped with groundcover or grass, and street canopy is inconsistent. Most of the curb ramps have been upgraded to be ADA compliant since 2001. Gateway Drive has a right of way of 80', curb to curb measurements of 52', and is listed to have no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately commercial.



Image above shows Gateway Drive from the intersection of 5th Street facing South East.

3.10 E Street

Traveling in a Northerly direction, E Street is continuous through the project between 6th Street and 4th Street. This facility can be divided into 3 distinct segments through the project area: a 2-Lane Collector with diagonal on-street parking between 6th Street and Yosemite Avenue, a 2-Lane Complete Street with perpendicular on-street parking and pedestrian bulb-outs between Yosemite Avenue and 5th Street, and a 2-Lane Collector with parallel on-street parking. This street has no signalized intersections and Pedestrian crossings of E Street include 4 controlled crosswalks at 6th Street, Yosemite Avenue, and 5th Street. This street has continuous curb, gutter, and sidewalk on the East and West side of the street except for the West side between 5th Street and 4th Street. Street lighting is provided between 6th Street and 5th Street. Overhead powerlines are continuous on the West side of the street. Some of the curb ramps have been upgraded to be ADA compliant since 2001. E Street has a right of way of 80', curb to curb measurements of 64' between Yosemite Avenue and 5th Street, 54' between curbs on all other sections, and is listed to have no bicycle facilities in the Madera Active Transportation Plan

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published by Madera County Transportation Commission. Zoning for this street is entirely commercial.

In the Cesar Chavez Plaza, between E Street between 5th Street and Yosemite Avenue, street canopy is mature and consistent, providing ample shade over parking stalls. Sidewalks and crosswalks in the Plaza area are wide and characterized by red enhanced paving in a herringbone pattern with accent grey banding. Street trees have an ornamental metal tree guard around the

trunks. Four benches are located at the mid-crossing bulb-out on the East side of the street. Bulb-outs at the north and south ends of the Plaza have mature trees planted in raised landscape planters.



Image above shows E Street from the intersection of 5th Street facing South East

Between Yosemite Avenue and 6th Street, the wide sidewalks are characterized by red enhanced paving wholly or partially depending on the block. Directly south of Yosemite Avenue, enhanced paving is used on the street to create an at-grade bulb-out. Some benches and waste receptacles are located directly south of Yosemite Avenue. Street canopy is inconsistent due to sparse planting strips and tree wells on both sides of the street.

3.11 Alleyway Between E Street and D Street

Traveling in a Northerly direction, this alleyway is physically divided into 2 segments within the project limits, the first segment beginning South of the project and ending at the alleyway between Yosemite Avenue and 6th Street, and the second segment beginning at Yosemite Avenue and continues through 4th Street. It is a paved



Image above shows the alleyway between E Street and D Street from the intersection of 5th Street facing South East

alleyway with concrete valley gutters except for a section just north of Yosemite Avenue and concrete alley approaches on all entrances. Lighting is sporadic along alleyway in both segments. Zoning for this alleyway is predominately commercial.

3.12 D Street

Traveling in a Northerly direction, D Street is continuous through the project between 6th Street and 4th Street. It is classified as a 2-lane Collector with parallel on-street parking with a section of diagonal on-street parking between 6th Street and Yosemite Avenue. This street has 2 signalized intersections at 4th Street and Yosemite Avenue. Pedestrian crossings of D Street include 6 controlled crosswalks at 6th Street, Yosemite Avenue, and 4th Street; and 2 uncontrolled marked crosswalks at 5th Street. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. Wide planters are populated by mature trees between 4th and 5th street on the east side and are mostly bare on the west side. South of 5th Street, the sidewalk is a combination of concrete and enhanced paving. Planting strips are barren or are dominated by weeds. Street canopy is inconsistent. Street lighting is continuous along D Street in the project limits. Most of the curb ramps have been upgraded to be ADA compliant since 2001. D Street has a right of way of 80', typical curb to curb measurements of 54' between 6th Street and 5th Street, 52' curb measurements between 5th Street and 4th Street, and is listed to have no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately commercial.



Image above shows D Street from the intersection of Yosemite Avenue facing South East

3.13 Alleyway Between D Street and C Street

Traveling in a Northerly direction, this alleyway is physically divided into 2 segments within the project limits, the first segment beginning South of the project and ending at the alleyway between Yosemite Avenue and 6th Street, and the second segment beginning at Yosemite Avenue and continues through 4th Street. It is a paved alleyway with concrete valley gutters in 2 sections: North of 6th Street and South of 4th Street, and concrete alley approaches on all entrances. Lighting is only provided in Southern segment. Zoning for this alleyway is predominately commercial.



