

## CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

## **Meeting Agenda**

## **Bicycle and Pedestrian Advisory Commission**

Tuesday, October 28, 2025

4:00 PM

City Council Chamber, 2nd Floor, Merced Civic Center, 678 W. 18th Street, Merced, CA 95340

## **NOTICE TO PUBLIC**

#### **WELCOME**

At least 72 hours prior to each regular Commission meeting, a complete agenda packet is available for review on the City's website at www.cityofmerced.gov or at the City Clerk's Office, 678 W. 18th Street, Merced, CA 95340. All public records relation to an open session item that are distributed to a majority of the Commission will be available for public inspection at the City Clerk's Office during regular business hours. Assisted hearing devices are available for meetings held in the Council Chamber.

#### PUBLIC COMMENT: OBTAIN SPEAKER CARD FROM THE COMMISSION CLERK

Members of the audience who wish to address the Commission are requested to complete a speaker card available at the podium against the back of the Council Chamber. Please submit the completed card to the Commission Clerk before the item is called, preferably before the meeting begins.

Material may be emailed to (insert Commission contact email) no later than 1 PM on the day of the meeting. Please specify which portion of the agenda you are commenting on, for example, Report item # or Public Comment. Your comments will be presented to the Commission at the appropriate time. Any correspondence received after 1 PM will be distributed to the Commission and retained for the official record.

## A. CALL TO ORDER

## **B. PLEDGE OF ALLEGIANCE**

## C. ROLL CALL

## D. PUBLIC COMMENT

Members of the public who wish to speak on any matter not listed on the agenda may speak during this portion of the meeting and will be allotted 3 minutes. State law prohibits the Commission from acting at this meeting on any matter raised during the public comment period. Members of the public who wish to speak on a matter that is listed on the agenda will be called upon to speak during discussion of that item.

#### E. CONSENT CALENDAR

Adoption of the Consent Calendar may be made by one motion of the Commission, provided that any Member, individual, or organization may request removal of an item from the Consent Calendar for separate consideration. If a request for removal of an item from the Consent Calendar has been received, the item will be discussed and voted on separately.

#### F. ACTION ITEMS

#### G. REPORTS

**G.1.** 25-960

**SUBJECT:** Bicycle and Pedestrian Advisory Commission Roles and Responsibilities

#### REPORT IN BRIEF

For the benefit of new members of the Bicycle and Pedestrian Advisory Commission (BPAC), Merced Municipal Code Chapter 2.52 - "Bicycle and Pedestrian Advisory Commission" introduces the BPAC and lists the Roles and Responsibilities below:

The purpose of the Bicycle and Pedestrian Advisory Commission is to serve as an advisory body to the City Council on matters having to do with bicycling, pedestrian activity, and other modes of active transportation within the City of Merced, as well as the mobility needs of the elderly and those with disabilities. They are to be used in an advisory capacity to the City Council to improve conditions for users of all active modes in the City of Merced, promote active transportation with the associated benefits of improved air quality, improved safety conditions for users of all modes, and health benefits, and to help advise on matters of policy, programs, and bike routes for active transportation users of all ages. The BPAC shall consist of seven (7) voting members, 6 of which represent a different district within the City of Merced and the 7th member serves at-large. In addition, the City Council may appoint up to an additional 4 ex-officio, non-voting members. The BPAC shall have the responsibilities as provided below:

- 1. Review and advise the City Council, as directed by the City Council or requested by the staff, on the design of capital improvement projects, street improvements, and parking facility projects as they relate to bicycling, pedestrian activity, or other active transportation issues.
- 2. Review and advise the City Council, as directed by the City Council or requested by the staff, on changes and updates to the active transportation and safe-routes-to-school plan, general plan, Municipal Code and other policy documents which relate to active transportation.
- 3. Promote any and all forms of active transportation as a viable form of transportation.

- 4. Assist in the development and dissemination of awareness and education materials for all forms of active transportation to the community.
- 5. Initiate requests to City staff from the community on issues of concern related to bicycling, pedestrian issues, and issues that relate to other forms of active transportation or the transportation needs of elderly individuals or those with disabilities.
- 6. Such other duties as the City Council may prescribe
  This does not require action by the Commission at this meeting.
- G.2. 25-957 SUBJECT: Merced Comprehensive General Plan Update and Downtown Station Area Plan

#### REPORT IN BRIEF

The City of Merced is undertaking a Comprehensive General Plan Update and the creation of a Downtown Station Area Plan. A comprehensive General Plan update is a periodic revision and update of the City's long-term planning document, which serves as a blueprint for future development and conservation.

#### H. BUSINESS

H.1. 25-959 SUBJECT: Requests to Add Items to Future Agenda

#### REPORT IN BRIEF

Provides Commissioners an opportunity to request that an item be placed on a future Bicycle and Pedestrian Advisory Commission agenda for initial consideration.

H.2. <u>25-958</u> SUBJECT: Commissioner Comments

#### REPORT IN BRIEF

Provides Commissioners an opportunity to make a brief announcement on any activities they have attended on behalf of the City and/or on future community events/activities that relate to active transportation. The Brown Act does not allow discussion or action by the legislative body under this section.

## I. ADJOURNMENT



## CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

## **ADMINISTRATIVE REPORT**

**File #:** 25-960 Meeting Date: 10/28/2025

Report Prepared by: Jonnie Lan, AICP, Acting Planning Manager, Development Services Department

SUBJECT: Bicycle and Pedestrian Advisory Commission Roles and Responsibilities

#### REPORT IN BRIEF

For the benefit of new members of the Bicycle and Pedestrian Advisory Commission (BPAC), Merced Municipal Code Chapter 2.52 - "Bicycle and Pedestrian Advisory Commission" introduces the BPAC and lists the Roles and Responsibilities below:

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**File #:** 25-960 Meeting Date: 10/28/2025

This does not require action by the Commission at this meeting.

# MERCED

## CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

## ADMINISTRATIVE REPORT

**File #:** 25-957 Meeting Date: 10/28/2025

Report Prepared by: Jonnie Lan, AICP, Acting Planning Manager, Development Services Department

SUBJECT: Merced Comprehensive General Plan Update and Downtown Station Area Plan

#### REPORT IN BRIEF

The City of Merced is undertaking a Comprehensive General Plan Update and the creation of a Downtown Station Area Plan. A comprehensive General Plan update is a periodic revision and update of the City's long-term planning document, which serves as a blueprint for future development and conservation.

## DISCUSSION

The last General Plan was adopted in 2012. Over the past several years, individual chapters have been revised as needed. However, due to changes in State law among other things, it has been determined that it is time for the General Plan to be comprehensively updated. A General Plan addresses a broad range of issues related to land use, housing, transportation, infrastructure, and community well-being. Updating it at regular intervals ensures the plan remains relevant and effective.

Through the process the community will define the Planning Area, the long-term community vision for the future (spanning about 20 years or more), establish goals, objectives, policies, and establish implementation measures to achieve that vision.

Mandatory elements or chapters include Air Quality, Land Use, Circulation, Housing, Conservation, Open Space, Noise, Environmental Justice and Safety. The City of Merced will also consider other chapters like Economic Development and Public Facilities.

This process will involve extensive public participation. This engagement began this summer. The City has held stakeholder meetings (Transportation, Developer and Real Estate and Downtown Merchant focus groups), an interactive meeting for Citizen Based Organizations and a couple of Citizens Advisory Focus Group (CAFG) meetings. As mentioned last meeting, the Bicycle and Pedestrian Advisory Commission is represented on the CAFG by Ex-Officio Member Curtis Thomas. The next meeting of the CAFG (CAFG #3) will take place November 10, 2025, from 6:00-8:00 in the City Council Chambers. It is an open, public meeting so we would encourage anyone from the public to join and participate.

The last several months staff has been working on Existing Conditions and Trends documents for both the General Plan Update effort and the Downtown Station Area Plan. Existing Conditions and Trends documents reflect as close to the existing "real time" status of those issues that the General

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Plan Chapters normally address (i.e. Air Quality, Land Use, Circulation, Housing, Conservation, Open Space, Noise, Environmental Justice, Safety, Economic Development and Public Facilities). This creates a baseline upon which the General Plan can be built. The document is still in draft form. It has been attached for the BPAC to review.

The City held the first public workshop/open house on Thursday October 23<sup>rd</sup>, 2025. There City Staff and the consultant team heard the community's response to what they feel currently reflects the existing conditions and trends of the City.

You may give any comments about the General Plan Update or the Downtown Station Area Plan at the meeting, however, if you could send the comments to staff at <a href="mailto:lanj@cityofmerced.gov">lanj@cityofmerced.gov</a>, as well, that would be appreciated. You can also submit comments online and find information about the General Plan Update and Downtown Station Area Plan at the project website <a href="https://www.imaginemerced.com">www.imaginemerced.com</a>>.









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## CITY OF MERCED

# EXISTING CONDITIONS AND TRENDS WORKBOOK





**DRAFT, October 2025** 

# Acknowledgements

## City of Merced

Scott McBride, City Manager

Leah Brown, Management Analyst,

**Development Services** 

Frank Quintero, Deputy City Manager,

Jenneifer Flachman, Public Information Officer

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Brent Gibbons, Project Director

Michael Gibbons, Project Manager

Ryan Lester, Assistant Project Manager

Nikki Zanchetta, Planner

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Paul Stephenson, Senior Managing Associate

#### **DKS Associates**

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Roger Dale, Managing Principal

## **City of Merced City Council**

Mathew Serratto, Mayor

Council Member

Darin Dupont

Council Member, District 1

Ronnie De Anda

Council Member, District 2

Mike Harris

Council Member, District 3

Shane Smith

Council Member, District 4

Sarah Boyle, Mayor Pro Tempore

Council Member, District 5

Fue Xiong

Council Member, District 6

# City of Merced Planning Commission

Anthony Gonzalez

Chair, District 5 Commissioner

Jeremiah Greggains

Vice-Chair, At-Large Commissioner

Walter Smith

District 1 Commissioner

Yang Pao Thao

District 2 Commissioner

Emanuelle Ochoa

District 3 Commissioner

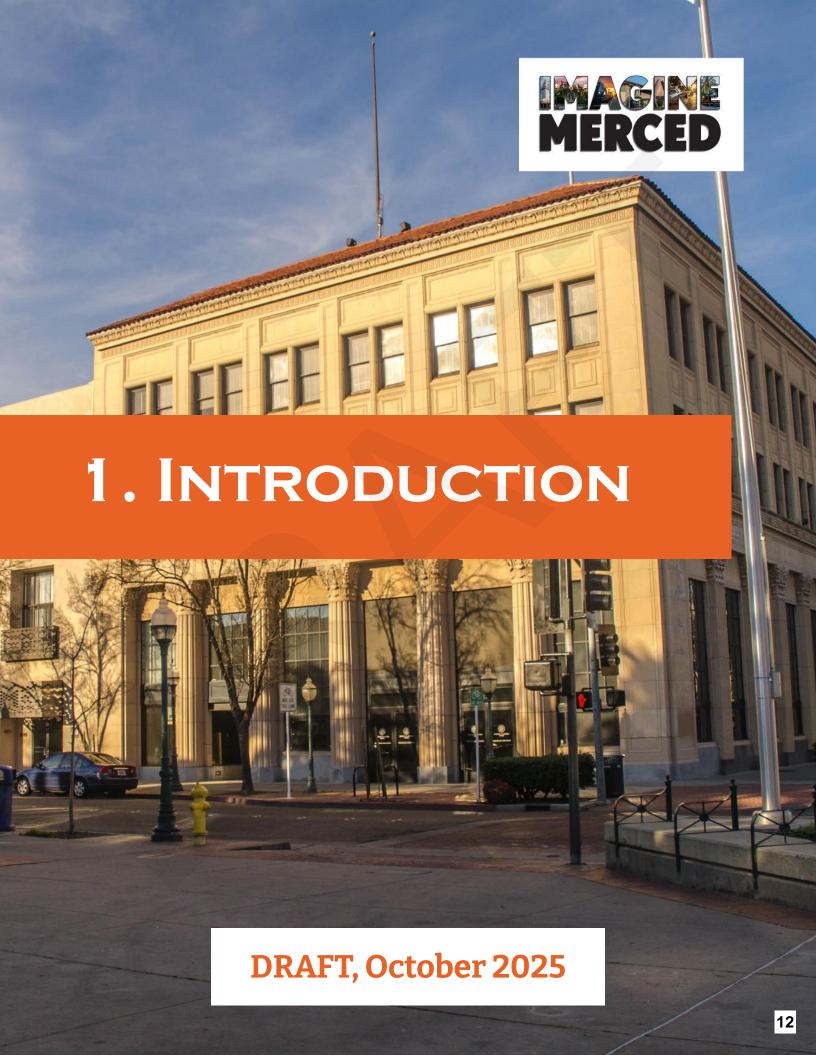
Jose Delgadillo

District 6 Commissioner

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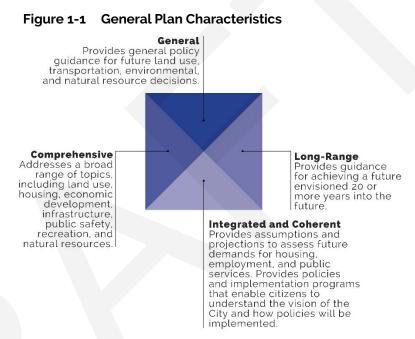
## What is the Existing Conditions and Trends Workbook?

This Workbook provides a concise, reader-friendly overview of the various topics covered in the Merced General Plan. The purpose of the Workbook is to document the current state of the community by analyzing existing conditions and identifying key trends that will help guide the General Plan Update. The Workbook includes a mix of text, infographics, charts, graphs, and maps to provide a clear depiction of the current conditions and trends that will shape the future of Merced.

## What is a General Plan?

Every jurisdiction in California must have a general plan, which is the local government's long-term framework or "constitution" for future growth and development. The general plan represents the community's vision of its future and establishes the development needs necessary to support that vision. General plans contain goals and policies upon which the City Council and Planning Commission base their land use decisions and are designed to address topics facing the city for the next 20-25 years. General plans refer to these topics as "elements."

There are currently nine mandatory general plan elements: land use, circulation, housing, conservation, open space, noise, safety, environmental justice, and air quality (only applicable to jurisdictions within the San Joaquin Valley). Communities can include other elements that address issues of local concern, such as economic development, community character, or water. Communities can also organize their general plan any way they choose, as long as they address each of the required topics.

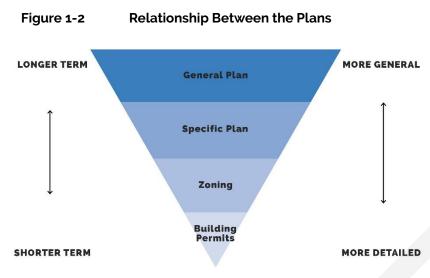


# Purpose of the General Plan Update

A general plan is not a static document but rather a living, adaptive blueprint which evolves with the changing needs and desired vision of a community. The City of Merced adopted its current Vision 2030 General Plan in 2012, with some elements being updated since then. While the existing General Plan is serving the community well, this monumental update will address emerging trends, ensure compliance with recent State laws, and consider new opportunities for the City.

## How Do the General Plan and Zoning Code Differ?

A general plan is not to be confused with a zoning code. Although both a general plan and zoning code designate how land may be developed, they do so in different ways. A general plan has a broad, long-term outlook. It identifies the general types of development allowed, the spatial relationships among land uses, and the overall pattern of future development. On the other hand, a zoning code (also commonly referred to as a "development code" or "zoning ordinance") contains those regulations which dictate various land use decisions at a parcel level. These regulations are referred to as "zoning" regulations.



A zoning code is the tool used to implement the vision and general land use guidance provided in a general plan. Zoning codes and development regulations achieve this by regulating development through specific standards such as lot size, building setbacks, height, and allowable uses. Development must not only meet the specific requirements established in a jurisdiction's zoning regulations but also the broader policies set forth in the community's general plan.

# Purpose of the Downtown Station Area Plan

Merced is expected to become a hub for rail, bus, and other mobility modes in the coming years. Rail service at the Central Merced Station will include Altamont Corridor Express (ACE), Amtrak San Joaquin, and the California High Speed Rail (HSR). The upcoming investment and changes in the intrastate rail services throughout the region provides an excellent opportunity for redevelopment in the area surrounding the proposed station.

# **Regional Planning Initiatives**

Several regional planning initiatives are currently underway that are expected to influence the City of Merced and shape key components of its General Plan Update. Understanding the goals of these broader efforts, and actively tracking their progress, is essential to maintaining alignment and consistency across all planning activities that affect the community. Below are some of the major regional initiatives likely to impact Merced:

Annexation of the University of California Campus and AB 3312. In August 2024, the Merced County Local Agency Formation Commission (LAFCo) gave final approval of the annexation of over 1,130 acres of land northeast of Merced. AB 3312 allows for several contiguous properties adjacent to the UC to be annexed, in spite of not meeting traditional LAFCO requirements. The Virginia Smith Trust (VST) was the first of those properties to be annexed. LAFCO approved the annexation in October 2024 The VST project is planned to be developed into a new university-oriented community that includes housing, retail, parks, transportation infrastructure, and a future business park. The new development is expected to better integrate UC Merced with the city and create a vibrant new neighborhood.

6<sup>th</sup> Cycle Multi-Jurisdictional Housing Element Update. The City of Merced is participating in a joint housing element update with the County of Merced and the cities of Atwater, Dos Palos, Gustine, Livingston, and Los Banos. The Multi-Jurisdictional Housing Element Update will assess how the participating jurisdictions' current demands are being met and plan for projected housing

needs over the next eight years. Jurisdictions will continue to prioritize affordable housing available for all residents, tailored to the unique demographics of each community.

**Regional Active Transportation Plan.** The purpose of the Regional Active Transportation Plan is to establish a safe and functional regional network of pedestrian and bicycle facilities to better connect where people live to where they need to go in Merced County. The plan will advance strategies to help reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions and prioritize equitable access to the regional transportation network.

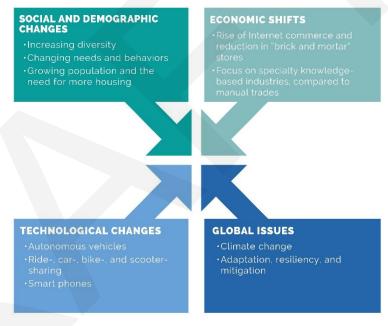
## **Notable State Laws**

**SB 244** (2011) requires cities and counties to address the infrastructure needs of unincorporated disadvantaged communities in city and county general plans.

**SB 743** (2013) introduced the use of vehicle miles traveled (VMT) as the metric for evaluating environmental impacts related to vehicle traffic. This aimed to balance congestion management with infill development, active transportation, and GHG emissions reduction.

AB 52 (2014) requires the identification and reduction of adverse changes to significant tribal cultural resources during the California Environmental Quality Act (CEQA) analysis.

Figure 1-3 Topics to Address State law



**SB 379** (2015) requires all cities and counties to include climate adaptation and resiliency strategies in the safety elements of their general plan.

**SB 1000** (2016) requires cities and counties to address environmental justice in their general plans, either through an environmental justice element or through goals, policies and objectives integrated in other elements.

**SB 32** (2017) extended the commitment to reduce statewide greenhouse gas (GHG) emissions, targeting a 40 percent reduction in statewide GHG emissions below 1990 levels by 2030.

## California 2017 and 2019 Housing Package (Enacted in 2017 and 2019)

- Aimed to streamline housing development processes.
- Provided State financial incentives for housing production.
- Streamlined permitting and approval processes.
- Limited fees for housing production.

• Facilitated the development of accessory dwelling units (ADUs) by removing barriers to approval and construction (SB 330).

**AB 747** (2019) requires local governments to review and update the safety element to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios.

**SB 99** (2019) requires a local government to review and update the safety element during the next revision of the housing element to identify residential developments in hazard areas that do not have at least two emergency evacuation routes.

**AB 1409** (2021) requires local governments to review and update the safety element to identify evacuation locations and their capacity, safety, and viability under a range of emergency scenarios.

**SB 1425** (2022) requires every city and county to review and update its open-space element update to include plans and an action program that address open space access and climate resilience.

**SB 932** (2022) Requires every city and county to develop and implement bicycle plans, pedestrian plans, and traffic calming plans upon a substantive revision of the circulation element.

**AB 98** (2024) requires all local jurisdictions to update the circulation element of their General Plan to include specific requirements for truck routes by 2026 in the "warehouse concentration region", or by 2028 elsewhere.

**AB 1889** (2024) requires an update to the conservation element to consider the impact of development on the wildlife movement and habitat connectivity on or after January 1, 2028

**SB 9** (2021) creates a ministerial approval process for lot splits and duplex construction on parcels zoned for single-family uses, if the project meets specified requirements.

**SB35** (2017) aims to addressing the State's housing shortage and high costs by requiring local governments to establish objective design standards for qualifying multi-family residential developments as a part of a streamlined ministerial approval process for multi-family residential developments.

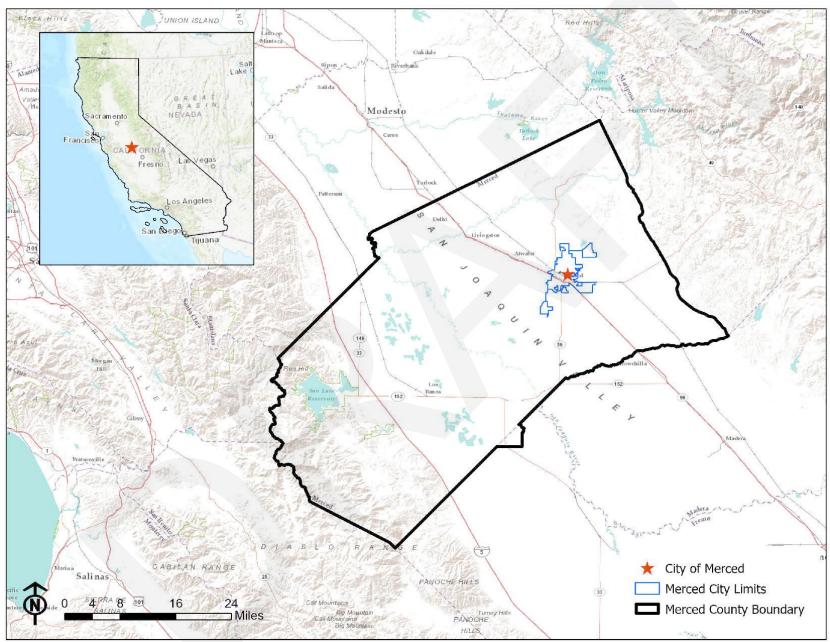
**SB375** (2008) requires the California Air Resources Board to develop and set regional targets for greenhouse gas (GHG) emission reductions from passenger vehicles. The Air Resources Board updates these regional targets at least every eight years.

# Regional Setting and Local Planning Boundaries

Merced is located in Merced County, in the heart of the San Joaquin Valley. The region enjoys a Mediterranean climate with mild wet winters and hot summers. Merced is recognized as the regional hub for education, culture, and business, all within close proximity to the Sierra Nevada mountains. Residents enjoy easy access to outdoor recreation including national parks, skiing, beaches, fishing, and other outdoor activities. Historically, Merced has been considered the "Gateway to Yosemite" due to its proximity to Yosemite National Park.

The areas surrounding Merced are largely agricultural and suburban, with the communities of Franklin to the west, Lingard to the Southeast, and Bear Creek, Tuttle, and Calpack to the west. Atwater is the nearest incorporated city, located about eight miles northwest of downtown Merced along SR 99. Merced is also strategically positioned close to major urban centers, including San Jose, Sacramento, and Fresno.

Figure 1-4 Regional Setting



# **City History**

## **Yokuts Indians Settlement**

Long before the Spanish settled the region, the San Joaquin Valley was inhabited by the Yokuts Indians who lived a semi-nomadic subsistence lifestyle. The Yokuts roamed the lands and were often territorial towards western trappers and settlers who would occasionally travel through the valley.



## **Spanish Colonial Exploration**

While the early Spanish explorations and settlements were concentrated along the California coast, a number of altercations with natives resulted in a military expedition into the valley to recover stolen horses. In 1806, Lieutenant-General Gabriel Moraga led 30 men across the San Joaquin River where they crossed a hot plain before arriving at a river which he named "El Rio de Nuestra Senora de la Mercedes" (the "River of Our Lady of Mercy").



## **Early Western Settlements**

By the middle of the 19<sup>th</sup> Century, land grants were issued throughout the valley by the Spanish, and later by the Mexican government, leading to the earliest western settlements. After the Mexican War, American settlers came into the valley and all land that did not fall under a previously established land grant was free to settle.



## **Early Growth**

The town of Merced was established in 1872 by the Central Pacific Railroad and was named after the Merced River. It became the county seat shortly after and was incorporated in 1889. Merced developed as an agricultural and transportation center that serviced the surrounding agricultural economy of the San Joaquin Valley.



## Japanese American History

During World War II, Japanese Americans were detained all along the West Coast under Executive Order 9066. Roughly 4,600 Japanese Americans were transported to Merced and were held at the Merced Assembly Center for four months prior to being transported to a permanent internment camp in Colorado. This history has a lasting effect on the San Joaquin Valley and the greater West Coast region.





## Turn of the Century

In the late 20<sup>th</sup> Century, the City attracted new industries including printing, fiberglass boat production, and warehousing. In 1995, the Castle Air Force Base was closed in response to the end of the Cold War. Castle Airport took its place as a distribution center, reloading base for aerial firefighting, and the headquarters of the Sierra Academy of Aeronautics. In 2005, UC Merced opened and was recognized as the first American research university of the 21<sup>st</sup> Century.



## **Present**

Today, Merced continues to be a major agribusiness hub and center for higher education. The primary industries in Merced include food and beverage production and packaging, manufacturing, distribution, and life science and environmental sciences. The development of California High Speed Rail in the region is expected to be a major economic driver for Merced in the coming years.

# What has changed since the City last comprehensively updated its General Plan?

Since the Vision 2030 General Plan Update, Merced has undergone several major changes that will impact this General Plan Update effort.

## **Population Growth**

According to the US Census American Community Survey (ACS), the population of Merced has grown from 81,120 residents in 2015 to 96,082 in 2024, approximately an 18 percent growth rate over the 9-year period. The California Department of Finance estimates that in 2025, the population of Merced increased further to 98,039.

## California High Speed Rail

California High Speed Rail (HSR) construction began in the San Joaquin Valley began in January 2015. Approximately 119 miles of the 171-mile Initial Operating Segment (IOS) from Merced to Bakersfield has been constructed.

## **Downtown Merced Revitalization**

There have been multiple downtown Merced revitalization projects that have taken place in the last decade, including the apartment conversion of the historic Tioga Hotel, major renovations to the El Capitan Hotel, and renovations to the historic Mainzer Theater.

## **UC Merced Annexation**

As mentioned above,, the approximately 1,130-acre UC Merced campus was annexed into the City of Merced, significantly expanding the City's jurisdiction.

## References

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## What is Land Use?

Land Use describes the current or projected uses of a property, whether for residential, commercial, industrial, and/or other uses. Land use policies, plans, and standards guide growth and development and shape the fabric of Merced. This chapter provides a snapshot of land use patterns in Merced in 2025 and examines existing and planned land uses.

# **Existing Land Uses**

When preparing an updated General Plan land use map, it is crucial to understand the distribution of existing land uses and where they are located throughout the city. Existing land use data is provided by the City of Merced Planning Division. Although the existing land use of a property does not carry any regulatory significance and may or may not be consistent with current General Plan land use designations or zoning for the property, this information can assist in evaluating the effectiveness of past General Plan policies in directing new growth. The most common land uses by total land area include Public Facilities and Low Density Residential. Figure 2-1 and Table 2-1 provide a breakdown of the existing General Plan land use classifications.

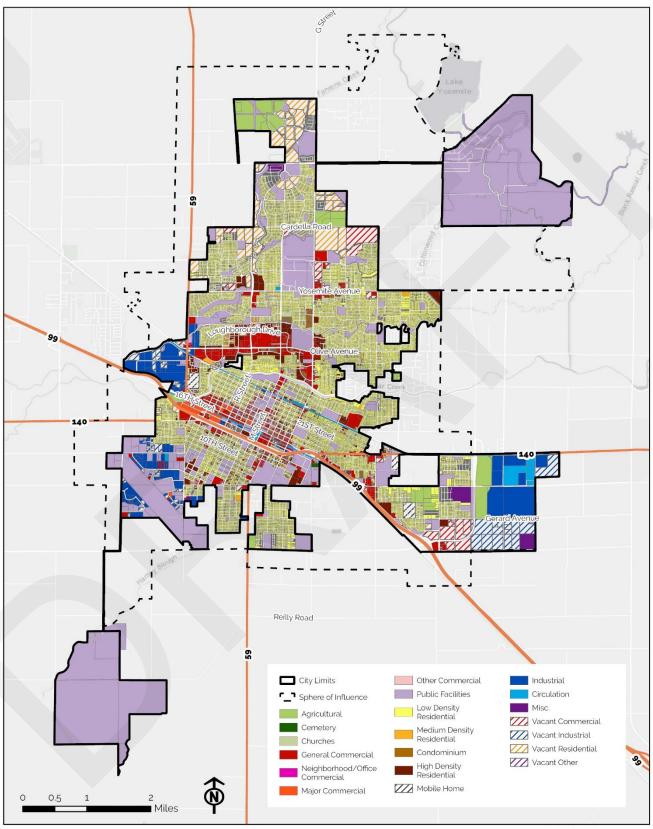
Table 2-1 Existing Land Uses

Existing Land Use	Acres	Percent
Agricultural	484.7	3.5%
Cemetery	4.8	0.04%
Churches	80.6	0.6%
Public Facilities	5,424.7	39.3%
General Commercial	701.6	5.1%
Neighborhood/Office Commercial	18.6	0.1%
Major Commercial	66.8	0.5%
Other Commercial	3.9	0.03%
Low Density Residential	3,594.5	26.0%
Medium Density Residential	151.3	1.1%
Condominium	94.9	0.7%
High Density Residential	351.1	2.5%
Mobile Home	76.2	0.6%
Industrial	807.2	5.8%
Circulation	236.6	1.7%
Misc.	113.3	0.8%
// Vacant Commercial	380.8	2.8%
// Vacant Industrial	401.7	2.9%
// Vacant Residential	814.3	5.9%
Vacant Other	8.8	0.1%
TOTAL*	13,816.3	-

\*Note: Only includes parcel area within the City Limit.

Source: City of Merced, 2025.

Figure 2-1 Existing Land Uses



Last updated: July 14, 2025

# **Existing Zoning**

Zoning districts in the Zoning Code provide design and development standards for each parcel of land. Zoning districts differ from General Plan land use designations in that the General Plan provides general guidance on the location, type, and density of growth and development, whereas zoning districts provide specific standards that new, current development must follow, including building standards as well as specific uses that are permitted, conditionally permitted, or are not allowed within each district. The City has 28 zoning districts and three overlay zones; however, only 19 zoning districts are currently applied to parcels and no overlay zones are in use. The most common zoning districts by total land area include Low Density Residential and Planned Development. These zoning districts are organized as follows:

Table	2-2	Existing	Zonina
IUDIC		Existing	_0,9

Existing Zoning District	Acres	Percent
Residential Zoning Districts		
Rural Residential	0	0.0%
Low Density Residential	5,395.0	32.2%
Low Medium Density Residential	334.6	2.0%
Medium Density Residential	443.0	2.6%
High Density Residential	203.3	1.2%
Mobile Home Residential	82.6	0.5%
Commercial Zoning Districts		
Regional/Central Commercial	187.2	1.1%
General Commercial	314.9	1.9%
Thoroughfare Commercial	233.1	1.4%
Neighborhood Commercial	68.3	0.4%
Shopping Center Commercial	5.8	0.03%
Office Commercial	196.9	1.2%
Business Park	81.2	0.5%
Industrial Zoning Districts		
Light Industrial	1,048.2	6.3%
Heavy Industrial	1,154.8	6.9%
Downtown Zoning Districts		
Downtown Core	0	0.0%
Downtown Office	0	0.0%
Downtown Commercial	0	0.0%
Urban Village Zoning Districts		
Inner Village Residential	0	0.0%
Outer Village Residential	0	0.0%
Village Commercial	0	0.0%
<b>Public Use and Agricultural Zoning Districts</b>	5	
Parks and Open Space	0	0.0%
Public Facility	1,139.2	6.8%
Public Parking District	0	0.0%
Agriculture	1,597.6	9.5%

Existing Zoning District	Acres	Percent	
Special Use Zoning Districts			
Urban Transition	53.4	0.3%	
Planned Development	3,649.8	21.8%	
Residential Planned Development	548.8	3.3%	
Overlay Zones			
High Speed Rail	0	0.0%	
Airport Environ	0	0.0%	
Urban Residential	0	0.0%	
TOTAL* 16,737.6		-	

\*Note: Includes parcel area within the City Limit, including certain streets. Source: City of Merced, 2025.

## **Residential Zoning Districts**

#### Rural Residential (R-R)

The R-R Zoning District provides an area for single-family dwellings on large lots in a semi-rural environment. The R-R Zoning District serves as a buffer between urbanized areas and agricultural land and other environmentally sensitive or natural resource areas. The minimum density standard for this zoning district is one dwelling unit per acre (DU/acre).

## Low Density Residential (R-1)

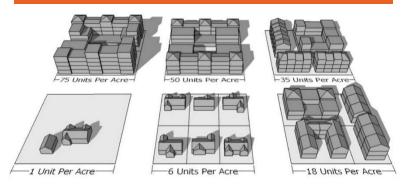
The R-1 Zoning District is intended to stabilize, protect, and encourage the establishment and maintenance of a suitable environment for detached single-family dwellings, duplexes, and other land uses typically compatible with a low-density residential setting. The R-1 Zoning District is divided into four subzones (R-1-20, R-1-10, R-1-6, and R-1-5) allowing for a range of minimum lot sizes. The minimum density standard for this zoning district ranges from 2.2 to 8.7 DU/acre, depending on the minimum lot size requirement.

## **Low Medium Density Residential (R-2)**

The R-2 Zoning District is intended to stabilize, protect, and encourage the establishment and maintenance of a suitable environment for single-family dwellings, duplex homes, limited multi-

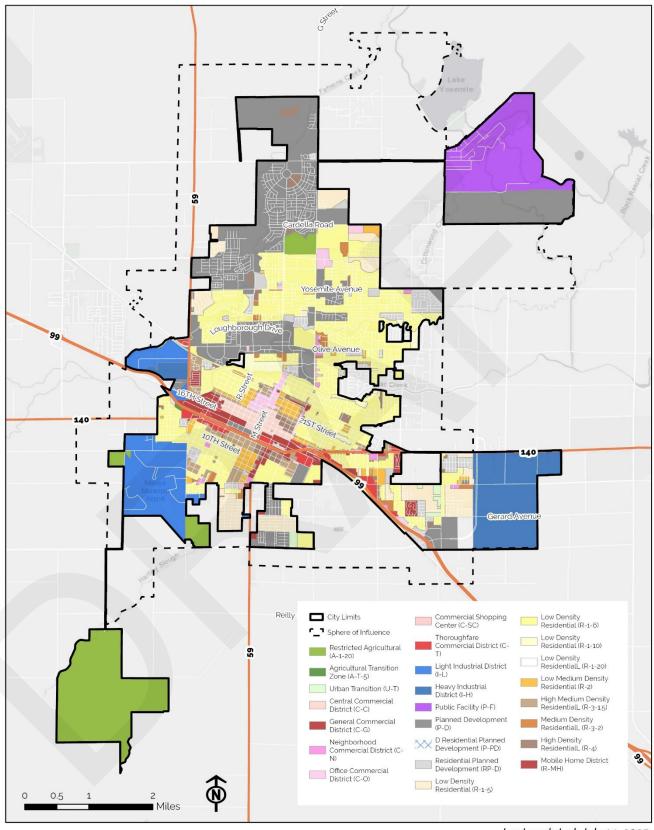
# What is Density? ♠️

"Density" indicates the number of residential dwelling units allowed to be developed per acre of land. This metric is calculated by dividing the number of dwelling units by the net acreage (total acreage minus roadways and easements) of a parcel. Density standards are often used to allow a range of minimum to maximum residential densities on a parcel.



family dwellings, and other land uses typically compatible with a low to medium-density residential setting. The minimum density standard for this zoning district is 14.5 DU/acre.

Figure 2-2 Existing Zoning



Last updated: July 14, 2025

## **Medium Density Residential (R-3)**

The R-3 Zoning District provides areas for a full range of residential uses, including single-family dwellings, duplex homes, multi-family dwellings, single room occupancy (SRO) housing<sup>1</sup>, and other land uses typically compatible with a medium density residential setting. The R-3 Zoning District is divided into two subzones (R-3-1.5 and R-3-2) allowing for a range of permitted residential densities. The minimum density standard for this zoning district ranges from 21.7 to 29.4 DU/acre, depending on the minimum lot size requirement.

## **High Density Residential (R-4)**

The R-4 Zoning District provides areas for the highest density residential uses in Merced. Permitted uses include single-family dwellings, duplex homes, multi-family dwellings, single room occupancy housing, and other land uses typically compatible with a high-density residential setting in close proximity to shopping, transportation, and other facilities. The minimum density standard for this zoning district is 43.5 DU/acre.



Source: Huff Construction Company

## Mobile Home Park (R-MH)

The R-MH Zoning District provides areas for mobile home parks with regulations and standards intended to maintain a suitable environment for mobile home park residents. The maximum density standard for this zoning district is 10.0 DU/acre.

## **Commercial Zoning Districts**

## Neighborhood Commercial (C-N)

The C-N Zoning District provides areas for shopping centers and other commercial uses that serve the day-to-day needs of residential neighborhoods. The C-N zoned districts are only located where

analysis of the residential population demonstrates that such facilities are justified.

#### Shopping Center Commercial (C-SC)

The C-SC Zoning District provides areas for grocery stores, supermarkets, and other retail establishments selling groceries to serve local residents as well as the larger regional market.

#### Regional/Central Commercial (C-C)

The C-C Zoning District provides areas for a diversity of commercial and residential land uses in the central business district and regional centers. These uses help to support a vibrant retail destination,



<sup>&</sup>lt;sup>1</sup> Single room occupancy (SRO) is a form of housing that is typically aimed at residents with lower incomes who rent small, furnished single rooms with a bed, chair, and sometimes a small desk.

provide jobs for residents, and accommodate commercial and service uses to meet the needs of community and regional businesses and residents.

#### Office Commercial (C-O)

The C-O Zoning District provides locations for a broad range of office uses including professional offices, business offices, medical offices, and regional or "back" offices. The C-O Zoning District can also accommodate limited "accessory" restaurant, retail, and service uses that cater to the needs of on-site employees and visitors.