Image above shows the alleyway between D Street and C Street from the intersection of 5th Street facing South East

3.14 C Street

Traveling in a Northerly direction, C Street is continuous through the project between 6th Street and 4th Street. It is classified as a 2-lane Collector with diagonal on-street parking with a section of parallel on-street parking between 5th Street and 4th Street. This street has 1 signalized intersection at Yosemite Avenue. Pedestrian crossings of C Street include 4 controlled crosswalks at 6th Street and Yosemite Avenue. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. Planting strips are landscaped with grass which is patchy or dry. Street trees on the East side of the street are mature. Trees are sparse on the West side of the street. Between 5th Street and 6th Street, street trees have not reached a mature size and sidewalk has ornamental enhanced paving design. Street lighting is provided between 6th Street and 5th Street. Some of the curb ramps have been upgraded to be ADA compliant since 2001. C



Image above shows C Street from the intersection of 5th Street facing South East

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Street has a right of way of 80', 54' curb to curb measurement between 6th Street and 5th Street, 52' curb measurement between 5th Street, and 4th Street, and is listed to have no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is predominately commercial.

3.15 Alleyway Between C Street and B Street

Traveling in a Northerly direction, This Alleyway is physically divided into 2 segments within the project limits, the first segment beginning South of the project and ending at the alleyway between Yosemite Avenue and 6th Street, and the second segment beginning at Yosemite Avenue and continues through 4th Street. It is a paved alleyway with concrete alley approaches on all entrances. Lighting is provided between Yosemite Avenue and 5th Street. Zoning for this alleyway is primarily commercial.



Image above shows the alleyway between C Street and B Street from the intersection of 5th Street facing South East

3.16 B Street

Traveling in a Northerly direction, B Street is continuous through the project between 6th Street and 4th Street. It is classified as a 2-lane Collector with parallel on-street parking. This street has no signalized intersections and pedestrian crossings of B Street include 4 controlled crosswalks at 6th Street and Yosemite Avenue. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. Landscape planters are wide on both side of the street



Image above shows B Street from the intersection of 5th Street facing South East

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and are covered with dry, patchy grass. Street canopy is inconsistent in placement and tree species and sizes vary. Between Yosemite Avenue and 6th Street, sidewalk on the East side has decorative enhanced paving design. Street lighting is continuous along B Street within the project limits. Some of the curb ramps have been upgraded to be ADA compliant since 2001. B Street has a right of way of 80', curb to curb measurement of 52', and is listed to have no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is primarily commercial.

3.17 Alleyway Between B Street and A Street

Traveling in a Northerly direction, this alleyway is continuous within the project limits from 6th Street to 4th Street. It is a paved alleyway with concrete valley gutters between 6th Street and Yosemite Avenue and concrete alley approaches on all entrances. No lighting is provided along alleyway within the project limits. Zoning for this alleyway is primarily commercial and residential.



Image above shows the alleyway between A Street and B Street from the intersection of 5th Street Facing South East

3.18 A Street

Traveling in a Northerly direction, A Street is continuous through the project between 6th Street and 4th Street. It is classified as a 2-lane Collector with parallel on-street parking. This street has no signalized intersections and pedestrian crossings of A Street include 4 controlled crosswalks at 6th Street and Yosemite Avenue. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. Landscape planters are wide on both side of the street and are covered with dry, patchy grass. Street canopy is inconsistent in placement and tree species and sizes vary. Between Yosemite Avenue and



Image above shows A Street from the intersection of 5th Street facing South East

6th Street, sidewalk on the East side has decorative enhanced paving design. Street lighting only covers intersections along A Street within the project limits. Most of the curb ramps have been upgraded to be ADA compliant since 2001. A Street has a right of way of 80', curb to curb measurements of 52', and is listed to have no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is primarily commercial and residential.

3.19 Alleyway Between A Street and Lake Street

Traveling in a Northerly direction, This Alleyway is continuous within the project limits from 6th Street to 4th Street. It is a paved alleyway with concrete alley approaches on all entrances except on 6th Street. Lighting is sporadic along alleyway within the project limits. Zoning for this alleyway is primarily commercial and residential.



Image above shows the alleyway between A Street and Lake Street from the intersection of 5th Street facing South East

3.20 Lake Street

Traveling in a Northerly direction, Lake Street is continuous through the project between 6th Street and 4th Street ending in a 5-street stop-controlled intersection. It is classified as a 2-lane Collector with parallel on-street parking. This street has one signalized intersection at Yosemite Avenue and pedestrian crossings of Lake Street include 6 controlled crosswalks at 6th Street, Yosemite Avenue, and 4th Street. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. Wide planting strips on both sides of the street are landscaped with grass and mature trees. Street lighting is sporadic along Lake Street within the project limits. Some of the curb ramps have been upgraded to be ADA compliant since 2001. Lake Street has a



Image above Shows Lake Street from the intersection of 5th Street facing South East

right of way of 80', curb to curb measurement of 52', and is listed as a Class III bicycle facility in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is primarily commercial and residential.

3.21 Alleyway Between Lake Street and Flume Street

Traveling in a Northerly direction, this alleyway is physically divided into 2 segments: the first running from South of Project limits to Alleyway between 6th Street and Yosemite Avenue, and the second beginning at Yosemite Avenue and continuing past 4th street. The first segment is gravel and dirt alleyway. The second is a paved alleyway with concrete alley approaches on all entrances. No lighting is provided along alleyway within the project area. Zoning for this alleyway is primarily residential.



Image above shows the alleyway between Lake Street and Flume Street taken from the intersection of 5th Street facing South East

3.22 Flume Street

Traveling in a Northerly direction, Flume Street begins at Yosemite Avenue and ends at 4th Street with a closed through movement barricade. It is classified as a 2-lane Collector with parallel on-street parking. This street has no signalized intersections and no marked pedestrian crossings. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. Planting strips are landscaped with grass and street canopy is inconsistent in placement and species. Street lighting is sporadic along Flume Street within the project limits. Some of the curb ramps have been upgraded to be ADA compliant



Image above shows Flume Street taken from the intersection of 5th Street facing South East

since 2001. Flume Street has a right of way of 80', curb to curb measurement of 52', and is listed as having no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is primarily commercial and residential.

3.23 Vineyard Avenue

Traveling in a Northerly direction, Vineyard Avenue begins beyond the project limits and ends at Yosemite Avenue. It is classified as a 2-lane Collector with parallel on-street parking. This street has no signalized intersections and no marked pedestrian crossings of Vineyard Avenue. This street has continuous curb, gutter, and sidewalk on the East and West side of the avenue except for a West side section South of Yosemite Avenue. No street trees or planting strips exist except for a narrow barren strip on the west side. one street light is provided for Vineyard Avenue on the East side within the project limits. Some of the curb ramps have been upgraded to be ADA compliant since 2001. Vineyard Avenue has a right of way of 80', curb to curb measurement of 52', and is listed as having no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is primarily commercial.



Image above shows Vineyard Avenue taken from the intersection of 6th Street facing North West

3.24 Alleyway Between Flume Street and High Street

Traveling in a Northerly direction, this alleyway begins at Yosemite Avenue and ends at 5th Street. It is a dirt alleyway with concrete alley approaches on both entrances. No lighting is provided for alleyway within the project limits. Zoning for this alleyway is primarily residential.

3.25 High Street

Traveling in a Northerly direction, High Street begins at Yosemite Avenue and ends in a Cul-de-Sac North of 5th Street. It is classified as a 2-lane Collector with parallel on-street parking. This street has no signalized intersections and no marked pedestrian crossings. This street has continuous curb, gutter, and sidewalk on the East and West side of the street. No street lighting is provided for High Street within the project limits. No planting strips except between 5th Street and Yosemite Avenue, and planting areas are bare. Some of the curb ramps have been upgraded to be ADA compliant since 2001. High Street has a right of way of 80', curb to curb measurement of 52' and is listed as having no bicycle facilities in the Madera Active Transportation Plan published by Madera County Transportation Commission. Zoning for this street is primarily residential.



Image above shows High Street taken from the intersection of 5th St facing South East.

4. TRAFFIC DATA

Within the project area, Caltrans and Madera County Transportation Commission have compiled traffic data. The following tables 1 & 2 show Average Daily Traffic counts of vehicles traveling through specific locations along major streets within the project area. Unless denoted, data was obtained from MCTC 2018 Traffic Data Report.

2013-2015 Data	Gateway Drive	D Street	C Street	Lake Street
4th Street	NB - 6,611 SB - 5,413 EB - 4,849 WB - 5,189	NB - 3,641 SB - 3,327 EB - NR WB - NR	NB - NR SB - NR EB - NR WB - NR	NB - 4,117 SB - 4,456 EB - NR WB - NR
Yosemite Avenue	NB - 17,700* SB - 14,500* EB - 6,084 WB - 5,113	NB - NR SB - NR EB - NR WB - NR	NB - NR SB - NR EB - 16,000* WB - 17,700*	NB - NR SB - NR EB - 13,000* WB - 13,800*
6th Street	NB - 14,500* SB - 13,500* EB - NR WB - NR	NB - 1,861 SB - 1,861 EB - 2,548 WB - 2,637	NB - NR SB - NR EB - NR WB - NR	NB - NR SB - NR EB - NR WB - NR

2016-2018 Data	Gateway Drive	D Street	C Street	Lake Street
4th Street	NB - 6,930 SB - 5,529 EB - 6,195 WB - 6,111	NB - 3,716 SB - 4,643 EB - NR WB - NR	NB - NR SB - NR EB - NR WB - NR	NB 4,867 SB 5,433 EB - NR WB - NR
Yosemite Avenue	NB - 15,800* SB - 12,800* EB - 6,043 WB - 6,547	NB - NR SB - NR EB - NR WB - NR	NB - NR SB - NR EB 15,900* WB 15,800*	NB - NR SB - NR EB 16,800* WB 16,200*
6th Street	NB - 12,800* SB - 15,800* EB - NR WB - NR	NB - 1,689 SB - 1,797 EB - 2,843 WB - 2,562	NB - NR SB - NR EB - NR WB - NR	NB - NR SB - NR EB - NR WB - NR

* denotes AADT obtained from Caltrans

NR - Not Recorded

5. UTILITIES

Existing utilities have been approximately located based on as-builts, master plans for the city, and general observations of the project area. The following existing underground and overhead utilities have been identified as being within the project limits.

5.1 PG&E Electric

PG&E electrical lines within the project area are predominately overhead facilities. These lines serve most properties through alleyways and along 5th Street and 6th Street. There is no overhead electrical crossings of the Union Pacific Railroad is within the project limits. Visible Riser poles indicating underground electrical distribution facilities are located around the area of Yosemite Avenue between E Street and A Street.