## **Thoroughfare Commercial (C-T)**

The C-T Zoning District provides areas for auto-oriented commercial uses that accommodate the needs of people traveling on highways and local motorists. The C-T Zoning District also accommodates large recreational facilities and heavy commercial uses that benefit from proximity to highways.

## **General Commercial (C-G)**

The C-G Zoning District provides areas for heavy commercial and light industrial uses that may impact neighboring uses and often require large parcels and benefit from separation from retail uses.

## **Business Park (B-P)**

The B-P Zoning District provides locations for employment-intensive uses within an attractive campus-like setting. The B-P Zoning District primarily allows offices, research and development businesses, and limited commercial retail uses to serve employees in the area.

## **Industrial Zoning Districts**

## **Light Industrial (I-L)**

The I-L Zoning District provides areas for manufacturing, wholesale, and storage activities that meet City standards to ensure compatibility with surrounding areas and that maintain and strengthen the economic base of the city.

## **Heavy Industrial (I-H)**

The I-H Zoning District provides areas for a full range of industrial land uses, including operations that necessitate the storage of hazardous or unsightly materials, and



Source: Crexi

encourages sound industrial development by providing and protecting an environment exclusively to insure the protection of surrounding areas.

## **Downtown Zoning Districts**

## **Downtown Core (D-COR)**

The purpose of the D-COR Zoning District is intended to maintain and enhance a vibrant downtown core with a diversity of land uses. The D-COR Zoning District supports downtown as a destination for arts, entertainment, retail, and dining uses, with housing that contributes to the vitality of the area. The design of development helps to create a pedestrian-friendly environment and an active

public realm. A mixture of land uses and higher intensity development supports transportation options, including walking, bicycling, and use of transit. As of 2025, this district is not applied to any parcels in the city.

#### **Downtown Office (D-O)**

The purpose of the D-O Zoning District is to accommodate a concentration of office uses that support a vibrant and dynamic downtown. The D-O Zoning District accommodates a variety of land uses, including personal service and office uses. In the D-O Zoning District buildings are designed to support an active and inviting public realm. The D-O Zoning District creates an attractive environment for businesses and employers that enhances the economic vitality of the community. The D-O Zoning District also serves as a buffer between more intensive development in the D-COR Zoning District and surrounding residential neighborhoods. As of 2025, this district is not applied to any parcels in the city.

#### **Downtown Commercial (D-CM)**

The purpose of the D-CM Zoning District is to encourage growth and investment in commercial areas adjacent to Merced's downtown core. New development in the D-CM Zoning District will provide amenities for adjacent residential neighborhoods and enhance the appearance of gateways into downtown. Development supports a pedestrian-friendly environment with buildings located near the front sidewalk and parking located to the side or rear. A variety of land uses, including residential, commercial, and office, contribute to an active and inviting environment. As of 2025, this district is not applied to any parcels in the city.

## **Village Zoning Districts**

The Village Zoning Districts are intended to promote the development of high quality neighborhoods in new growth areas of Merced. These neighborhoods are characterized by a mixture of land uses that enable residents to easily walk and bike to a variety of destinations.

## Inner Village Residential (R-IV)

The R-IV Zoning District allows for higher density residential development within an urban village. The R-IV Zoning District accommodates a range of housing types, including apartments, townhomes, and other forms of multi-family housing. The R-IV Zoning District supports higher density housing located in close proximity to transit, employment uses, and commercial areas. The R-IV zoning district also may function as a buffer between village commercial areas and surrounding lower-density residential neighborhoods. As of 2025, this district is not applied to any parcels in the city.

## **Outer Village Residential (R-OV)**

The R-OV Zoning District allows for lower density residential uses within an urban village. Typical housing types within the R-OV Zoning District include single-family homes, duplex homes, and second units. The R-OV Zoning District accommodates single-family neighborhoods located in close proximity to public amenities such as parks and schools as well as neighborhood-serving retail and service uses. As of 2025, this district is not applied to any parcels in the city.

## Village Commercial (C-V)

The C-V Zoning District functions as the center of activity within an urban village. The C-V Zoning District accommodates a diversity of land uses, including commercial, residential, and civic uses.

Development in the C-V Zoning District supports a pedestrian-friendly environment and encourages the use of transit. Local streets, sidewalks, and bicycle paths provide safe and convenient access to the C-V Zoning District from surrounding residential neighborhoods. The C-V Zoning District meets the day-to-day shopping needs of area residents and provides a central gathering place for the use and enjoyment of surrounding neighborhoods. As of 2025, this district is not applied to any parcels in the city.

## **Public Use and Agricultural Zoning Districts**

## Parks and Open Space (P-OS)

The P-OS Zoning District provides areas for public parks and recreational facilities to serve existing and future residents. As of 2025, this district is not applied to any parcels in the city.

## **Public Facility (P-F)**

The P-F Zoning District provides areas for land uses and facilities owned and operated by governmental agencies.

## **Public Parking District (P-PK)**

The P-PK Zoning District provides a location for parking lots that are available for use by the public at no cost for minimum periods of time in each 24-hour period. As of 2025, this district is not applied to any parcels in the city.



Source: UC Merced

## Agriculture (A-G)

The A-G Zoning District provides space for continued agricultural uses within city limits. This zone replaces the previous A-1-20 Zoning District and applies to all land zoned A-1-20 within the city.

## **Special Use Zoning Districts**

#### **Urban Transition (U-T)**

The U-T Zoning District allows for the lawful continuation of land uses on land that is annexed to the City but not proposed for immediate urban development.

## Planned Development (P-D)

The Planned Development (P-D) Zoning Districts allow for high quality development that deviates from standards and regulations applicable to other zoning districts within Merced. There are two types of Planned Development Zoning Districts: The Planned Development (P-D) Zoning District and the Residential Planned Development (RP-D) Zoning District. The Planned Development Zoning Districts are intended to promote creativity in building design, flexibility in permitted land uses, and innovation in development concepts. The



Source: Century Communities

Planned Development Zoning Districts are also intended to ensure project consistency with the General Plan. Planned Development Zoning Districts provide land owners with enhanced flexibility

to take advantage of unique site characteristics to develop projects that will provide public benefits for residents, employees, and visitors to Merced.

## **Overlay Zones**

## Airport Environ (/AE)

The Airport Environs (/AE) Overlay Zone identifies areas in Merced where additional requirements apply to ensure the compatibility of land uses and development with operations at the Merced Regional Airport.

## High Speed Rail (/HSR)

No definition exists for this overlay zone.

#### Urban Residential (/UR)

The /UR Overlay Zone is intended to encourage high quality residential development in Merced's downtown and other urban neighborhoods. The Overlay Zone identifies permitted residential building types that reflect the traditional scale and character of these neighborhoods. These building types are permitted in addition to the use allowed by the underlying base zoning district. The /UR Overlay Zone increases choices for property owners and residents, promotes high quality design, and supports a vibrant and welcoming downtown area.

# What are Overlay Zones?



Overlay Zones establish special design and development standards that can be applied to parcels in addition to development standards from the underlying "base" zone. These standards help to create and implement specific structural, physical or design characteristics for new development projects.

# **Existing 2030 General Plan Land Use**

The City of Merced 2030 General Plan, including the Land Use Chapter, was adopted on January 3, 2012. The Land Use Chapter establishes land use classifications, which identify the types of development allowed (e.g., residential, commercial, industrial), residential density (i.e., how many units are allowed per acre), and the intensity for commercial and industrial development (i.e., the maximum allowed building bulk and lot coverage). In terms of land area, the most common General Plan land use designations include Low-Density Residential and High-Density Residential. Table 2-3 provides a breakdown of the existing General Plan land use classifications.

Table 2-3 Existing 2030 General Plan Land Use Classifications

Existing General Plan Land Use	Acros	Porcent
Classification	Acres	Percent
Agricultural Residential Land Use Classificati		
Rural Residential	2,122.5	5.7%
Agriculture	113.8	0.3%
Residential Land Use Classifications		
Village Residential	439.2	1.2%
Low-Density Residential	8,240.7	22.3%
Low-Medium Density Residential	1,129.5	3.1%
High-Medium Density	1711.1	4.6%
High Density Residential	5,718.7	15.4%
Residential Mobile Home	79.5	0.2%
Residential Reserve	360.3	1.0%
Office Land Use Classifications		
Public/Government	538.4	1.5%
School	1,665.7	4.5%
Future School	48.6	0.1%
Commercial Office	498.9	1.3%
Industrial Land Use Classifications		
Industrial	2,876.8	7.8%
// Industrial Reserve	1,194.9	3.2%
<b>Business Park Land Use Classifications</b>		
Business Park	460.5	1.2%
Business Park Reserve	88.2	0.2%
Commercial Land Use Classifications		
General Commercial	523.4	1.4%
Neighborhood Commercial	262.5	0.7%
Thoroughfare Commercial	729.3	2.0%
Regional/Community	656.0	1.8%
Commercial Reserve	90.3	0.2%
Open Space Land Use Classification		
Open Space/Park	1,704.8	4.6%
Future Park	71.0	0.2%
Other	,	
Community Plan	3,662.3	9.9%
Virginia Smith Trust Specific Plan	2,044.9	5.5%
Area of Interest	0.0	0.0%
TOTAL*	37,032.0	0.076

\*Note: Includes parcel area within the City Limit and the Merced Sphere of Influence. Source: City of Merced, 2025.

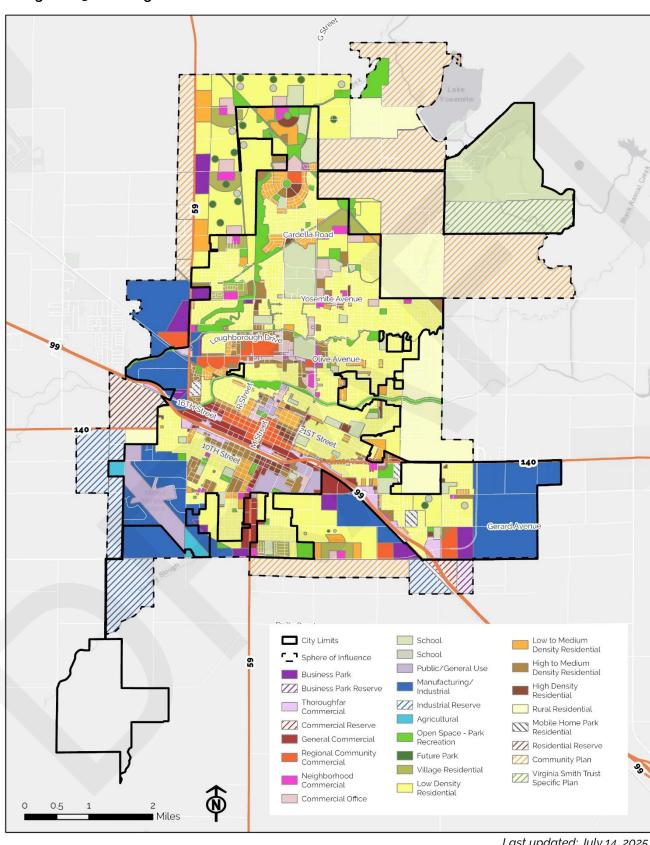


Figure 2-3 Existing General Plan Land Use Classifications

Last updated: July 14, 2025

#### Rural Residential (1 to 3 dwelling units per acre (du/ac))

Provides single family homes on large lots in a semi-rural environment as a buffer between agricultural land and other environmentally sensitive or resource areas and the city's urbanized areas.

#### Low Density Residential (2 to 6 du/ac)

Provides single family residential dwellings served by City services throughout the city. Primarily provides single-family detached housing, but some condominiums and zero-lot-line units can be developed.

#### Low-Medium Density Residential (6 to 12 du/ac)

Provides duplexes, triplexes, four-plexes, condominiums, zero-lot-line as well as single-family detached units on appropriately sized lots.

#### High-Medium Density Residential (12 to 24 du/ac)

Provides areas for multi-family development such as apartments, higher density triplex/fourplex units condominiums.

#### High Density Residential (24 to 36 du/ac)

Provides for the highest multi-family residential densities found only in limited areas of the city.

#### Mobile Home Park Residential (6 to 10 du/ac)

Provides designated areas within the city for the establishment of Mobile Home Park residential environments.

#### Village Core Residential (7 to 30 du/ac for a minimum average of 10 du/ac)

Provides for the development of mixed use, medium-density urban "village" centers in the undeveloped portions of the Merced Sphere of Influence.

#### General Commercial (0.35 Average Net FAR)

Provides areas for general commercial uses which are land-intensive commercial operations, involving some light manufacturing, repair, or wholesaling of goods. Typical activities include lumberyards, automobile repair shops and wrecking yards, farm equipment or mobile home sales, and building supplies and machine shops.

# Regional/Community Commercial (0.35 to 6.0 Average Net FAR)

Provides community and regional commercial centers

to serve the full depth and variety of retail goods, general merchandise, apparel, and home furnishings, with one or more major department stores as key tenants.

#### What is FAR?



"FAR" stands for "Floor Area Ratio."
FAR is an indicator of how much
building space can be constructed
on a given site. FAR provides for
overall development intensity, but
not the form or character of the
building.

#### Neighborhood Commercial (0.35 Average Net FAR)

Provides sites for retail shopping areas, primarily in shopping centers, containing a wide variety of businesses including retail stores, eating and drinking establishments, commercial recreation, auto services, etc., to serve residential neighborhoods.

#### Thoroughfare Commercial (0.35 Average Net FAR)

Accommodates auto-oriented commerce and the needs of people traveling on highways. Large recreational facilities and some "heavy commercial" uses are also common. Typical uses include motels, gas stations, truck stops, restaurants, automobile sales, auto repair shops, bowling alleys, driving ranges, skating rinks, souvenir shops, carwashes, and plant nurseries.

#### Commercial Professional Office (0.5 Average Net FAR)

Provides for a wide range of office commercial uses within the city. The array of relatively small-scale office activities range from professional uses (such as medical, dental, law, engineering, counseling, and architecture) to typical commercial/business office activities like real estate agencies and insurance agencies, financial institutions (banks, and savings and loans), and travel agencies.

#### Industrial (0.3 to 0.5 Average Net FAR)

Provides for the full range of industrial activities, including but not limited to manufacturing, food processing, trucking, packing, and recycling, as well as related office and production facilities.

#### **Business Park (0.4 Average Net FAR)**

Provides areas for a mix of commercial, office, and industrial uses with shared access and parking

facilities. Uses could include a wide variety of light warehousing, office, manufacturing, research and development, and service business activities.

#### **Residential Reserve**

Provides areas for future urban density residential expansion within the Merced Sphere of Influence (SOI). This classification, along with the other reserve classifications described below, is to be combined with an interim use classification, such as Agriculture, which maintains existing use practices in the area but establishes expected future uses based on need.

#### **Commercial Reserve**

Provides areas for future commercial expansion within the Merced SOI

#### **Industrial Reserve**

Provides areas for future industrial expansion within the Merced SOI.

# What is a Sphere of Influence?



The Local Agency Formation Commission (LAFCO) establishes the City's Sphere of Influence (SOI). An SOI typically includes both incorporated and unincorporated areas surrounding Merced. Land within the City's SOI may be annexed by the City, pending approval by LAFCO.

#### **Business Park Reserve**

Provides areas for future business park expansion within the Merced SOI.

#### **Area of Interest**

Applied to areas located outside the City's SOI, proximate to City territory, but not currently planned for annexation or City service, whose development may impact City planning efforts and that may be added to the SOI in the future.

#### Public/Government or School

Provides public facilities such as schools, fire stations, police stations, public buildings (libraries, courthouse, public offices, etc.) and similar types of public uses and facilities.

#### Open Space-Park/Recreation (0.1 Average Net FAR)

Provides public and private open space for outdoor recreation both passive and active. OS-PK areas may be designated in areas containing public parks, golf courses, greens, commons, playgrounds, landscape areas and similar types of public and private open spaces.

#### Open Space-Park/Recreation (0.1 Average Net FAR)

No definition exists for this classification.

# **Community Character and Design**

The character and design of buildings, infrastructure, and other components of the built environment play an important role in creating a distinctive community identity and improving the quality of life of residents. Well-thought out community character and design can also make a positive impact on economic development, community health, safety, and vitality in a city. Decision-making on future development that is informed by the ways in which community character and design influence the experience of a city helps to fulfill the needs of the residents and enhance the city as a place to live and work.

The urban core of the city is surrounded by diverse agricultural uses, providing residents with a wide range of rural and urban neighborhoods to live and shop in. The city offers abundant shopping, pleasant neighborhoods, and tree-lined streets. Downtown Merced is home to a number of historic buildings in its downtown, including 12 buildings on the National Register of Historic Places. Public art can be found throughout the downtown area.













Source (from left to right, top to bottom): (1) The Mainzer Restaurant and Theater, (2) Merced Theatre, Wikimedia, (3) Leggett House, Wikimedia, (4) Downtown Merced, Adam Blauert, (5) Residential home, Keller Williams, and (6) Spanish-Mediterranean home in Merced Historic District, Kalani Stone

# **Annexations**

Over time, cities often need more space to expand into to accommodate their growing population. This is done through annexations, where an area of land under County of Merced jurisdiction is added to the City's jurisdiction. Annexations can only occur through the approval of the Local Agency Formation Commission (LAFCo) of Merced County.

The most recent notable annexations into City of Merced jurisdiction were the annexations of UC Merced and Virginia Smith Trust Land, which brought approximately 1,794 total acres of land into the City Limit. These annexations occurred in July 2024 and October 2024, respectively. The City is looking to annex additional land to the north and south of its existing City Limit. O below shows all ongoing annexation and pre-annexation projects occurring as of July 2025.

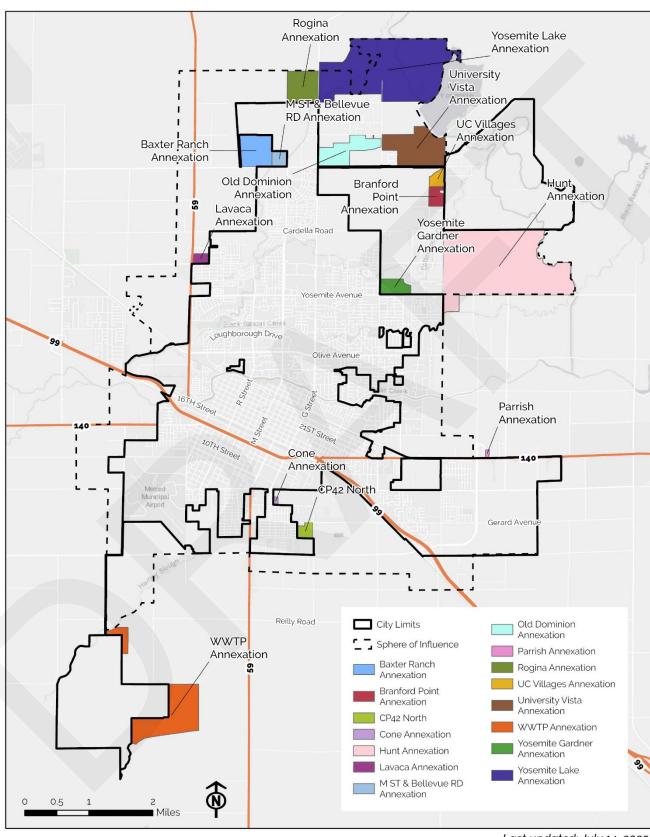


Figure 2-4 Ongoing Annexation and Pre-Annexation Projects, July 2025

Last updated: July 14, 2025

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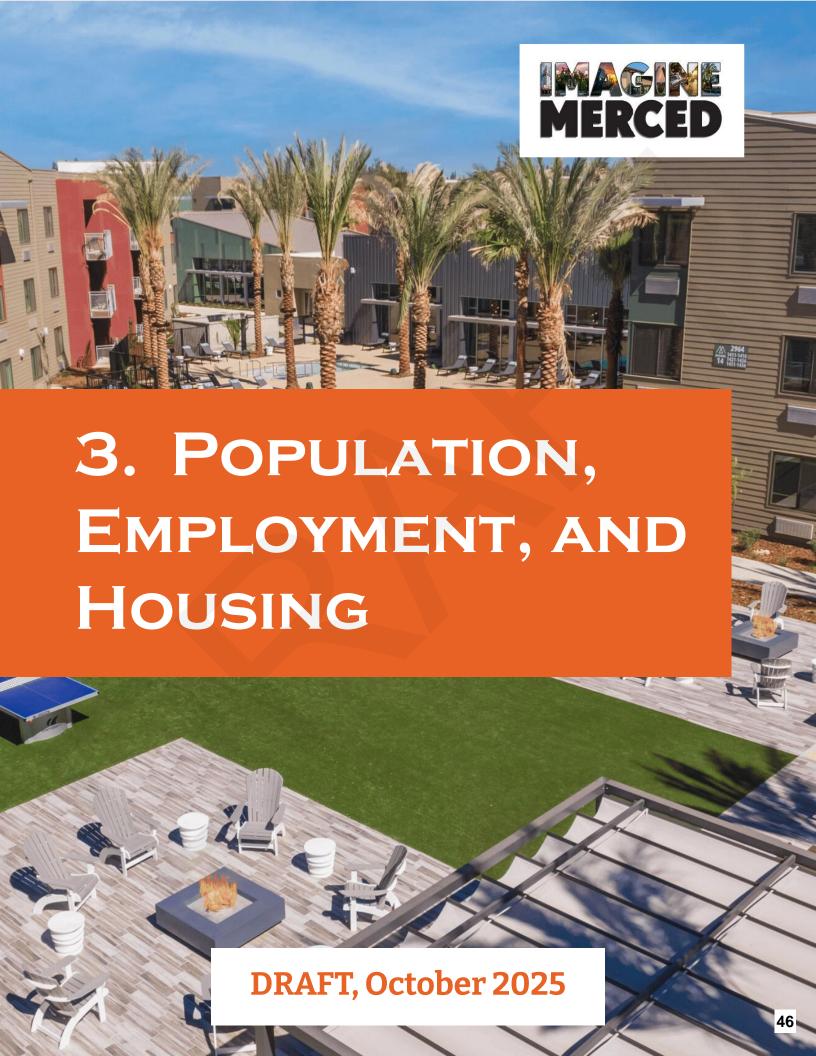
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# Population, Employment, and Housing

Understanding the makeup of the population and housing conditions allows jurisdictions to better gauge the needs and concerns of their residents. This section provides a description of population, demographic, employment, and housing characteristics in the city using Department of Finance 2025 population estimates and the most recently available American Community Survey (ACS) demographic and housing datasets. The intent of this section is to update and build upon the background information document in the 2025 Multijurisdictional Housing Element and 2025-2029 Five Year Consolidated Plan.

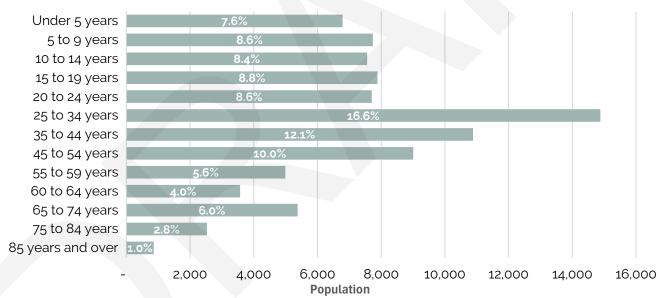
# **Population**

Figure 3-1 and Table 3-1 summarize the population in the city by age. The Department of Finance estimates the population of Merced to be 98,039 in 2025. According to the most recently published American Community Survey (ACS) estimates, the population is young, with a median age in the city of 30 years old compared to 31.8 countywide and 37.6 in California. More than 58 percent of the citywide population is under the age of 35, and seniors (65 and older) make up about 10 percent of the city's population.

2025 Population
Merced: 98,039<sup>1</sup>

Please note: While 2025 population totals are available through the Department of Finance, this data does not include information on the population by race, age, sex, or other characteristic. The demographic data presented in this chapter was prepared by the U.S. Census Bureau's, American Community Survey, and relies on the most recently published 5-year estimates, which include data through 2023.

Figure 3-1 Population by Age, Merced, American Community Survey, 2023



Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2023.

Table 3-1 Population by Age, Merced, 2023

Age Group	Total	Percent		
Under 18 years	26,951	30.0%		
Under 34 Years	52,552	58.6%		
18 years and over	62,815	70.0%		
21 years and over	57,931	64.5%		
65 years and over	8,765	9.8%		

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2023.

# **Historic Population Trends**

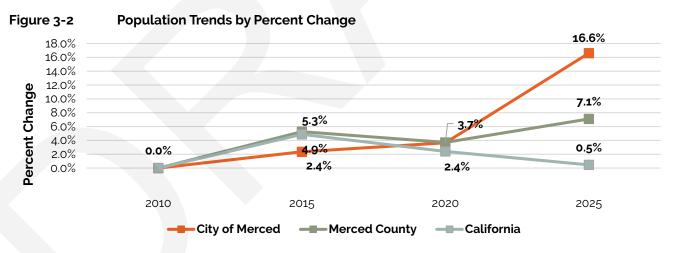
In recent years, both the city and county have grown at a significantly higher rate than California's statewide average. Between 2010 and 2025 the population in Merced grew 24 percent, from 79,254 in 2010 to 98,039 in 2025 (Table 3-2). The county population also grew significantly, with an increase of 17 percent during the same time. By contrast, the population of California grew by just 8 percent during this time.

Table 3-2 Population Trends, 2010-2023

	2010	2015	2020	2025	Percent Change 2010-2025	Annual Growth Rate
Merced	79,254	81,120	84,081	98,039	24%	1.43%
Merced County	250,699	263,885	273,661	29,080	17%	1.05%
California	36,637,290	38,421,464	39,346,023	39,529,101	8%	0.51%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2015, 2020; California Department of Finance, Report E4:L Population Estimates with 2020 Benchmark, released May 1, 2025.

Figure 3-2 shows the percentage change in population for each interval listed in Table 3-2. As shown, Merced has experienced significant population growth over the past five years. While the city population grew by 2.4 percent between 2010 and 2015, and 3.7 percent between 2015 and 2020, the city experienced growth of 16.6 percent between 2020 and 2025. Merced County also saw consistent growth over this period. In contrast, the statewide population grew by around 5 percent between 2010 and 2015, but this rate declined to 2.4 percent between 2015 and 2020 and just 0.5 percent between 2020 and 2025.



Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2015, 2020; California Department of Finance, Report E4:L Population Estimates with 2020 Benchmark, released May 1, 2025.

#### **Projected Population**

According to the Merced County Association of Governments (MCAG), Merced's population is expected to add 20,267 residents between 2020 and 2035. This projection assumes a 1.5 percent

annual growth rate over this period, which is higher than the annual growth rate experienced between 2010 and 2023 (1.0 percent), as shown in Table 3-2.

# **Demographics**

# **Age Characteristics**

In 2023, the median age in Merced was 30.0 years, up from 28.4 in 2010 (Table 3-3). Between 2010 and 2023, the largest reductions were seen among individuals under five years (-1.3 percent), 15 to 19 (-1.7 percent), and individuals 85 years and over (-1.0 percent). The largest increases were among individuals aged 25 to 34 years (+1.7 percent), 55 to 59 years (+1.7 percent), and 20 to 24 years (+0.8 percent). These shifts indicate that the city continues to have a high number of working age adults and a low percentage of seniors 65 and over (9.8 percent citywide), particularly when compared to the State (12.5 percent).

Table 3-3 Population by Age, Merced, 2010, 2023

Age	2010	2023	Percent Change 2010-2023
Under 5 years	8.9%	7.6%	-1.3%
5 to 9 years	9.1%	8.6%	-0.5%
10 to 14 years	7.9%	8.4%	0.5%
15 to 19 years	10.5%	8.8%	-1.7%
20 to 24 years	7.8%	8.6%	0.8%
25 to 34 years	14.9%	16.6%	1.7%
35 to 44 years	12.2%	12.1%	-0.1%
45 to 54 years	10.8%	10.0%	-0.8%
55 to 59 years	3.9%	5.6%	1.7%
60 to 64 years	4.2%	4.0%	-0.2%
65 to 74 years	5.5%	6.0%	0.5%
75 to 84 years	2.4%	2.8%	0.4%
85 years and over	2.0%	1.0%	-1.0%

Median age (years)	28.4	30.0	
Under 18 years	32.0%	30.0%	-2.0%
18 years and over	68.0%	70.0%	2.0%
21 years and over	61.6%	64.5%	2.0%
62 years and over	12.3%	11.9%	-0.4%
65 years and over	9.9%	9.8%	-0.1%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2023.

### **Race and Ethnicity**

Table 3-4 summarizes data on racial demographics for 2010 and 2023. The city's racial demographics are mixed and becoming more diverse. In 2010, white residents made up approximately 68 percent of the population compared to around 32 percent in 2023, though some of this large decrease can be attributed to changes in Census data collection related to race and ethnicity, which has expanded and become more nuanced since 2010. The largest increases were among individuals identifying as some other race (11.7 percent in 2010 to 39.2 percent in 2023) and individuals of two or more races (2.1 percent in 2010 to 13.1 percent in 2023).

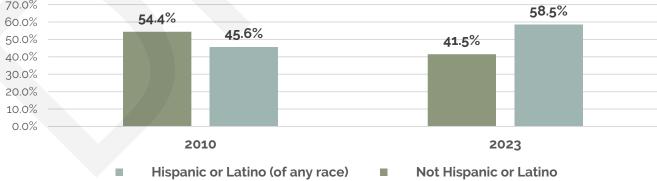
Table 3-4 Racial Demographics, 2010 and 2023

	20	010	20	Percent	
	Total	Percent	Total	Percent	Change 2015- 2023
Total population	79,254	100%	89,766	100.0%	-
One race	77,623	97.9%	77,980	86.9%	-11.0%
White	53,841	67.9%	28,446	31.7%	-36.2%
Black or African American	4,387	5.5%	4,443	4.9%	-0.6%
American Indian and Alaska Native	1,162	1.5%	658	0.7%	-0.8%
Asian	8,966	11.3%	8,812	9.8%	-1.5%
Native Hawaiian and Other Pacific Islander	0	0.0%	400	0.4%	0.4%
Some Other Race	9,267	11.7%	35,221	39.2%	27.5%
Two or More Races	1,631	2.1%	11,786	13.1%	11.0%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2023.

Between 2010 and 2023, the city experienced a significant increase in the percentage of the population identifying as ethnically Hispanic or Latino (of any race). During this time, Hispanic or Latino residents increased by nearly 13 percent from around 46 percent of the population to approximately 59 percent. As of 2023, a majority of residents identify as Hispanic or Latino (Figure 3-3).

Figure 3-3 Ethnicity, Merced, 2010 and 2023
70.0%
54.4%



Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2023.

#### Sex

At 50.6 percent, a slight majority of the population in Merced identifies as female (Figure 3-4). This contrasts slightly with the countywide population, of which 49.6 percent identify as female and 50.7 percent identify as male. The sex ratio is quite different among seniors over 65 years of age. Among this age group, the ratio of females to males is more divided, with females making up 57.5 percent of city residents over 65 in 2023.

100.0% 80.0% 57.5% 56.9% 56.8% 50.0% 60.0% 50.3% 50.6% 40.0% 20.0% 0.0% 2010 2020 2023 ■ Total Population Seniors

Percentage of the Population Identifying as Female, Merced, 2010-2023. Figure 3-4

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2020, 2023,

#### **Educational Attainment**

Educational attainment in the city and county is relatively low compared to the state. Of the population 25 years or older, 18.0 percent of those in the city and approximately 15 percent of residents countywide have a bachelor's degree or higher (Figure 3-5). By contrast, in California around 37 percent of individuals 25 or older have a bachelor's degree or higher. As of 2023, about 51 percent of the population has completed some college coursework or higher, which compares more favorably to statewide totals (64 percent).

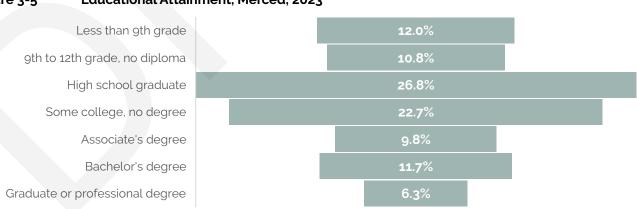


Figure 3-5 **Educational Attainment, Merced, 2023** 

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table S1501, 2023,

# **Employment**

# **Major Employers**

Of the 20 largest employers in Merced County, 11 are located within Merced, reflecting the city's role as the county's primary employment center (Table 3-5). These major employers represent diverse employment sectors, demonstrating the city's economic diversity and its concentration of essential services, public institutions, and retail and manufacturing jobs. Notably, many of these employers fall into the 100–499 employee size range, indicating that while Merced hosts several large institutions, much of its employment base is composed of mid-sized organizations.

Table 3-5 Major Employers, Merced, 2025

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Employer Name	Location	Employer Size Class	Industry
Dignity Health-Mercy Med Center	Merced	1,000-4,999 Employees	Hospitals
Merced County	Merced	1,000-4,999 Employees	Government Offices - County Human Services Mental Health Services Clinics - Behavioral Health
Golden Valley Health Center	Merced	500-999 Employees	Pharmacies/Clinics
UC Merced	Merced	500-999 Employees	Schools-Universities & Colleges
City of Merced	Merced	250-499 Employees	Government Offices - City
Malibu Boats Inc	Merced	250-499 Employees	Boats-Manufacturers
Walmart	Merced	250-499 Employees	Department Stores
Costco Wholesale	Merced	100-249 Employees	Wholesale Clubs
Foodmaxx	Merced	100-249 Employees	Grocers-Retail
Scholle IPN	Merced	100-249 Employees	Packaging Materials-Manufacturers
Weaver Union School District	Merced	100-249 Employees	School Districts

Source: California Employment Development Department, Major Employers, extracted from the America's Labor Market Information System (ALMIS) Employer Database, 2025 1st Edition, City of Merced, 2025.

Health care is a prominent employment sector in Merced, with several key employers in this field, The largest employers in Merced are Dignity Health Mercy Medical Center and Merced County, which fall within the 1,000–4,999 employee range. Additionally, Golden Valley Health Center employs 500–999. These organizations provide a range of medical, behavioral health, and social services, indicating the city's central role in supporting the health and well-being of the broader county population.

UC Merced is another major employer, representing the education sector. As a growing research university, UC Merced plays a dual role as both a higher education institution and an economic engine, drawing in faculty, staff, and students while supporting local service and housing markets. The presence of Weaver Union School District also underscores the importance of public education as a source of local employment.

Private-sector employers are also well represented. Other manufacturers, such as Malibu Boats Inc. and Scholle IPN (packaging), indicate a growing specialization in mid-sized manufacturing

operations. Employment generation at Walmart and Costco also reflects Merced's role as a regional retail hub.

# **Employment and Jobs**

Table 3-6 shows the breakdown of employment by industry for individuals living in the city in 2023. Among residents 16 years and older, about 26 percent work in the category of educational services, and health care and social assistance, approximately 8 percent work in manufacturing, and around 7 percent work in professional, scientific, and management occupations. These industries historically have provide higher salaries than other sectors, such as retail trades (11 percent of jobs) and arts, entertainment and recreation and accommodation and food services (around 11 percent of jobs).

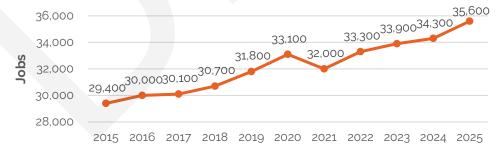
Table 3-6 Employment by Industry, Merced

Industry	Total	Percent
Civilian employed population 16 years and over	35,750	100.0%
Educational services, and health care and social assistance	9,267	25.90%
Retail trade	3,940	11.00%
Arts, entertainment, and recreation, and accommodation and food services	3,805	10.60%
Manufacturing	2,997	8.40%
Agriculture, forestry, fishing and hunting, and mining	2,423	6.80%
Transportation and warehousing, and utilities	2,402	6.70%
Professional, scientific, and management, and administrative and waste management services	2,378	6.70%
Construction	2,370	6.60%
Public administration	2,065	5.80%
Finance and insurance, and real estate and rental and leasing	1,438	4.00%
Other services, except public administration	1,241	3.50%
Wholesale trade	1,040	2.90%
Information	384	1.10%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2023.

Figure 3-6 summarizes employment in the city by year. According to the Bureau of Labor Statistics, there were 35,600 jobs in Merced in January 2025. The number of jobs increased by more than 6,000 between 2015 and 2024, from 29,400 to 35,600, indicating a compound annual growth rate (CAGR) of 1.93 percent.

Figure 3-6 Employment, Merced, 2015-2025



Source: California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, 2015 to 2025.

Year

#### **Employment Status**

Among residents 16 years and over, about 57 percent were employed in 2023 (Table 3-7). This is higher than employment in the county (around 55 percent) but lower than employment statewide (approximately 60 percent). Unemployment was considerably higher in the city (around 7 percent) and county (about 6 percent) than in California, where about 4 percent of the labor force was unemployed in 2023.

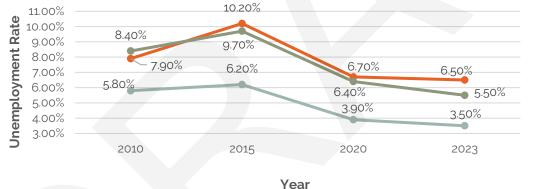
Table 3-7 Employment Status

	Merce	ed	Merced Co	ounty	California		
Population 16 years and over	69,769	100.0%	220,588	100.0%	31,584,340	100.0%	
In labor force	44,506	63.8%	132,993	60.3%	20,298,562	64.3%	
Civilian labor force	44,476	63.7%	132,963	60.3%	20,137,422	63.8%	
Employed	39,937	57.2%	120,770	54.7%	19,026,566	60.2%	
Unemployed	4,539	6.5%	12,193	5.5%	1,110,856	3.5%	

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2023.

Unemployment rates experienced in the city, county, and state have followed similar trends in recent years, as shown on Figure 3-7. Trend lines indicate high unemployment in 2010 and an increase in unemployment between 2010 and 2015. Between 2015 and 2020, the unemployment rate decreased significantly and continued to decrease through 2023.





Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2010, 2015, 2020, 2023.

#### **Income Levels**

According to ACS estimates, Merced's median household income was \$59,938 in 2023 (Table 3-8). This is lower than Merced County (\$65,044) and significantly lower than California (\$96,334). In Merced, around 14 percent of households made \$150,000 or more annually in 2023 compared to approximately 5 percent in 2010. The increase in higher-income households is likely impacted by the city's high percentage of employment in the education services and health and social services (about 26 percent of employment, see Table 3-6).