5.2 PG&E Gas

As-builts acquired from the project limit do not have much information about gas lines. PG&E will need to be contacted to gather more information. It is assumed that gas lines are routed along alleyways and serve properties similar to PG&E electrical facilities.

5.3 City of Madera Storm Drain

Storm drain facilities within the project limits primarily are routing storm water to the Fresno River to the North and MID canal to the South. Primarily Storm drain facilities are within intersections to transfer water across streets and then utilize existing gutters to move water along street right of way.

5.4 City of Madera Sewer

Sewer services are being provided along most alleyways, 5th Street, 6th Street, and Yosemite Avenue West of Gateway Drive. These service lines range from 6" and smaller to 12" in diameter. An 18" diameter sewer line is within Yosemite Avenue running West away from G Street, before turning South along H Street and out of the Project limits.

5.5 City of Madera Water

Water service lines are along all major streets within the project limits except 5th Street, and small portions of 6th Street. Sizes range from smaller than 8" to 12" in diameter. An active well site is on 4th Street between H Street and G Street within the project area.

6. COLLISION DATA

6.1 Collision Data Overview

Collision data was taken between 2014 and 2018 from UC Berkeley Transportation Injury Mapping System. Within the project area, a total of 70 accidents that caused injury occurred. Of those 70 accidents, 0 were fatal, 7 were severe injuries, 23 were visible injuries, and 40 were complaints of injury. Of those 70 accidents, 9 were bicycle related, while 13 were pedestrian related. Also, of those 70 accidents, 11 occurred between the hours of 10PM and 4AM, and 19 were recorded by the responding officer to have lighting issues as a contributing factor.

Collision Type	Head-On		Sideswipe		Rear End		Broadside		Hit Object		Ped	Other	
	M	B	M	B	M	B	M	B	M	B	Ped	M	B
Driving/Biking intoxicated							3		1				
Unsafe Speed					11								
Wrong Side of Road		1		1				2					1
Improper Passing							1						
Unsafe Lane Change			1										
Improper Turning	1								2				
Auto Right of Way							14	1					
Ped Right of Way							1				10		
Ped Violation											2		
Traffic Signals and Signs					1		10	2					
Other than Driver					1					1			
Unsafe Backing							1						
Other											1		
Total	1	1	1	1	13	0	30	5	3	1	13	0	1

Ped - Pedestrian

M - Motor Vehicle

B - Bicyclist

Focusing on the 22 total pedestrian and bicycle related collisions and their causes, existing facilities and their deficiencies in relation to multimodal safety can be determined.

6.1.1 4th Street Facility and Intersections

Along 4th Street, 5 bicycle collisions and 1 pedestrian collision were recorded. Of the 5 bicycle collisions, the primary collision factor for 80% of the collisions were due to the bicyclist traveling on the wrong side of the road. These includes 1 severe injury, 1 visible injury, and 2 painful injuries. The locations of these collisions were at the cross streets: H Street, G Street, and D Street. The primary factor of the remaining collision was attributed to the bicyclist not following traffic signals at the intersection of Gateway Drive.

One pedestrian collision was recorded along 4th Street, involving a 10-year-old child crossing legally within a crosswalk at the intersection of 4th Street and G Street and resulting in a painful injury. The motorist was deemed at fault, making a left turn without yielding to the pedestrian right of way.

6.1.2 5th Street Facility and Intersections

Along 5th Street 1 pedestrian collision was recorded at the intersection of D Street. The pedestrian was crossing legally within a crosswalk and was struck by a motorist making a left turn resulting in a visible injury. Motorists traveling in a North South direction are not stop controlled at this intersection but are required to yield to crossing pedestrians.

6.1.3 Yosemite Avenue Facility and Intersections

Along Yosemite Avenue, 2 bicycle collisions and 7 pedestrian collisions were recorded. The primary collision factors for these bicycle collisions were 50% striking a fixed object resulting in a visible injury, and 50% not following traffic control signals resulting in a severe injury. Because no fixed objects are within the traveled way, 1 bicycle collision was due to traveling along the sidewalk where fixed objects can become obstacles. The other collision was at the fault of the cyclist, not following traffic signals at the intersection of Yosemite Avenue and C Street. Buildings at this intersection are located at back of walk, reducing sight distance.