Data indicates that the median household income increased sharply from \$37,637 to \$59,938, or approximately 60 percent between 2015 and 2023, for a compound annual growth rate (CAGR) of 6 percent, while the total number of households increased by just 1 percent CAGR. The average household income also increased significantly during this time from \$57,786 to \$81,691, which equates to an approximately 41 percent increase and a CAGR of around 4 percent.

As shown in Table 3-9, the city's median household income grew at a quicker rate (6.0 percent CAGR) than in the county (5.5 percent) and state (5.7 percent). Conversely, the average household income grew at a slower rate (4.4 percent CAGR) than the county (5.1 percent) and state (5.7 percent).

In the city and county, the median income grew at a greater annual rate than average household income. This indicates that between 2015 and 2023 households with income below the median generally experienced greater income growth than households with incomes above the median, pushing the median closer to the average income. While in 2015 the average household income in the city was 154 percent of the median, this decreased to 136 percent in 2023. Notably, the percentage of households in all income categories below \$35,000 decreased between 2015 and 2023.

Table 3-8 Household Income, Merced, 2015-2023

	20	2015		2020		2023	
	Total	Percent	Total	Percent	Total	Percent	2015-2023
Total households	25,330	100.0%	26,626	100.0%	27,482	100.0%	1.0%
Less than \$10,000	2,399	9.5%	2,293	8.6%	1,712	6.2%	-4.1%
\$10,000 to \$14,999	2,248	8.9%	1,715	6.4%	1,386	5.0%	-5.9%
\$15,000 to \$24,999	4,014	15.8%	2,965	11.1%	2,481	9.0%	-5.8%
\$25,000 to \$34,999	3,154	12.5%	2,590	9.7%	2,096	7.6%	-5.0%
\$35,000 to \$49,999	3,529	13.9%	3,755	14.1%	3,673	13.4%	0.5%
\$50,000 to \$74,999	4,186	16.5%	5,269	19.8%	5,077	18.5%	2.4%
\$75,000 to \$99,999	2,246	8.9%	2,724	10.2%	3,388	12.3%	5.3%
\$100,000 to \$149,999	2,370	9.4%	3,253	12.2%	3,912	14.2%	6.5%
\$150,000 to \$199,999	799	3.2%	1,046	3.9%	2,045	7.4%	12.5%
\$200,000 or more	385	1.5%	1,016	3.8%	1,712	6.2%	20.5%
Median household income	\$37,627		\$49,973		\$59,938		6.0%
Mean (average) household income	\$57	,786	\$66,213		\$81,691		4.4%
Average as a percentage of Median	15	4%	13	3%	13	6%	

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2015, 2020, 2023.

Table 3-9 Median and Mean (average) Household Income, 2015-2023

				Percent Growth	CAGR
	2015	2020	2023	2015-2023	2015-2023
Merced					
Median	\$37,627	\$49,973	\$ 59,938	59.3%	6.0%
Mean (Average)	\$57,786	\$66,213	\$81,691	41.4%	4.4%
Merced County					
Median	\$42,462	\$56,330	\$65,044	55.8%	5.5%
Mean (Average)	\$58,398	\$ 76,432	\$87,129	55.6%	5.1%
California					
Median	\$61,818	\$ 78,672	\$96,334	64.2%	5.7%
Mean (Average)	\$87,877	\$111,622	\$136,730	64.3%	5.7%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2015, 2020, 2023.

### **Projected Job Growth**

U.S. Bureau of Labor Statistics' Occupational Employment Projections indicate that between 2022 and 2032 the Merced Metropolitan Area (which includes non-farm employment in the county) is expected to add 6,310 jobs, which would be an increase of 7 percent over the 10-year period (Table 3-10). The largest growth is projected in the industries of transportation and warehousing (around 22 percent), education and health services (approximately 24 percent), and health and social services (about 24 percent). The Bureau's projections reflect anticipated job growth equivalent to 0.7 percent CAGR for the area, which is significantly lower than the CAGR for employment between 2015 and 2025 (1.98 percent), indicating that the data projections may be conservative.

Table 3-10 2022-2032 Industry Employment Projections, Merced Metropolitan Statistical Area

Industry Title	Base Year Employment Estimate 2022	Projected Year Employment Estimate 2032	Numeric Change 2022-2032	Percentage Change 2022-2032
Total Employment	90,240	96,550	6,310	7.0%
Self Employment	6,190	6,270	80	1.3%
Goods-Producing	27,130	27,590	460	1.7%
Natural Resources and Mining	14,160	14,100	-60	-0.4%
Construction	3,270	3,750	480	14.7%
Manufacturing	9,700	9,740	40	0.4%
Service-Providing	56,920	62,690	5,770	10.1%
Trade, Transportation, and Utilities	13,790	15,310	1,520	11.0%
Retail Trade	8,790	9,550	760	8.6%
Transportation and Warehousing	2,730	3,320	590	21.6%
Information	240	280	40	16.7%
Financial Activities	1,650	1,800	150	9.1%
Finance and Insurance	1,030	1,150	120	11.7%
Real Estate and Rental and Leasing	620	650	30	4.8%
Professional and Business Services	3,730	4,210	480	12.9%
Professional, Scientific, and Technical Services	1,070	1,260	190	17.8%
Management of Companies and Enterprises	890	870	-20	-2.2%
Administrative and Support and Waste Management	1,770	2,080	310	17.5%
Education and Health Services	11,060	13,740	2,680	24.2%
Educational Services	240	290	50	20.8%
Health Care and Social Assistance	10,820	13,450	2,630	24.3%
Leisure and Hospitality	6,880	7,120	240	3.5%
Arts, Entertainment, and Recreation	570	640	70	12.3%
Accommodation and Food Services	6,310	6,480	170	2.7%
Other Services	1,770	1,740	-30	-1.7%
Government	17,800	18,490	690	3.9%
Federal Government	720	720	0	0.0%
State and Local Government	17,080	17.770	690	4.0%
State Government	2,740	2,750	10	0.4%
State Government Education	2,360	2,360	0	0.0%
State Government Excluding Education	380	390	10	2.6%
Local Government	14,340	15,020	680	4.7%
Local Government Education	10,080	10,690	610	6.1%
Local Government Excluding Education	4,260	4,330	70	1.6%

Source: California Employment Development Department, Labor Market Information Divisions, 2022-2032 Industry Employment Projections, March 2025.

# Housing

# **Housing Stock**

California law requires each city and county to plan for its "fair share" of the statewide housing need. This fair share is calculated through a process called the Regional Housing Needs Allocation (RHNA). For the 6th cycle 2024-2032 RHNA projection period, the City of Merced was assigned a RHNA of 10,517 housing units.

The 6th Cycle RHNA is significantly higher (nearly 100 percent increase) than the 5<sup>th</sup> cycle 2016-2024 RHNA, which identified a need of 5,551 new housing units. Based on the increased RHNA for 2024-2032, the City will need to create the conditions for sufficient housing production to meet its regional need (RHNA) by removing constraints, supporting development, and incentivizing construction.

While 3,342 new housing units were approved in Merced during the 5th Cycle, a vast majority were for Above Moderate-Income households. Between 2016 and 2024, only 58 very low- and 61 low-income units were approved by the City. By comparison, more than 2,490 new above moderate-income units were approved during this time. Table 3-11 shows units approved in Merced from 2016-2024.

Table 3-11 Progress Towards the 5<sup>th</sup> Cycle RHNA

rable 5 22 rogics rowards the 5 cycle Kind K														
	Extremely Low- Income		Low- ome	Low- Income								Moderate- Income	Above Moderate- Income	Total
2016-2024 RHNA	-		1,351		966	886	2,348	5,551						
Units Approved	-		58		61	733	2,490	3,342						
Achievement	-		4.3%		6.3%	82.7%	106.0%	60.2%						

Source: City of Merced, Draft 2024-2032 Housing Element Update, April 2025.

# **Housing Growth**

Housing development in the city has fluctuated in recent decades (Table 3-12, Figure 3-1). The largest growth rate occurred between 1980 and 1990 with an over 41 percent increase during this 10-year period. Between 1990 and 2000 the housing stock grew at a slower pace of around 14 percent. Between 2000 and 2010, the number of housing units in the city increased by around 28 percent, however in the 10 years from 2010 and 2020, the housing stock increased by just over 2 percent. From 2020 and 2023 housing production increased, illustrating growth of nearly 4 percent.

Table 3-12 Total Housing Units Over Time, Merced, 1980-2020

Year	1980	1990	2000	2010	2020	2023
Merced	13,381	18,965	21,532	27,446	28,120	29,208
Percent Change	-	41.7%	13.5%	27.5%	2.5%	3.6%

Source: U.S. Census Bureau, Census 1980(STF1:T65), 1990(STF1:H1), 2000(SF1:H1); ACS 16-20 (5-year Estimates), Table B2500, ACS 2023 (5-year estimates), Table DP04.

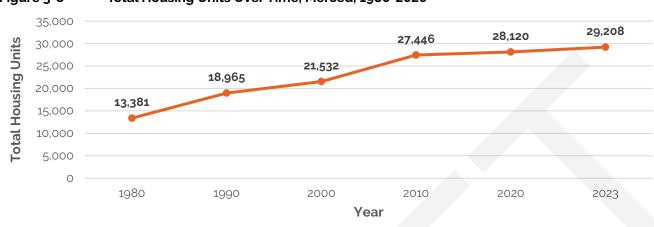


Figure 3-8 Total Housing Units Over Time, Merced, 1980-2020

Source: U.S. Census Bureau, Census 1980(STF1:T65), 1990(STF1:H1), 2000(SF1:H1); ACS 16-20 (5-year Estimates), Table B25001...

# **Age of Housing Stock**

If not properly and regularly maintained, housing can lead to deteriorating neighborhood conditions, decreasing property values and impacting community pride and quality of life. As housing ages, the cost of upkeep can be significant. Housing units more than 30 years old often require repairs, such as reroofing, while units over 50 years old often require major repair or replacement to ensure safe and sanitary housing.

Table 3-13 shows data on housing units by year of construction, as of 2023. The data shows around 61 percent of the housing units in the city were built prior to 1990 and are over 30 years old, and 27.2 percent were built prior to 1970 and are more than 50 years old. While approximately 39 percent of the housing stock has been constructed since 1990, most of these units were built between 1990 and 2009. Only around 9 percent of the housing stock was constructed between 2010 and 2023.

Table 3-13 Housing Units by Year of Construction, Merced, 2023

	Total	Percent
Total housing units	29,208	100.0%
Built 2020 or later	623	2.1%
Built 2010 to 2019	1,886	6.5%
Built 2000 to 2009	5,917	20.3%
Built 1990 to 1999	2,964	10.1%
Built 1980 to 1989	4,838	16.6%
Built 1970 to 1979	5,069	17.4%
Built 1960 to 1969	2,298	7.9%
Built 1950 to 1959	2,805	9.6%
Built 1940 to 1949	1,478	5.1%
Built 1939 or earlier	1,330	4.6%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP04, 2023.

### **Housing Mix**



### **Single-Unit Detached Homes**

Table 3-14 summarizes the city's housing mix. As shown, single-unit detached homes account for around 65 percent of the city's housing stock. This is a lower percentage than the county (about 74 percent) but greater than the state (around 57 percent).



#### Small Multi-Unit Structures

The second most common housing type is three to four multi-unit complexes, comprising nearly nine percent of the total units in the city. This is significantly higher than the county (about five percent) and the state (around five percent).

The third largest housing type in Merced is five to nine multi-unit complexes, compromising just under nine percent of the total units in the city, which is also significantly higher than the county (about four percent) and the state (approximately six percent).



#### **Mobile Homes**

Merced has a lower proportion of mobile homes (three percent) than the county (around seven percent), although its proportion of mobile homes is similar to that of the state (around four percent).



#### **Large Apartments**

Merced has a higher proportion of 20 or more-unit complexes (around six percent) than the county (about three percent) but a lower proportion than the state (over 13 percent).

Table 3-14 Housing Mix

	- c.cg					
	Me	rced	Merced	County	California	
		Percent of		Percent of		Percent of
Housing Type	Units	Total	Units	Total	Units	Total
Total housing units	29,208	100.0%	89,610	100.0%	14,532,683	100.0%
1-unit, detached	19,003	65.1%	66,364	74.1%	8,315,954	57.2%
1-unit, attached	495	1.7%	1,471	1.6%	1,061,574	7.3%
2 units	933	3.2%	2,701	3.0%	342,430	2.4%
3 or 4 units	2,715	9.3%	4,357	4.9%	782,419	5.4%
5 to 9 units	2,536	8.7%	3,974	4.4%	832,491	5.7%
10 to 19 units	1,013	3.5%	1,925	2.1%	717,369	4.9%
20 or more units	1,604	5.5%	2,712	3.0%	1,946,659	13.4%
Mobile home	896	3.1%	5,994	6.7%	515,402	3.5%
Boat, RV, van, etc.	13	0.0%	112	0.1%	18,385	0.1%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table C24050, 2023.

# Homeownership

Home equity is the largest single source of household wealth for most Americans. According to the Survey of Consumer Finances, released in 2025 by the Federal Reserve (Figure 3-9), homeowners in the U.S. had a median net worth of \$430,000, while renters had a net worth of just over \$10,000. This is a considerable difference.

**Tenure:** the conditions under which a unit is held or occupied (i.e., renter occupied vs. homeowner occupied)



Source: Federal Reserve Survey of Consumer Finance, 2025, data compiled by National Association of Realtors.

Table 3-15 shows data on occupied units by tenure. In Merced, there are considerably more renter-occupied units (58 percent) than owner-occupied (about 42 percent). In contrast, the state and county have more owner-occupied housing units than renter-occupied housing units.

Table 3-15 Occupied Housing Units by Tenure, 2021

	Merced	Merced County	California
Owner-occupied	41.9%	51.6%	55.5%
Renter-occupied	58.1%	48.4%	44.5%

Source: U.S. Census Bureau, ACS 5-year Estimates, Table B2504, 2021.

#### **Rental Rates**

#### **Trends**

Table 3-16 summarizes median gross rent over time in Merced, as provided by the Zillow Observed Rent Index (ZORI). This data considers all long-term rental unit types, from studios to large units. As shown, median gross rent has grown from \$898 per month in 2015 to \$1,938 in 2025 (Table 3-16). Between 2015 and 2020 rents in the city grew by around 42 percent. From 2020 to 2025, rents grew at a faster rate of around 52 percent.

Table 3-16 Median Gross Rent Over Time, 2023

	2015	2020	2025
Total	\$898	\$1,276	\$1,938
Percent Change		42.1%	51.9%

Source: Zillow Group, "Zillow Observed Rent Index (ZORI)," Merced, California, 2015-2025.

#### **Current Rental Rates**

Zillow's monthly rental market summary data provides average rent prices by number of rooms for May to August 2025. This data is shown in Table 3-17 and on Figure 3-10 and summarized below.

- The total average gross rent (\$1,975) is comparable to the median rent documented in Table 3-16 (\$1,938).
- Average rent for a studio is very low (\$1,060) in Merced, but nearly \$1,800 in California.
- In Merced, one and two bedroom units are also fairly affordable, averaging \$1,195 and \$1,450, respectively.
- Larger units are more expensive, including an average of \$2,095 for a three-bedroom unit in the city.
- Across all categories, rents in Merced are significantly lower than in California.

Table 3-17 Average Gross Rent, 2025

	Merced	California
Total:	\$1,975	\$2,800
No bedroom	\$1,060	\$1,795
1 bedroom	\$1,195	\$2,100
2 bedrooms	\$1,450	\$2,750
3 bedrooms	\$2,095	\$3,650
4+ bedrooms	\$1,875	\$4,579

Source: Zillow, 2025, "Rental Market Summary", (California and Merced, California, https://www.zillow.com/rental-manager/market-trends/merced-ca/.



Source: Zillow, 2025, "Rental Market Summary", (California and Merced, California, <a href="https://www.zillow.com/rental-manager/market-trends/merced-ca/">https://www.zillow.com/rental-manager/market-trends/merced-ca/</a>.

### **Vacancy Rate**

Vacancy rates are an important indicator of housing availability. A certain number of vacant units are needed to moderate the cost of housing, allowing sufficient choice for residents, and providing an incentive for unit upkeep and repair. Specifically, a vacancy rate of 1.5 to 2.0 percent for ownership housing and 5.0 to 6.0 percent for rental housing is considered appropriate to balance demand and supply for housing.

The homeowner vacancy rate in the city was 0.6 percent in 2023, while the rental vacancy rate was 5.6 percent (Figure 3-11). This indicates a balanced market for rental units but a low stock of available units for sale. Data for the county and state indicate that both the homeowner and rental vacancy rates are low and additional units of all types are needed to ensure a balanced market of available units.

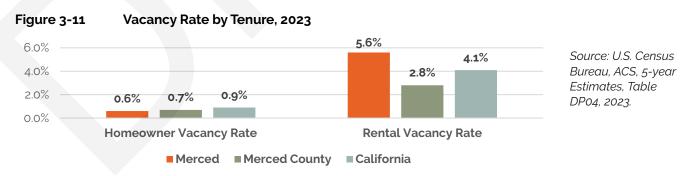


Table 3-18 summarizes vacant units by structure type and status, which is available through 2024. As shown, 986 of the 1,909 vacant units estimated in the city in 2024 were one-unit detached structures (52 percent of all vacant units). Multi-unit structures account for 814 vacant units (43 percent). The data estimates that there were 109 vacant mobile homes, which account for 6 percent of all vacant units.

Table 3-18 Vacant Units by Structure Type

	Total Vacant Units	1-unit, detached	1-unit, attached	2-9 units	10 or more units	Mobile home
 Total	1,909	986	0	681	133	109
Percent	100%	52%	0%	36%	7%	6%

Source: U.S. Census Bureau, ACS, 1-year Estimates, Table B25136, 2024.

Table 3-19 shows vacant units by status. As shown, the majority of vacant units identified are in active use but available for rent at the time the data was estimated by ACS. The category "Other vacant" accounts for a significant percentage of total vacant units (28 percent). Units that fall within this category are assumed to be off the market or otherwise not in active use and may be in need of rehabilitation.

Table 3-19 Vacancy Status

Vacancy Status	%
Total	100%
For rent	52%
Rented, not occupied	0%
For sale only	5%
Sold, not occupied	9%
For seasonal, recreational, or occasional use	6%
For migrant workers	0%
Other vacant Other vacant	28%

Source: U.S. Census Bureau, ACS, 5-year Estimates, Table B25004, 2023.

#### "Other Vacant" includes:

- Foreclosure
- Personal/Family reasons
- Legal proceedings
- Preparing to rent/sell
- Held for storage of furniture
- Needs repairs
- Currently being repaired/renovated
- Specific use housing
- Extended absence
- Abandoned/Possibly condemned

# **Housing Costs and Affordability**

#### **Trends**

According to U.S. Census and American Community Survey (ACS) data, home values in Merced have been rising since 1980 (Table 3-20). The largest increase in median home value occurred between 2000 and 2010, with a growth of over 116 percent during this decade. Growth slowed between 2010 and 2020, as median housing values in the city increased by around 11 percent. ACS data estimates are available through 2024, which indicates that median housing values increased by over 46 percent between 2020 and 2024.

Table 3-20 Housing Value Over Time, Merced, 1980-2024

	1980	1990	2000	2010	2020	2024
Total	\$57,700	\$90,300	\$103,200	\$223,500	\$251,500	\$369,300
Percent Change	-	56.5%	14.3%	116.6%	11.1%	46.8%

Note: Data are not inflation-adjusted to 2022 dollars.