Of the 7 pedestrian collisions recorded along Yosemite Avenue, 100% of these collisions were at the fault of the motorist not yielding to the crossing pedestrian. One of these collisions occurred at the cross streets E Street, 4 at D Street including 1 collision involving a 5-year-old, 1 at A street, and 1 at Vineyard Avenue. These 7 collisions resulted in 1 visible injury, and 6 painful injuries. D

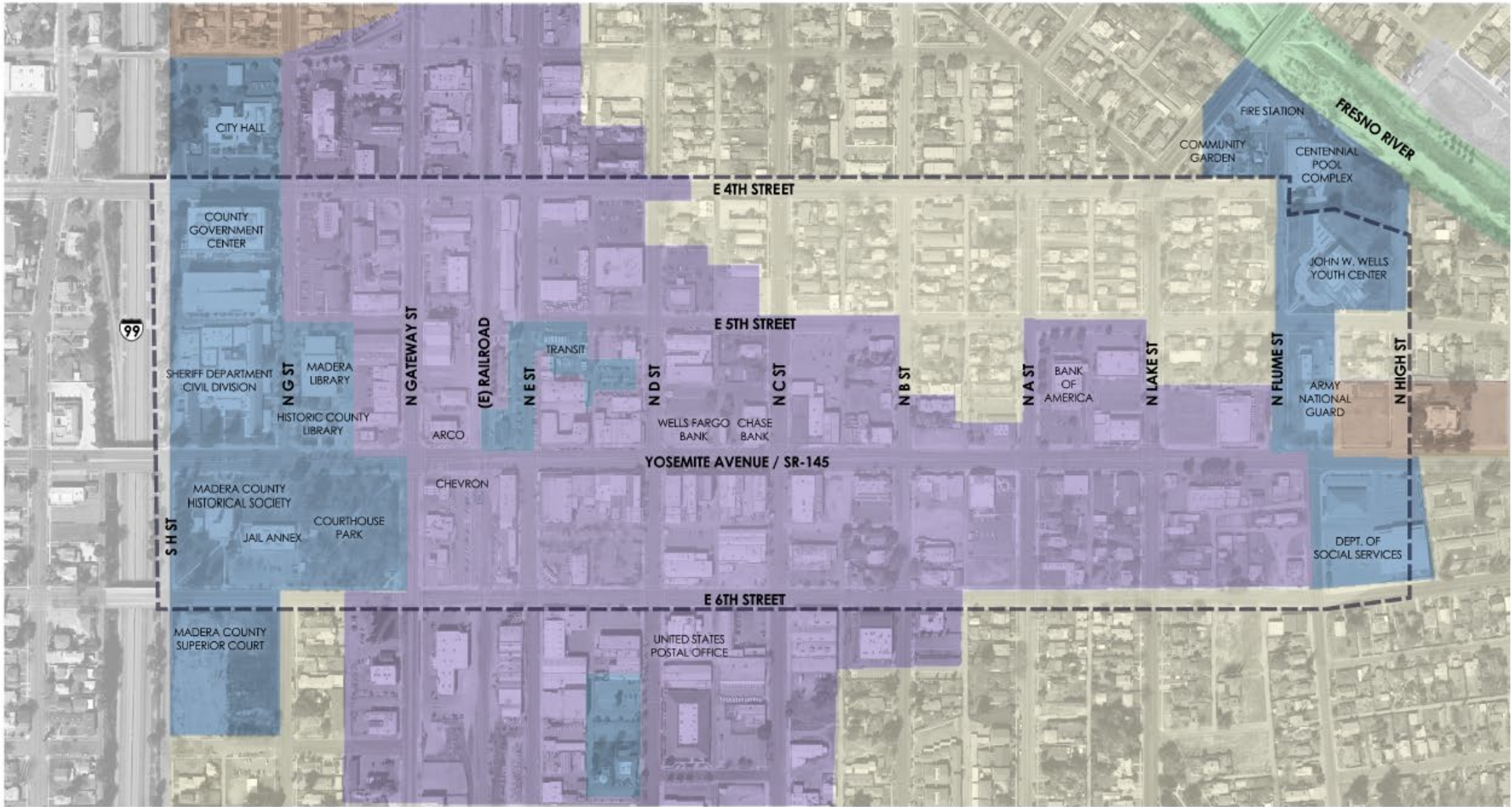
Street is a signalized intersection, E Street and A street are unsignalized with marked crosswalks, and Vineyard is unsignalized with no crosswalks marked.

6.1.4 6th Street Facility and Intersections

Along 6th Street, 2 bicycle collisions and 4 pedestrian collisions were recorded. The primary collision factor for these bicycle collisions were 50% the motorist not yielding to the cyclist's right of way, and 50% due to cyclist traveling on the wrong side of the road. Both collisions resulted in visible injuries.

Of the 4 pedestrian collisions, 50% were due to motorist not yielding to the pedestrian's right of way, and the remaining 50% were due to the pedestrian being at fault and entering into traffic (50% of which was also contributed by alcohol). Of these collisions, 1 resulted in a visible injury and 3 were painful injuries.

Exhibit A



LEGEND

- CIVIC/PUBLIC
- COMMERCIAL CORE
- RESIDENTIAL
- RIVER AREA
- OTHER
- PROJECT BOUNDARY

NTS

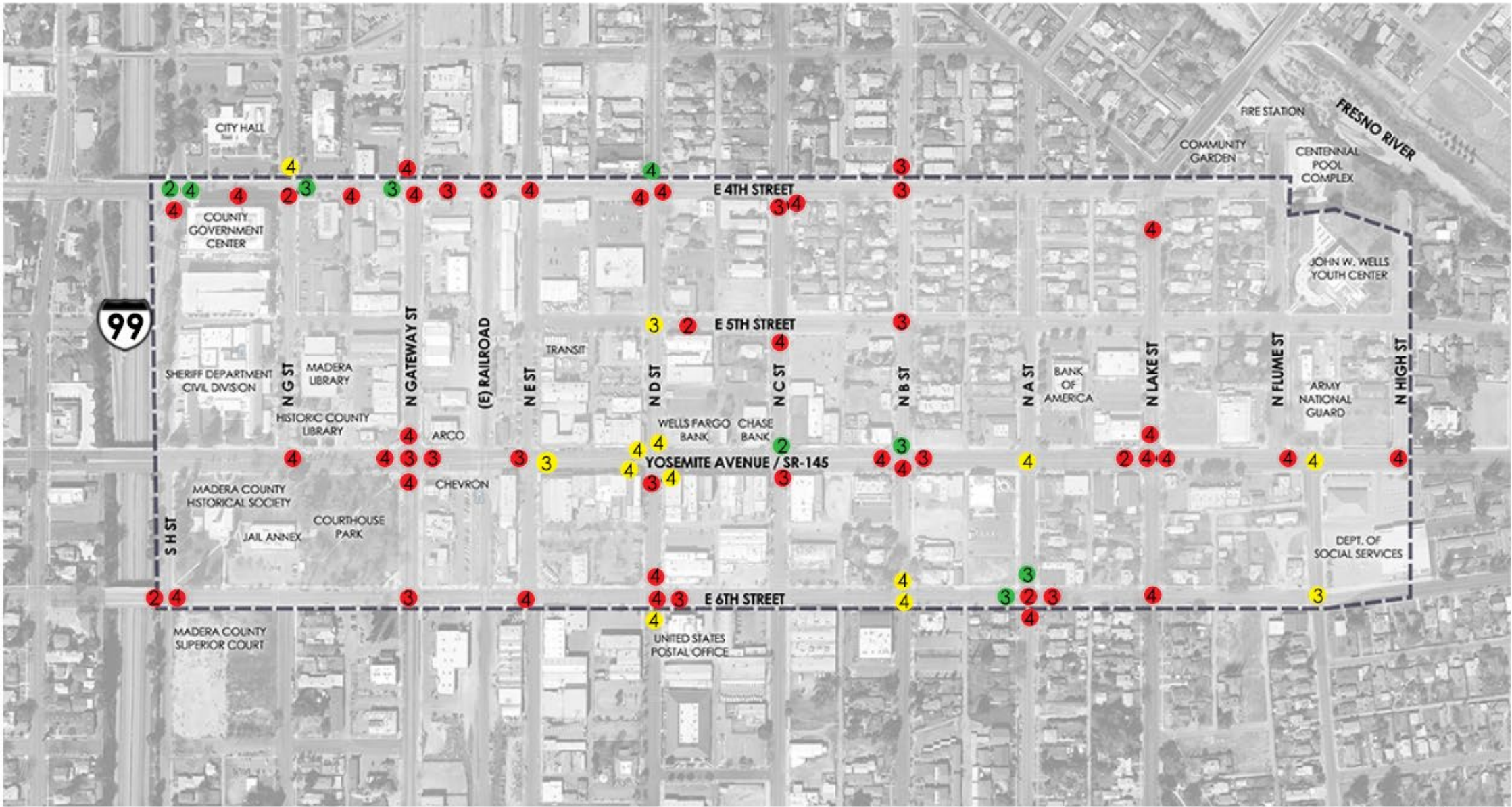
MADERA DOWNTOWN - LAND USE RELATIONSHIP MAP

DOWNTOWN MADERA HAS MIXED USES IN A RELATIVELY SMALL AREA.



7/31/2019

Exhibit B



LEGEND

- PROJECT BOUNDARY

1

FATAL
- MOTOR COLLISION

2

SEVERE INJURY
- PEDESTRIAN COLLISION

3

VISIBLE INJURY
- BICYCLE COLLISION

4

PAINFUL INJURY

MADERA DOWNTOWN - COLLISION DATA MAP 2014-2018



7/31/2019

Exhibit C



NTS

LEGEND

- PROJECT BOUNDARY
- UNPROTECTED CROSSWALK
- PROTECTED CROSSWALK

MADERA DOWNTOWN - CROSSWALK ANALYSIS MAP



7/31/2019

Exhibit D



NTS

LEGEND

- PROJECT BOUNDARY
- URBAN CANOPY

MADERA DOWNTOWN - URBAN CANOPY MAP

STREET TREES, WHICH CAN HELP IMPROVE PEDESTRIAN COMFORT ON STREETS, ARE IRREGULARLY DISPERSED.