Source: U.S. Census Bureau, Census 1980(ORG STF1), 1990(STF3), 2000(SF3); ACS 06-10, 16-20 (5-year Estimates), 24 (1-year estimates), Table B25106, 2024.

#### **Current Home Values**

Data provided by Zillow provides an accurate representation of current average home values. As shown in Table 3-21, according to Zillow, the typical value for single family homes in Merced (within the 65th to 95th percentile range) as of August 2025 was \$397,655, and for condominium units the typical value was \$265,556.

The data shows that between January 2020, and August 2025, the typical value for all homes increased by approximately 45 percent from \$272,615 to \$396,395. This increase is similar to the 46.8 percent increase identified between 2020 and 2024 in the ACS data (Table 3-20).

AVERAGE HOME VALUE
City of Merced, Aug. 2025:
\$397,655

Source: Zillow Home Value Index

Table 3-21 Zillow Home Value Index Over Time, Merced, 2020-2025

Home Values	January 2020	January 2021	January 2022	January 2023	January 2024	January 2025	August 2025
All Homes	\$272,615	\$301,430	\$370,767	\$381,757	\$389,801	\$402,810	\$396,395
Single Family Units	\$273,479	\$302,459	\$372,064	\$383,035	\$391,091	\$404,136	\$397,655
Condominiums /Coop Units	\$189,999	\$214,718	\$272,059	\$275,854	\$269,866	\$268,764	\$265,556
Percent Change (All Homes)	-	10.6%	23.0%	3.0%	2.1%	3.3%	-1.6%

Source: Zillow Home Value Index, Zillow, 2020-2025.

#### **Cost Burden**

Table 3-22 shows that housing cost burden (spending 30 to 50 percent of income on housing) is predominantly an issue for renter households with lower-incomes, with small-related households making up the largest group at all income levels. Among renters, 1,250 small-related households experience housing cost burdens, with the highest concentration in the >50-80% of the area median income (AMI) range. Elderly renter households also face significant cost burdens, with 555 households affected, primarily in the 0-30% AMI bracket. In contrast, among owners, small-related households account for 405 of the total cost-burdened households, with the majority in the >50-80% AMI category. This highlights the disproportionate impact of housing costs on renters with lower-income renters, particularly smaller households and the elderly.

Table 3-22 Cost Burdened Households (30-50%)

Household Type		Rer	nter	
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
Small Related	150	515	585	1,250
Large Related	115	230	220	565
Elderly	225	125	205	555
Other	115	135	365	615
Total need by income	605	1,005	1,375	2,985
Household Type		Ow	ner	
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
Small Related	40	110	255	405
Large Related	0	0	105	105
Elderly	120	90	170	380
Other	0	4	55	59
Total need by income	160	204	585	949

U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy (CHAS) dataset, 2017-2021 (5-Year Estimates), <a href="https://www.huduser.gov/portal/datasets/cp.html">https://www.huduser.gov/portal/datasets/cp.html</a>, accessed August 2025.

Table 3-23 shows that severe housing cost burden (spending over 50 percent of income on housing) is predominantly an issue for renter households earning up to 30% AMI, with small-related households making up the largest group at all income levels. Among renters, 1,870 small-related households experience housing cost burdens, with the highest concentration in the >0-30% AMI range. In contrast, among owners, small-related households account for 435 of the total cost-burdened households, with the majority in the >0-30% AMI category. This highlights the disproportionate impact of housing costs on renters with lower-income renters, particularly smaller households.

Table 3-23 Severely Cost Burdened Households (>50%)

Household Type		Renter				
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total		
Small Related	1,235	510	125	1,870		
Large Related	280	145	30	455		
Elderly	450	250	65	765		
Other	700	245	140	1,085		
Total need by income	2,665	1150	360	4,175		
	Owner					
Household Type		Ow	ner			
Household Type	0-30% AMI	Ow >30-50% AMI	ner >50-80% AMI	Total		
Household Type Small Related	0-30% AMI 230			Total 435		
	·	>30-50% AMI	>50-80% AMI			
Small Related	230	>30-50% AMI	>50-80% AMI 145	435		
Small Related Large Related	230 85	>30-50% AMI 60 35	>50-80% AMI 145 75	435 195		

U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy (CHAS) dataset, 2017-2021 (5-Year Estimates), <a href="https://www.huduser.gov/portal/datasets/cp.html">https://www.huduser.gov/portal/datasets/cp.html</a>, accessed August 2025.

### Overcrowding

The U.S. Census defines overcrowded households as households that have more than one person per room, not including hallways, kitchens, or bathrooms. Severe overcrowding is defined as households with more than 1.5 persons per room. A high prevalence of overcrowding can indicate a community does not have adequate supply of affordable housing, especially for large families. Overcrowding also tends to cause housing deterioration more rapidly. Therefore, maintaining a reasonable supply of housing and alleviating overcrowding is important for enhancing the quality of life in Merced.

In 2023, overcrowded households made up 8 percent of households in the city, county, and state (Table 3-24). During this time, approximately 3 percent of households are severely overcrowded. These data sets indicate a moderate need for larger and more affordable units.

Table 3-24 Overcrowding

	Mei	ced	Merced	County	California	
	Total	Percent	Total	Percent	Total	Percent
Total Units	27,482	100%	84,605	100%	13,434,847	100%
Total Overcrowded (1.01 or more occupants per room)	2,291	8.3%	6,703	7.9%	1,107,572	8.2%
Severely Overcrowded (1.51 or more occupants per room)	885	3.2%	2,385	2.8%	422,938	3.1%

Source: U.S. Census Bureau, ACS 5-Year Estimates, Table B25014, 2023.

Analyzing overcrowding by tenure can provide insight into the types of housing needed to address the issue. As of 2023, Merced had a similar rate of overcrowding in owner-occupied households at 4.7 percent compared to the county (5.3 percent) and state (4.4 percent), as shown on Table 3-25. Renter-occupied households experienced a similar rate of overcrowding in the city (11.3 percent) and county (11.0 percent), but a lower rate than in the state (13.1 percent). The rates of overcrowding among renters is significantly higher than among homeowners, indicating a need for larger rental units.

Table 3-25 Overcrowding Severity by Tenure

	Merc	Merced		Merced County		California	
	Total	Percent	Total	Percent	Total	Percent	
Total:	27,482		84,605		13,434,847		
Owner occupied:	12,209	100.0%	45,097	100.0%	7,494,811	100.0%	
0.50 or less occupants per room	8,036	65.8%	28,334	62.8%	4,993,923	66.6%	
0.51 to 1.00 occupants per room	3,606	29.5%	14,392	31.9%	2,169,457	28.9%	
1.01 to 1.50 occupants per room	425	3.5%	1,698	3.8%	242,528	3.2%	
1.51 or more occupants per room	142	1.2%	673	1.5%	88,903	1.2%	
Total 1.01 or more occupants per room	567	4.7%	2,371	5.3%	331,431	4.4%	
Renter occupied:	15,273	100.0%	39,508	100.0%	5,940,036	100.0%	
0.50 or less occupants per room	6,898	45.2%	18,715	47.4%	2,716,571	45.7%	
0.51 to 1.00 occupants per room	6,651	43.5%	16,461	41.7%	2,447,324	41.2%	
1.01 to 1.50 occupants per room	981	6.4%	2,620	6.6%	442,106	7.4%	
1.51 or more occupants per room	<i>743</i>	4.9%	1,712	4.3%	334,035	5.6%	
Total 1.01 or more occupants per room	1,724	11.3%	4,332	11.0%	776,141	13.1%	

Source: U.S. Census Bureau, ACS 5-Year Estimates, Table B25014, 2023.

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Source: Zillow Group, "Zillow Observed Rent Index (ZORI)," Merced, California, 2015-2025...

Zillow Home Value Index, Zillow, 2020-2025.

Zillow, 2025, "Rental Market Summary", (California and Merced, California, <a href="https://www.zillow.com/rental-manager/market-trends/merced-ca/">https://www.zillow.com/rental-manager/market-trends/merced-ca/</a>.

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### **Mobility**

This chapter outlines transportation and mobility trends in Merced as part of a larger effort to update the City's General Plan. Understanding ongoing transportation trends can be beneficial in planning and guiding the future of the transportation network. This transportation trend report provides context and basic information about the transportation network and characteristics in Merced.

# Roadways

The City of Merced has outlined a Circulation Plan within the City's Vision 2030 General Plan<sup>1</sup>. The General Plan roadway classifications are described below and shown on Figure 4-1. For each classification, generalized roadway right-of-way, street profile, access and design requirements have been established as follows.

**Freeway**. Freeways are major routes designed to carry large traffic volumes over long distances. Access is controlled, and grade separations and median strips are used to separate lanes of traffic moving in different directions. An example within Merced is State Route 99, which runs through the city, parallel to the Union Pacific Railroad. These roadways are managed by Caltrans.

**Expressway** Expressways are roads designed to carry traffic volumes intermediate between freeways and major arterials. Opposing traffic is separated by wide medians, but speeds are usually somewhat lower than freeways. Access is fully controlled. Two expressways are defined in the Merced Vision 2030 General Plan: Atwater/Merced Expressway and Campus Parkway.

**Major Arterial**. Major arterials are roads typically designed for new growth areas. They are intended to carry moderately heavy traffic volumes at moderate speeds on longer intra-city and cross-town trips, to regional destinations, and to State/Interstate routes for continuing longer trips. Examples within the city include Bellevue Road, G Street, Yosemite Avenue, and Mission Avenue.

**Divided Arterial**. Divided Arterial streets are designed to carry moderate traffic volumes at lower speeds than Arterials and Major Arterials. Divided Arterials, like higher order roadways, have medians to control cross-traffic. Examples within the city include Olive Avenue, portions of G Street, and Yosemite Parkway.

**Minor Arterial**. Minor Arterials are often designated in older portions of the city, particularly in areas where trends such as changing land uses and increasing traffic require larger streets but existing development limits the amount of land available for street right-of-way. Examples of minor arterials within Merced include R Street, Parsons Avenue, and Child's Avenue.

**Transitway**. A transitway is a special category of Arterial Street that is designed to accommodate a higher level of transit service than provided on standard arterial streets. They may be exclusive (for transit only) or may permit a mix of auto and transit vehicles. M Street was one of the first segments to be formally designated as a "transitway" due to it running the entire vertical length of the city. In addition to M Street, Bellevue Road and Mandeville Lane have been designated as transitways to better connect future major commercial and office park sites and UC Merced to public transit.

**Collector**. Collector streets are designed to channel traffic from local streets into the major street system and to handle short trips within neighborhoods. They distribute and collect traffic which is generated in the area circumscribed by major streets. Examples of collectors include G Street, 21<sup>st</sup> Street, and Gerard Avenue.

<sup>&</sup>lt;sup>1</sup> https://www.cityofmerced.gov/home/showpublisheddocument/4652/638186253664000000

**Special Street Section**. These are special streets which do not use normal design sections. These streets are designated where conditions warrant special designs, such as absence of curb and gutter adjacent to permanent agricultural areas, insufficient right-of-way, State highway needs, physical boundaries, or older existing neighborhoods. Examples of special street sections include segments of M Street and North Bear Creek Drive designated as a scenic corridor.

**Local**. Local streets primarily provide access to destinations within residential neighborhoods or business districts. Local streets include local through-streets, local cul-de-sacs, and alleys. Examples include K Street, P Street, 11<sup>th</sup> Street, and 15<sup>th</sup> Street.

Yosemite -Old-Lake-Rd-188 ft -Nevada-St-University of California Farmland Ave-Merced E-Bellewue-Rd W-Bellevue-Rd--W-Tahoe-St-Tahoe-St-Belcher-Ave Franklin Bear Creek Merced Stretch-Rd-Bear Creek Wardrobe-Ave ■Baker■D son-Ferry-Rd-E-Mission-Ave City of Merced Circulation Plan S-El-Capitan-School Legend Reilly-Rd-Rice-Rd-Merced City Limits **Circulation Plan** ■ FREEWAY EXPRESSWAY MAJOR ARTERIAL DIVIDED ARTERIAL MINOR ARTERIAL 148 ft TRANSITWAY Line COLLECTOR STREET SPECIAL STREET Duck Slough SECTION ISGS, FEMA, Sources: Esri, Tom Tom, Garmin, FAO, NOAA, USGS, etM & fontributors, and the GIS User Community, Sources: Esri, LOCAL STREET OR

RURAL ROAD

CAMPUSPARKWAY

Figure 4-1 Circulation Plan

Source: City of Merced Vision 2030 General Plan.

2 Miles

0

0.5

FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS

B-V-D-Ave

User Community

### **Commute Patterns**

### **Roadway Demand and Vehicle Trends**

This section examines existing and historic travel demand in Merced. One measure of travel demand is vehicle miles traveled (VMT). SB 743 has phased out the use of level of service (LOS) in favor of using VMT for identifying transportation impacts under CEQA. Total VMT within the city is based on Caltrans published volumes for state owned and operated facilities and the Highway Performance Monitoring System (HPMS for estimates VMT on City owned and maintained roads.

The amount of state highway VMT occurring within Merced was estimated by multiplying the annual average daily traffic (AADT) published by Caltrans by state highway segment length within the City Limit. Therefore, a summation of the estimated VMT on state highways and the published VMT on locally maintained roads gives the total VMT driven within the City Limit. As shown in Figure 4-2, total VMT over the past 13-years has remained relatively stable with VMT peaking in 2014 at 1,540,259. However, state highway VMT peaked in 2023 at 816,954 while local VMT peaked in 2011 at 733,080. Notably, in 2020 during the COVID-19 pandemic state highway VMT was higher than local VMT.

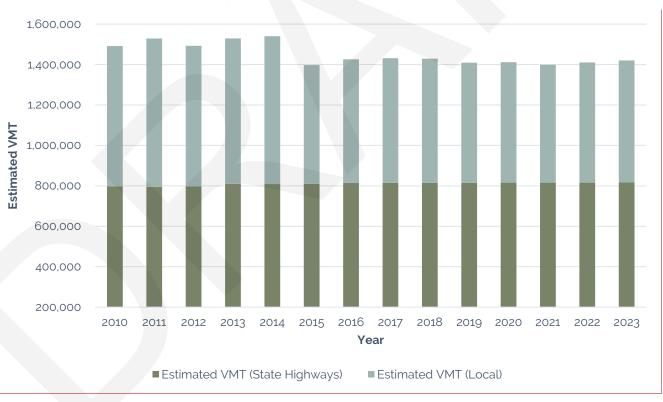


Figure 4-2 Estimated Total VMT by Year (2010-2023)

Source: Caltrans Public Road Data, Caltrans AADT.

VMT per capita is a common metric used to give an estimate of the average number of miles driven by each resident. Dividing the VMT estimates from Figure 4-2 by the population yields the VMT per capita results presented in Figure 4-3. VMT per capita has steadily decreased since 2014 with peak VMT per capita occurring in 2014.

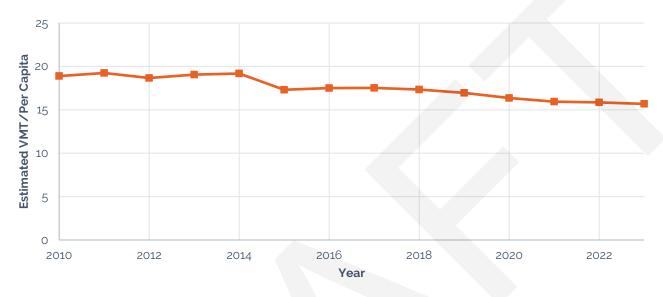


Figure 4-3 Estimated Total VMT/Per Capita by Year

Source: Caltrans Public Road Data, Caltrans AADT, California Department of Finance.

Based on the American Community Survey (ACS), residents of Merced travel an average of 24 minutes to commute to work. This number significantly increased from 20 minutes in 2010 to 27 minutes in 2023, with a high point of 28 minutes in 2020. Figure 4-4 shows the average travel time to work per year.

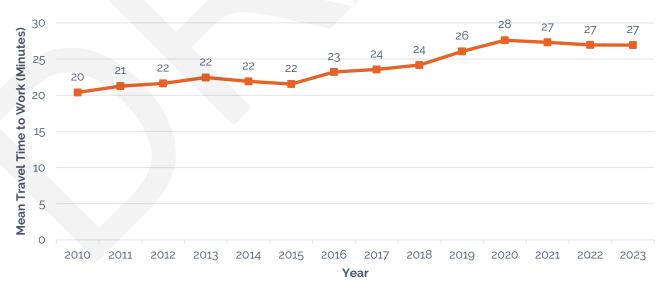


Figure 4-4 Average Travel Time to Work in Merced

Source: American Community Survey 5-Year Estimates.

Figure 4-5 illustrates the census-estimated average number of workers per car, truck, or van from 2010 to 2023. According to the ACS, the average worker per vehicle is 0.93 or 1.0 worker per vehicle. Vehicle occupancy peaked in 2023 at 0.99 with a low of 0.88 during 2015 and 2016. These totals indicate that carpooling has been limited in the city.

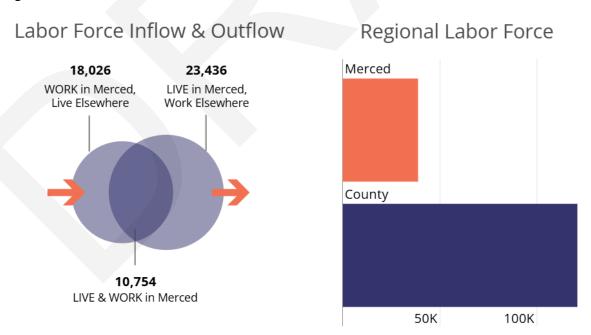
1.40 1.20 0.97 0.99 Vehicle Occupancy 0.96 0.94 0.94 0.94 0.92 0.92 0.91 0.91 1.00 0.88 0.88 0.89 0.80 0.60 0.40 0.20 0.00 2010 2011 2012 2013 2014 2015 2016 2017 2018 2020 2021 2022 Year

Figure 4-5 Average Worker Vehicle Occupancy by Year

Source: American Community Survey 5-Year Estimates.

According to the City of Merced Office of Economic Development, in 2024, the number of workers that live in Merced but work elsewhere increased (nearly 23,500 in 2024, Figure 4-6), while the number of workers who work in Merced but live elsewhere and intracity commuters decreased.

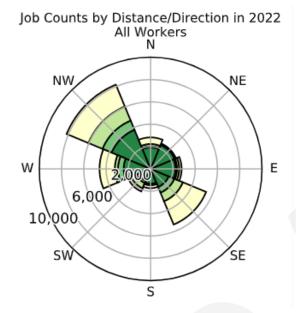
Figure 4-6 Labor Force Inflow & Outflow



Source: Merced Office of Economic Development (2024).

Merced County, located in the middle of the San Joaquin Valley, has a large agricultural community that may commute long distances. Commuters to (or from) other cities may commute to one of the other cities in Merced County, such as Atwater, Los Banos, Dos Palos, Gustine, and Livingston or to cities outside of Merced County, such as Modesto, (approximately 40 minutes north of Merced) and Fresno (approximatelyone hour and 15 minutes away south of Merced.. Figure 4-7 shows an illustration of the distance and direction workers travel from Merced.