7/24/2019

Exhibit E



LEGEND

- PRIVATE PARKING GARAGE
- SURFACE PARKING LOT (PRIVATE)
- SURFACE PARKING LOT (PUBLIC)
- ON-STREET PARKING (PARALLEL)
- ON-STREET PARKING (ANGLED)
- ON-STREET PARKING (PERPENDICULAR)

MADERA DOWNTOWN - PARKING ANALYSIS



MARK THOMAS

7/24/2019

Exhibit F



NTS

LEGEND

- PROJECT BOUNDARY
- ACORN TYPE STREET LIGHT
- COBRA TYPE STREET LIGHT

MADERA DOWNTOWN - SITE LIGHTING MAP

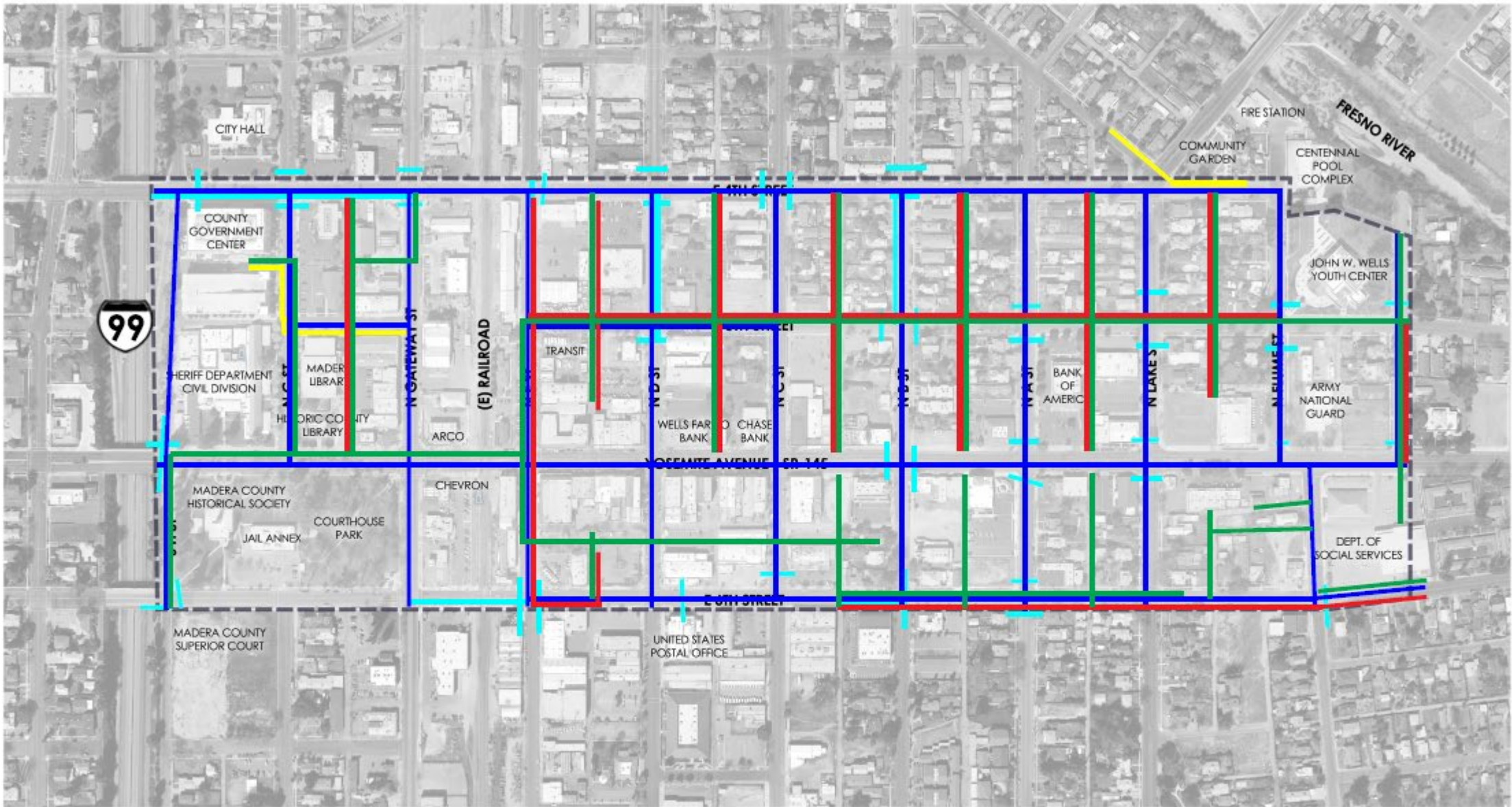
STREET TREES, WHICH CAN HELP IMPROVE PEDESTRIAN COMFORT ON STREETS, ARE IRREGULARLY DISPERSED.