Figure 4-7 Job Counts by Distance/Direction



Jobs by Distance - Work Census Block to Home Census Block			
	2022		
	Count	Share	
Total All Jobs	30,103	100.0%	
Less than 10 miles	16,945	56.3%	
■ 10 to 24 miles	2,504	8.3%	
25 to 50 miles	3,515	11.7%	
Greater than 50 miles	7,139	23.7%	

Source: US Census Bureau LODES Data.

According to the Merced Office of Economic Development, approximately 47 percent of Merced residents commute within Merced County (Figure 4-8) while approximately 31 percent of Merced's workforce live and work in Merced. Approximately 65 percent of the workforce in Merced live within Merced County (Figure 4-9).

Where Merced Where Merced residents work (city) Residents Work Count Share (counties drawing at least 1,000 City of Merced residents) 10,000-20,000 34,190 100.0% All Counties 5,000-10,000 Merced Co 16,138 47.2% 1,000-5,000 Stanislaus Co 3,588 10.5% Santa Clara Co 2,166 6.3% Fresno Co 1,658 4.8% San Joaquin Co 1,560 4.6% Alameda Co 1,285 3.8% Madera Co 980 2.9% MERCED CO Sacramento Co 945 2.8% Contra Costa Co 507 1.5% Los Angeles Co 498 1.5% All Other Locations 4,865 14.2% Download data

Figure 4-8 Commuting Characterisitics for Merced Residents

Source: City of Merced Office of Economic Development (2022).

**Where Merced** Share Where City of Merced workers live Count (city) Workers Live (counties supplying at least 1,000 people) All Counties 28,780 100.0% 10,000-20,000 Merced Co 18,768 65.2% 5,000-10,000 Stanislaus Co 1,778 6.2% 1,000-5,000 Fresno Co 1,294 4.5% Madera Co 1,123 3.9% San Jouquin Co 595 2.1% Sacramento Co 483 1.7% Santa Clara Co 413 1.4% Alameda Co 337 1.2% MERCED CO Contra Costa Co 319 1.1% Tulare Co 294 1.0% All Other Locations 3,376 11.7% Download data

Figure 4-9 Commuting Characterisitics for Merced Workers

Source: City of Merced Office of Economic Development (2022).

## **Active Transportation**

Active transportation is a key component of the City of Merced's broader mobility and public health strategies. The Regional Active Transportation Plan adopted in 2024 outlines a framework for short-term and long-term programs led by the Merced County Association of Governments (MCAG) and its member agencies to support active transportation through education, equity, policy, and implementation. These programs address countywide pedestrian and bicycle networks and aims to improve the existing roadway networks, reduce fatalities and serious injuries throughout the county, improve public health, and reduce dependency on single occupancy vehicles..

#### What is active transportation?

"Active Transportation" refers to way of getting around that are fully or partially peoplepowered. Examples of active transportation modes include: bicycles and e-bikes, scooters, skateboards, roller skates, mobility devices including wheelchairs, and walking.

According to the U.S. Department of Transportation, expanding active transportation networks boosts physical activity, improves equity and safety, decreases vehicle related injuries and deaths, and reduces air pollution from transportation.

Measure  $V^2$ , a 30-year,  $\frac{1}{2}$  cent transportation sales tax approved by voters in 2016 plays a key role in funding active transportation projects across Merced County including in Merced. The measure is estimated to generate about \$15 million per year, with a projected total of \$450 million over its lifetime. Five percent of the revenue goes directly to public transit, while 20 percent is distributed to the county's seven jurisdictions to support alternative mode projects, including bike and pedestrian infrastructure.

### **Relevant Active Transportation Planning Efforts**

Previous City of Merced active transportation planning efforts include:

- City of Merced Active Transportation Plan (2019)
- City of Merced Bicycle Transportation Plan (2013)

Additionally, there have been a number of regional active transportation planning efforts in the county, including:

- Merced County Regional Bicycle Transportation Plan (2008)
- 2030 Merced County General Plan (2011)
- Regional Transportation Plan / Sustainable Communities Strategy for Merced County (2018)
- Regional Transportation Plan / Sustainable Communities Strategy for Merced County (2022)
- MCAG Regional Active transportation Plan (2024)

<sup>&</sup>lt;sup>2</sup> https://www.mcagov.org/332/About-Measure-V

### **Pedestrian and Bicycle Facilities**

Table 4-1 outlines the different types of bikeways and their functions. Merced County has approximately 150 miles of designated bike paths and facilities<sup>3</sup>, and nearly half of them are in Merced<sup>4</sup>. Notably, there are no existing Class IV facilities. Table 4-2 summarizes the number of miles of bikeways in Merced by class type, and the bikeway miles proposed by the 2019 ATP Safe Routes to School (SR2S). Figure 4-10 shows the map of the existing bicycle infrastructure in Merced.

Table 4-1 Bikeway Classifications

Bikeway Classification	Description	Function
Class I (Bike Path)	- Exclusive use for bicycles within their own right-of-way, but it can also be utilized by pedestrians	Class I (Bike Path)
Class II (Bike Lane)	- Pavement striping and signage are used to delineate a portion of a roadway for bicycle travel	Class II (Bike Lane)
Class III (Bike Route)	- Established by placing bike route signs and optional shared roadway markings along roadways	Class III (Bike Route & Shared Lane Markings - Sharrows)
Class III B (Bicycle Boulevard)	- Bicycles and motor-vehicles share the same facility, however, the street has been modified to prioritize bicycle traffic	- A shared roadway intended to prioritize bicycle travel for people of all ages and abilities
Class IV (Separated Bikeway)	- Physically separated from motor traffic with a vertical feature	- Exclusively for bicyclists - One-way or two-way travel - Can reduce level of stress, improve comfort, and contribute to increasing bicycle volumes

Source: City of Merced Active Transportation and Safe-Routes-to-School Plan (2019)

Table 4-2 Bikeway Miles by Type, Merced

Bikeway Type	Existing Bikeways (Miles)	Proposed Bikeways from 2019 ATP SR2S
Class I	22.21	16
Class II	34.45	55.6
Class III	10.06	4.9
CLASS III (Bicycle Boulevard)	0	1.36
CLASS IV	0	4.2

Source: City of Merced Active Transportation and Safe-Routes-to-School Plan (2019).

<sup>&</sup>lt;sup>3</sup> MCAG Regional Active Transportation Plan, 2024.

<sup>&</sup>lt;sup>4</sup> City of Merced Active Transportation and Safe-Routes-to-School Plan, 2019.

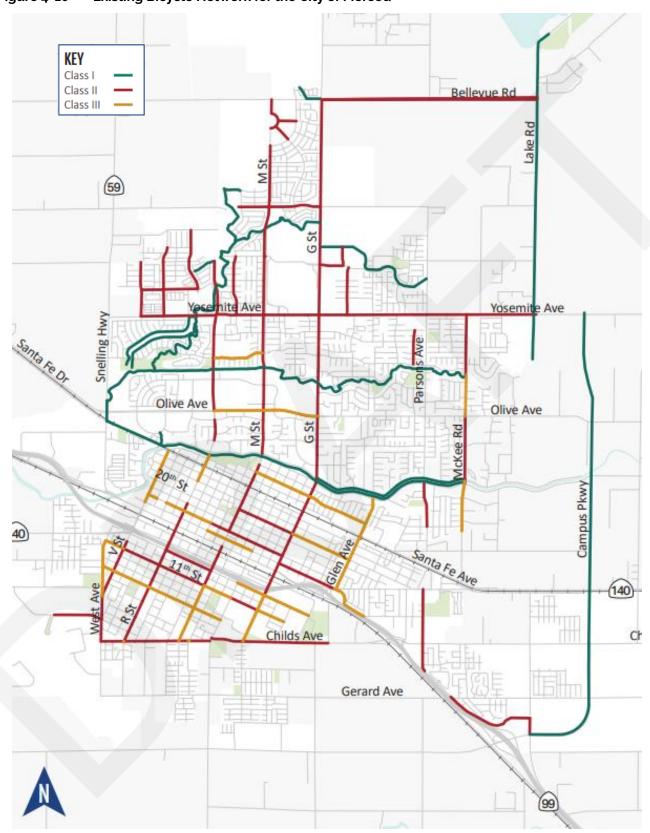


Figure 4-10 Existing Bicycle Network for the City of Merced

Source: MCAG Active Transportation Plan (2024).

Only a small percentage of residents commute using active transportation modes. Bicycling to work declined from its 2010 high of 1.3 percent to 0.9 percent in 2019, as shown in Figure 4-11. Walking to work also trended downward after a 2010 high of 3.3 percent, with brief peaks at 2.0 percent in 2015, 2016, and 2019 (Figure 4-12)

1.4% 1.3% 1.2% 1.0% 1.0% 0.9% Percentage 0.8% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.6% 0.6% 0.6% 0.6% 0.6% 0.6% 0.4% 0.2%

2016

Year

2017

2015

2018

2019

2020

2021

2022

2023

Figure 4-11 Percentage of People Who Biked to Work in Merced, 2010 - 2023

Source: ACS 5-Year Estimates.

2010

2011

2012

2013

0.0%



Figure 4-12 Percentage of People Who Walked to Work in Merced, 2010 – 2023

2014

Source: ACS 5-Year Estimates.

## **Public Transit Services**

There are several transit options serving Merced and its key destinations. The primary transit agency is the Merced Transit Authority (MTA), which operates "The Bus". Additionally, transit options that serve UC Merced and Yosemite National Park operate and provide transit services residents and visitors of Merced.

### **Merced Transit Authority "The Bus"**

The Merced Transit Authority (MTA) operates "The Bus". The Bus runs 15 fixed routes, including ten local routes and five intercity routes. Weekday service runs from 6:00 AM to 8:00 PM, while weekend service runs from 8:00 AM to 6:00 PM.

Figure 4-13 shows the eight routes serving Merced. The UC route connects UC Merced and downtown Merced through a partnership funded by the university.

In addition to fixed-route service, MTA also operates ParaTransit, a curb-to-curb service for riders who qualify under the Americans with Disabilities Act (ADA).

The Bus' fleet includes 66 revenue vehicles: 24 buses, 30 cutaway buses, three minivans, and nine vans. The 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), developed by the Merced County Association of Governments (MCAG), outlines planned investments in transit electrification. In 2019, The Bus was awarded \$2 million of FTA Funds followed by a \$3.1 million grant in 2020 from the California State Transportation Agency to purchase electric buses and install supporting charging infrastructure. The Innovative Clean Transit (ICT) Regulation of the California Air Resources Board (CARB) "requires that all public transit agencies to gradually transition to a 100 percent zero-emission bus (ZEB) fleet." The MTA has begun purchasing battery electric vehicles and has prepared The Bus to fully transition its fleet by 2029. Currently, The Bus has nine battery-electric buses in its fleet.

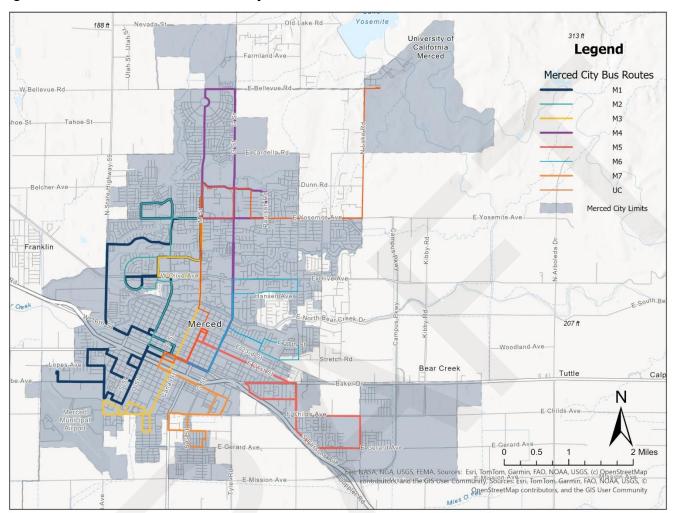


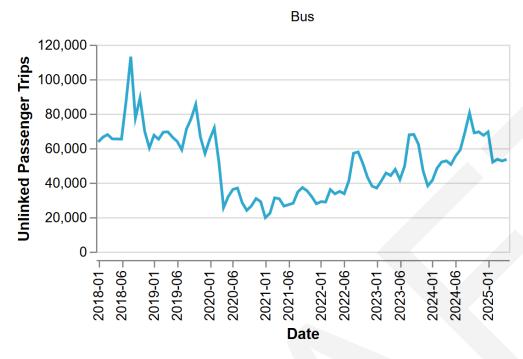
Figure 4-13 Bus Routes within the City of Merced

Source: California State Geoportal, The Bus.

Transit ridership in Merced County has faced notable fluctuations over the past several years, particularly due to the impacts of the COVID-19 pandemic. Based on unlinked passenger trips using bus transit, pre-pandemic ridership averaged around 65,000 trips per month through 2019. In 2020, ridership dropped sharply to approximately 20,000 monthly. Since then, ridership has gradually recovered, with current levels still climbing toward pre-2020 figures. Figure 4-14 illustrates these ridership trends from 2018 through projected levels in 2025.

In terms of commute to work, the share of residents using public transit steadily increased between 2010 and 2019, reaching a peak of 2.8 percent. However, this figure dropped significantly to 1.9 percent in 2020 due to the pandemic and further to just 0.8 percent in 2023. Figure 4-15 shows these trends from 2010 to 2023. In response, The Merced Transit Authority (MTA) is working to streamline The Bus network across the county as outlined in the Merced County Short-Range Transit Plan (SRTP) adopted in 2022. Planned improvements include reorienting routes to eliminate out-of-direction movements and better connecting major destinations. MTA also plans on using marketing strategies aimed at rebuilding and sustaining ridership over time.

Figure 4-14 Bi-Yearly Bus Ridership, 2018 - 2025



Source: MCAG The Bus Ridership Data.

Figure 4-15 Percentage of People Who Took Transit to Work, 2010 - 2023



Source: ACS 5-Year Estimates.

#### **CatTracks**

CatTracks is a bus service operated by UC Merced. This service is offered free of charge to students, staff, and faculty. The general public may use the service for \$0.35 per ride. Seven routes are offered and connect the UC Merced campus to locations within Merced. In 2024, the MCAG Social Services Transportation Advisory Council (SSTAC) noted in their meeting minutes<sup>5</sup> that for FY2022-23, CatTracks ridership was 20,000. Figure 4-16 shows the CatTracks network.

C2

Bellevor Rd

C2

Bellevor Rd

C2

Bellevor Rd

CALIFORNIA MERCED

CALIFORNIA MERCED

Dignity Fleath Dropital Particular Centre

FastCat

FastCat

FastCat

FastCat

OR

Resident Special

Power Ave

Merced Cox fly Court Ave

Merced Cox fly Court Ave

Selevor Rd

California Merced

California Merced

Court Ave

A

Bear Cree

Bear Cree

Bear Cree

Bear Cree

Bear Cree

Bear Cree

California Merced

California

Figure 4-16 CatTracks Bus Routes from UC Merced

Source: UC Merced Transportation and Parking Services.

The Bus and CatTracks currently do not coordinate with one another, resulting in overlapping service. In the 2022 SRTP, coordination or consolidation of the CatTracks and The Bus were discussed in the plan. This arrangement would allow for pooling resources and coordinating services to better serve the community, and the combined ridership of the coordinated or consolidated system would allow for higher FTA funding allocation and provide a positive image of the transit in the community. Due to challenges related to coordination, cost sharing, and the needs of the UC system, the systems have yet to be coordinated or consolidated.

<sup>&</sup>lt;sup>5</sup> https://www.mcagov.org/DocumentCenter/View/4726/SSTAC-Full-Agenda---July-11-2024?bidId=

### Yosemite Area Regional Transportation System

The Yosemite Area Regional Transportation System (YARTS) is a rural intercity bus program that serves communities in six counties. YARTS was created in 2000 as a solution to growing congestion and pollution from visitors to Yosemite National Park. YARTS provides public transit for visitors, employees, and communities along its four routes to Yosemite National Park. Figure 4-17 shows the four routes operated by YARTS. The Hwy 140 route primarily serves Merced and is the only year-round route operated by YARTS.

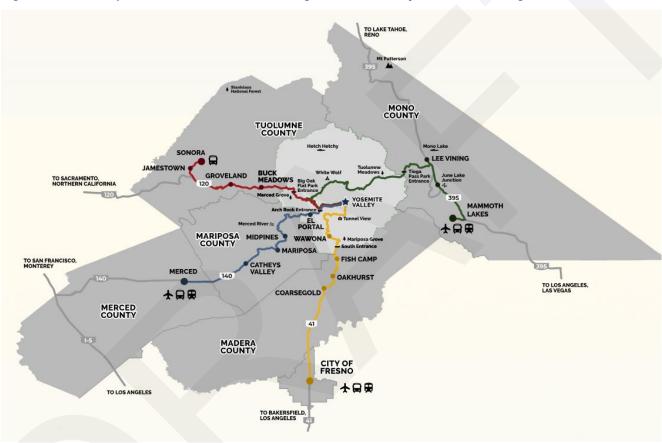


Figure 4-17 Map of YARTS Bus Routes Serving Yosemite Valley and Surrounding Counties

Source: Yosemite Area Regional Transportation System.

MCAG has provided administrative, staffing, and operational support to YARTS since its inception. Currently YARTS operates its routes with ten buses, ranging in age from seven to 12 years old. Buses are equipped with bathrooms, resulting in higher maintenance cost compared to traditional buses.

As shown in Figure 4-18 the Merced-HWY 140 stop has the highest number of riders compared to other YARTS stops. Since 2016, YARTS ridership has decreased by 53 percent. The drop of ridership during the 2018/2019 fiscal year may be due to the wildfires that closed the park for 27 days in the summer. The following years saw ridership decline more due to COVID-19.

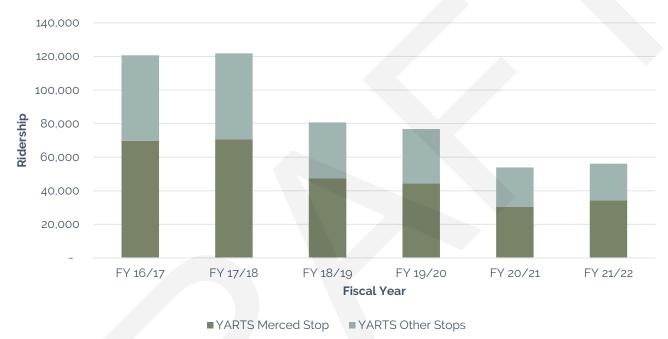


Figure 4-18 YARTS Annual Ridership (July 2016 to May 2022)

Source: Merced County YARTS Ridership.

### **Intercity Bus Service**

The Bus operates five intercity commuter buses, as shown in Figure 4-19. These intercity bus options provide connection between various communities in Merced County. In conjunction with The Bus, FlixBus, VIA Charter Lines, and Greyhound offer intercity services in Merced. The Merced transportation center houses the stops for the intercity routes and Greyhound routes.

Legend Stanislau Merced City Limits Merced County Boundary Turlock **Intercity Commuter Bus** Lines LB W1 Gustine Made Santa Nella os Banos Dos Palos Gaspin FAQ, NOAA, USGS. (c) contributors, and the GIS ++ Esri, NASA, NGA, USGS, FEMA, Source OpenStreetMap co Community, Sources Esri, TomTom, Garmin, FAO, NOAA, USGS © OpenStreetMap 0 contributors, and the GIS User Community 10 20 Miles

Figure 4-19 Intercity Bus Routes in Merced County

Source: California State Geoportal, The Bus.