MARK THOMAS

7/24/2019

Exhibit G



LEGEND

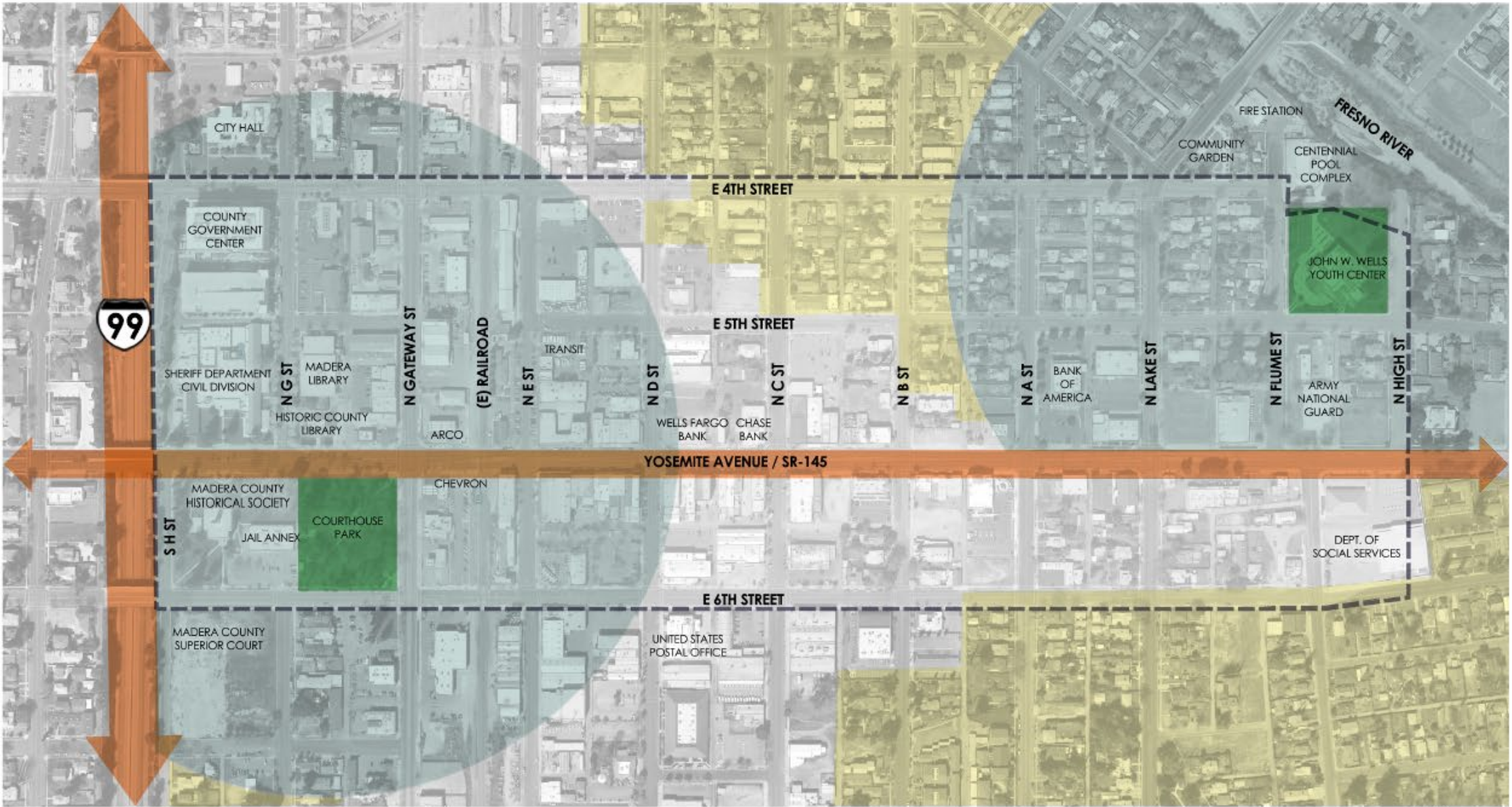
- PROJECT BOUNDARY
- GAS
- ELECTRIC
- WATER
- STORM DRAIN
- SEWER

MADERA DOWNTOWN - PRELIMINARY UTILITY MAPPING



7/31/2019

Exhibit H



NTS

LEGEND

- PROJECT BOUNDARY
- PEDESTRIAN BARRIER
- QUARTER-MILE/15 MIN WALK RADIUS ACCESS AREA
- RESIDENCES OUTSIDE A 15 MIN. WALK
- PARKS

MADERA DOWNTOWN - GREEN SPACE ACCESSIBILITY MAP

PEDESTRIAN ACCESS TO GREEN SPACE IS LIMITED BY BARRIERS SUCH AS HIGHWAY 99 AND YOSEMITE AVENUE.



7/31/2019

Exhibit I



NTS

LEGEND

- PROJECT BOUNDARY
- DISCONTINUOUS SIDEWALK

MADERA DOWNTOWN - SIDEWALK ANALYSIS MAP

STREET TREES, WHICH CAN HELP IMPROVE PEDESTRIAN COMFORT ON STREETS, ARE IRREGULARLY DISPERSED.



7/31/2019

Exhibit J - MAP OF NETWORK DEFICIENCIES

	6th Street	to	Yosemite Avenue	to	5th Street	to	4th Street
H Street							
to		COURT HOUSE PARK				COUNTY GOVT CENTER	
G Street							
to				COUNTY LIBRARY			
Gateway Drive							
to		BNSF RAILROAD		BNSF RAILROAD			
E Street							
to							
D Street							
to							
C Street							
to							
B Street							
to							
A Street							
to							
Lake Street							
to							
Flume Street							
to						JOHN W WELLS YOUTH CENTER	
Vineyard Avenue							
to		DEPT. SOCIAL SERVICES					
High Street							

Discontinuous Street Lighting - Missing Sections

Uncontrolled Crosswalks - Not stop controlled

Bicycle Facility Planned or Improvements needed

Discontinuous Sidewalks - Missing or damaged sections

No Existing Street

Existing Street

Landmark