Per SB 742 (2019), Amtrak, along with joint powers authority, public or private transit operator, are now allowed to sell bus-only services. Amtrak services in Merced fall under the San Joaquin Joint Powers Authority. This allows visitors on Amtrak, Amtrak Thruway Buses, and different intercity bus services to access destinations such as the Yosemite Valley through YARTS. Only one Amtrak Throughway Bus route, Route 15A, operates in Merced and travels between Merced and Yosemite National Park. A second Amtrak Throughway Bus route (Route 40) is planned to be developed in the future; once developed, this route will travel between Merced and San Jose.

# **Passenger Rail**

Passenger rail in Merced is primarily run by Amtrak, which offers a series of buses in concurrence with its rail services. In addition, two new rail services are expected to start servicing the city. The new California High Speed Rail would include a station stop in downtown Merced and the Altamont Corridor Express (ACE) is expanding its service to connect Merced with the Bay Area and Sacramento.

#### **Amtrak**

Amtrak rail service currently provides six daily round-trip services on the San Joaquins rail line accessible through the Merced station. The San Joaquins is the only passenger rail provided in Merced County. Prior to the COVID-19 pandemic, the San Joaquins had seven daily round-trip services with Merced Station being the fifth busiest stop. However, service dropped to four daily round-trips during COVID-19. Figure 4-20 shows the railroads crossing in Merced County.

Legend Stanislaus Merced City Limits Merced County Boundary Turlock Patterson Railroad Me ced Rive BNSF/Amtrak CFNR Livingstor UP Greyhound **YARTS** Planada Gustine e Grand Santa Nella os Banos Dos Palos Frank 775 ft Dos Palos Esri, NASA, NGA, USGS, FEMA, Source TomTom, Gaugin FAO, NOAA USGS. (c)
OpenStreetMap confidences fish, TomTom, Garmin,
FAO, NOAA, USGS. © OpenStreetMap 2 Miles ontributors, and the GIS User Community

Figure 4-20 Freight and Passenger Railroad including Greyhound and YARTS Bus Thruway Service

Source: California State Geoportal.

The full extent of the Amtrak San Joaquins service, including thruway bus services, can be seen in Figure 4-21. Route 40 is a future route that will connect Merced to San Jose. In addition, Amtrak has partnered with YARTS to provide a train and bus service to Yosemite National Park.

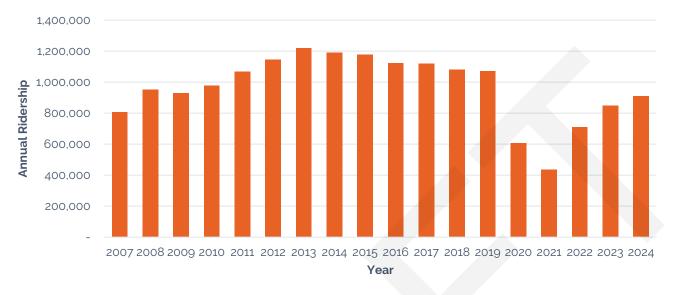
Cal Poly Humboldt Redding cramento Emeryville Oakland Turlock/ Santa Cruz Fresno To Las Vega San Luis Obisp Goleta (UCSB) San Diego

Figure 4-21 San Joaquins Service in California including Thruway Bus Routes

Source: Amtrak San Joaquins.

Ridership in the San Joaquins service decreased by approximately 60 percent between 2019 to 2021 (Figure 4-22). Although ridership increased by 50 percent from 2021 to 2024, total use of the system remains lower than in the years prior to the pandemic. Ridership at the Merced station follows a similar pattern to the whole system. The station saw a steep drop in ridership from 2019 to 2021. However, as shown in Figure 4-23, ridership at the Merced station is nearing pre-pandemic levels.

Figure 4-22 Ridership over Time, San Joaquins



Source: Amtrak Year End Ridership Fact Sheet.

Figure 4-23 Annual Ridership Using the Merced Station



Source: Amtrak Year End Ridership Fact Sheet.

### **High Speed Rail**

As early as 1981, planners and leadership in California have had vision of high speed, safe, reliable, and environmentally sustainable transportation from southern to northern parts of the state. Through the High-Speed Rail Development Act of 1994 and \$8 billion in funding as part of the federal American Reinvestment and Recovery Act of 2009, the rail system has been progressing with design, engineering, and construction. In 2020, the California High Speed Rail Authority approved the final environmental documents, clearing the way for construction of the 171-mile Merced to Bakersfield segment. As of 2022, the California High-Speed Rail Authority is studying alternative locations of the Merced Station as shown in Figure 4-24.

According to the Authority's 2022 Business Plan, Merced to Bakersfield currently takes 2.5 hours by car and three hours by Amtrak, the HSR will reduce travel times to 80 minutes, with 18 round trips per day. The Merced HSR station will be the northern terminal of the initial Central Valley HSR segment. Figure 4-25 shows the current HSR system status as of June 2024.

MERCED STATION
APPLI 2022

Figure 4-24 Merced Station Map

Source: California High-Speed Rail Authority.

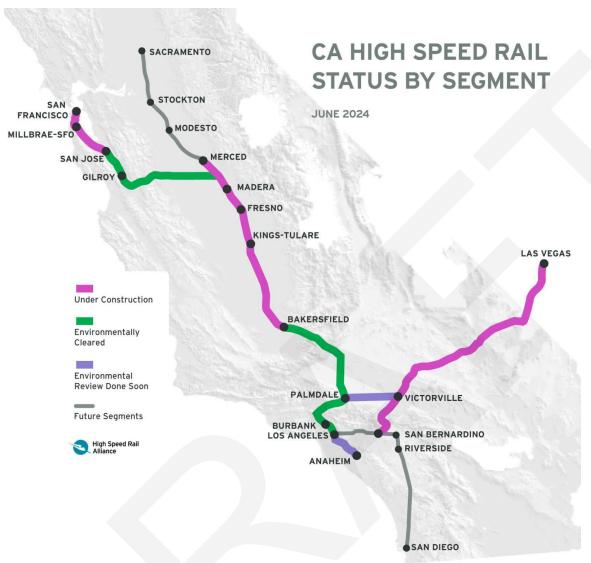


Figure 4-25 HSR 2024 Progress, California High-Speed Rail

Source: California High-Speed Rail Authority.

### **Altamont Corridor Express**

Altamont Corridor Express (ACE) is a commuter rail service managed by the San Joaquin Regional Rail Commission (SJRRC) that currently connects Stockton to Silicon Valley. The Valley Rail<sup>6</sup> is a future project that will extend the current network to Merced through the Ceres-Merced extension. The Final Environment Impact Report (EIR) for the Ceres-Merced extension was published in 2021, and SJRRC is currently working on permitting, final design, and construction. Construction of the Valley Rail is anticipated to be completed between 2030 and 2033. Figure 4-26 shows the current system network and future expansion.

TO CHICO ★ Shuttle | SACRAMENTO MIDTOWN 🔲 CITY COLLEGE **Existing Station ELK GROVE New Station** LODI Sac RT Light Rail OAKLEY STOCKTON San Joaquins MANTECA ACE NORTH LATHROP LATHROP/ MANTECA UNION CITY/ BART MODESTO /ASCO RD TURLOCK/DENAIR FREMONT GREAT AMERICA SANTA CLARA MERCED SAN JOSE MADERA FRESNO TO BAKERSFIELD

Figure 4-26 Valley Rail (ACE) Project Map

Source: San Joaquin Regional Rail Commission, Current Valley Rail Progress.

<sup>&</sup>lt;sup>6</sup> https://www.sjrrc.com/valley-rail/

# Freight and Goods Movement

#### Truck

The Surface Transportation Assistance Act (STAA) of 1982 designated certain highways as truck routes. These routes are specifically designed to accommodate longer and wider trucks than those typically allowed on standard roads. The Act permits motor carrier operation of 48-foot and 53-foot (kingpin to rear axle) semi-trailers on the national highway network and allowed states to permit these "STAA vehicles" on state and local routes as well. Designation of STAA routes is premised on engineering and safety standards (i.e., adequate footprint to accommodate 53-foot truck turn radius requirements, gross vehicle weight, vertical clearance height etc.). STAA designated routes within Merced are shown in Figure 4-27.

Figure 4-27 STAA Truck Route Map, Merced



Source: Caltrans Quick Map.

<sup>&</sup>lt;sup>7</sup> U.S. Code of Federal Regulations at Part 658 "Truck Size and Weight, Route Designations—Length, Width and Weight Limitations" and in the California Vehicle Code at Section 35401.7

State Route (SR) 99, SR59, and SR140 are the three State Highways that cross the jurisdiction of Merced. The truck VMT estimate is calculated by multiplying the average daily truck volume gathered from the Caltrans Public Road Data with the estimated total length of state highways within the jurisdiction. The estimate from 2013 to 2023 is illustrated in Figure 4-28. The estimated truck VMT has stayed consistent throughout the years and only has increased by an average of 2.0 percent per axle from 2013 to 2023.

200,000 180,000 160,000 **Estimated VMT** 140,000 120,000 100,000 80,000 60,000 40,000 2013 2014 2016 2017 2015 2018 2019 2020 2021 2022 2023 Year ■5+ Axle ■4 Axle ■3 Axle ■2 Axle

Figure 4-28 Estimated Annual Truck VMT for 2+ Axle Trucks on State Highways in Merced

Source: Caltrans Public Road Data, Caltrans AADT.

#### Rail

Along with the truck routes available for freight and goods movements, a number of freight rail routes run through Merced, including Class I rail routes operated by Union Pacific and Burlington Northern Santa Fe (BNSF), which maintains right-of-way and shares its tracks with Amtrak. Figure 4-29 shows the regional freight railroads in both the county and city of Merced.

Legend Stanislaus Merced City Limits Merced County Boundary Turlock Patterson Railroad BNSF/Amtrak CFNR UP Winton Bus Greyhound Planada **YARTS** Gustine e Grand Merced Santa Nella Dos Palos Frank 775 ft Dos Palos Esri, NASA NGA, USGS, FEMA, Sources, Esri, TomTom, Gauging FAQ, NQAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources, Esri, TomTom, Garmin, FAO, NOAA, USGS © OpenStreetMap contributors, and the GIS User Community Esri, 0 0.5 2 Miles 10

Figure 4-29 Freight and Passenger Railways in Merced County

Source: California State Geoportal.

### **Aviation Facilities**

There is one publicly owned airport for public use in Merced. Table 4-3 lists the airport and the nearby regional facility by name, FAA identifier, and facility type.

Figure 4-31, illustrates the two airport locations in Merced County within and adjacent to Merced. Merced Yosemite Regional Airport (MacReady Field, MCE) and Castle Airport (MER), have an International Air Transport Association (IATA) code, which matches its Federal Aviation Administration (FAA) designation. Castle Airport is a small general aviation airport, owned by Merced County and located next to the city of Atwater. MacReady Field is owned by the City of Merced, is the only commercial airport within the county. A new 12,000 sq. ft. terminal is being constructed to support a growing interest in enplanements to and from Merced/Yosemite.

Table 4-3 Publicly Owned Airports

Facility Name	FAA Identifier	Facility Type
Castle Airport	MER	Regional
Merced Yosemite Regional Airport (MacReady Field)	MCE	Commercial

Source: California State Geoportal.

Advanced Air is currently the primary airline serving MacReady Field. The airline provides routes from Merced to Las Vegas, Nevada, and Hawthorne, California. Figure 4-30 shows the enplanements at MacReady Field with demand decreasing 64 percent from 2016 to 2022. However, demand has increased 42 percent from 2022 to 2024. In 2025, the City of Merced solicited proposals from passenger air providers. The FAA is responsible for choosing the air provider(s) for MacReady Field. As of the print time of this publication, that decision has not been made.

Figure 4-30 Enplanements at MacReady Field, (MCE)



Source: FAA Passenger Boarding & All-Cargo Data.

CASTLE AIRPORT Castle Airport Franklin Merced MERCED REGIONAL AIRPORT MACREADY FIELD Pilger Lateral Linga Duck Slough Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community 0.5 1 Miles

Figure 4-31 Location of General Use Airfields

Source: California State Geoportal.

## **Transportation Demand Management**

Transportation Demand Management (TDM) refers to strategies that promote alternatives to single occupant vehicles. Active transportation (walking and cycling), transit promotion, use of micromobility, carpool and vanpool, park-and-ride, and tolling are examples of TDM strategies. Certain types of intelligent transportation systems (ITS), the use of telecommunications in transportation infrastructure, can also be considered TDM.

The Merced County Association of Government (MCAG) identifies five TDM measures in its 2022 RTP/SCS. These measures are:

- Active Transportation
- Transit
- ACE Train Extension
- Carpool/Vanpool Programs
- ITS Strategies

Please note: Active Transportation, Transit, and the ACE Train service expansion have been covered in earlier sections of this document. Carpool/vanpool programs are discussed in this section; ITS strategies are discussed under the heading, "Transportation System Management" below.

### Carpool and Vanpool

The San Joaquin Valley Air Pollution Control District (SJVAPCD) eTRIP Rule (Rule 9410), also known as the Employer Based Trip Reduction rule (eTRIP) is a mandate that employers with more than 100 employees create an employer-trip reduction plan to encourage employees to carpool or use transit other than single occupancy vehicles. eTRIP is menu based and requires employers to select items from a menu that fulfill a point-based criteria and must regularly report to the air district.

In Merced, there are several carpool and vanpool options, including Dibs, NorCalGo, CalVans, and UC Merced organized carpools. Dibs is offered only between San Joaquin and Merced counties through MCAG and San Joaquin Council of Governments (SJCOG). Dibs provides traveling solutions including carpooling, vanpooling, transit, and active transportation. Similar to Dibs, NorCalGO<sup>8</sup> is a ridesharing and transportation option service available in several Northern California counties including Merced. The program allows travelers to find alternatives transportation modes instead of single occupancy vehicles to specific destinations and provides rewards for using alternative modes of transportation. CalVans is offered through the California Vanpool Authority which offers ridesharing services for employees, primarily utilized by agricultural employers. Additionally, UC Merced hosts its own carpool program for students, faculty, and staff. A driver must be registered to the UC Merced carpool program, which has several requirements for its members.

<sup>8</sup> https://norcalgo.org/

# **Transportation System Management**

Transportation system management programs increase existing roadway efficiency without the construction of new roadway infrastructure. In general, these range from operational improvements such as signal timing management, pavement management, and fix-it-first programs to ITS improvements.

## **Intelligent Transportation Systems (ITS)**

In the 2022 MCAG RTP/SCS, many of the funded projects for ITS improvements include traffic signal synchronization in key corridors in the cities of Merced, Atwater, and Los Banos. In Merced, Phase 1 aims to synchronize the G and 16<sup>th</sup> Street corridors while Phase 2 seeks to upgrade controllers and synchronize signals on heavily traveled corridors.

In addition to signal timing improvements, the County also wants to develop Smart Corridor plans to provide real-time roadway information to drivers such as changeable message signs. In Merced, one changeable message sign is located on SR 140. The sign provides traffic condition updates to those traveling to Yosemite National Park.

### **Operations and Infrastructure Strategies**

As of 2023, the City of Merced maintains approximately 254 miles of roadway9.

Pavement Condition Index (PCI) is the measure of the pavement quality and condition. The PCI scores pavement quality range from poor (0-49), at risk (50-59), good (60-79), and excellent (80-100). Pavement conditions countywide are rated as having poor or at-risk pavement conditions. Figure 4-32 shows the average pavement conditions PCI index in the county from 2008 to 2022 based on the 2022 California Local Streets and Roads Needs Assessment. As shown the countywide PCI is 57 with a 10-year need over \$1.4 million. Figure 4-33, illustrates the pavement conditions in the county. Notably, Merced was given an estimated PCI score of poor.

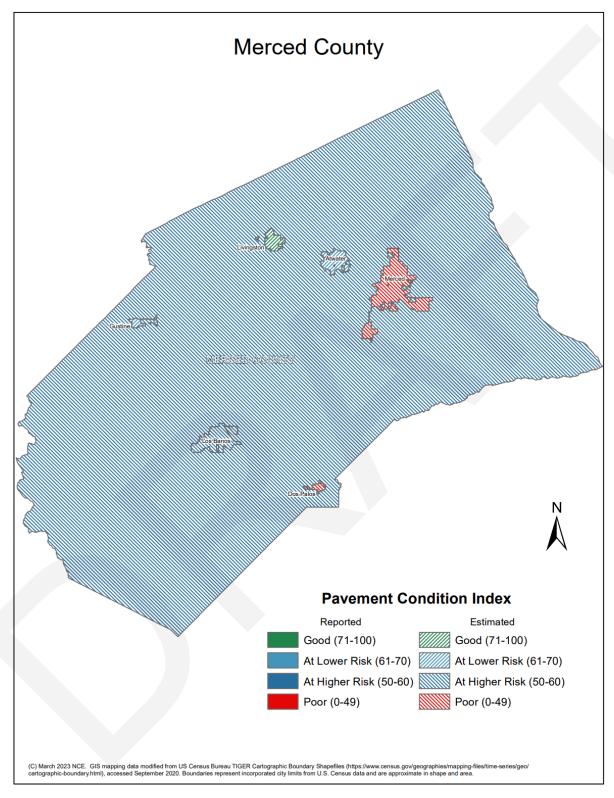




<sup>&</sup>lt;sup>9</sup> Highway Performance Monitoring System (HPMS) Public Road Data, 2023.

Source: California Statewide 2022 Local Streets and Roads Need Assessment.

Figure 4-33 2022 Pavement Condition Merced County



Source: Save California Streets.

#### **Vehicle Electrification**

Electrification is a continuing and growing trend in transportation, particularly in California where statewide policies are in place to facilitate the transition from traditional fossil fuels to alternative fuels. The advancements made in longer-life batteries, an increase in charging stations, and electric auto technology is making electric vehicles more attractive to consumers and is lowering the "range anxiety" blamed for slow adoption. As the technology develops, prices are becoming more affordable, and consumer choice is beginning to drive the electric vehicle market.

A key element of the growing market for electric vehicles is infrastructure. In 2023, MCAG completed its EV Readiness Plan<sup>10</sup> which identified current and future charging station sites in the county, and summarizes future EV infrastructure needs. According to the EV Readiness Plan, Merced has 27 chargers with 25 of them being public. Figure 4-34 shows existing EV charging infrastructure locations in Merced and the surrounding area. The EV Readiness Plan effort also included a suitability analysis for future charger site locations. Figure 4-35 illustrates the suitability analysis of charging infrastructure sites within the city.

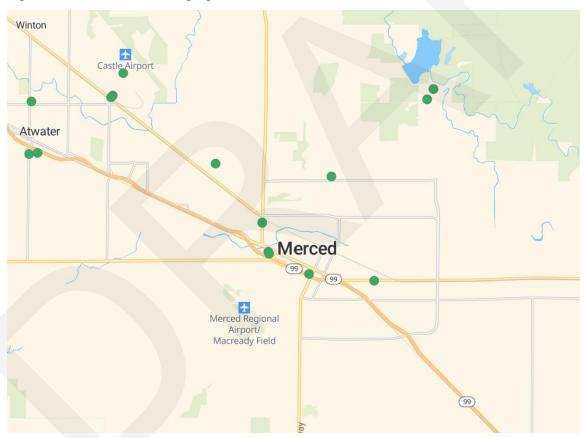


Figure 4-34 Electric Charging Infrastructure Locations Near Merced

Source: US Department of Energy, Alternative Fuels Data Center.

<sup>&</sup>lt;sup>10</sup> MCAG EV Readiness Plan (2023).

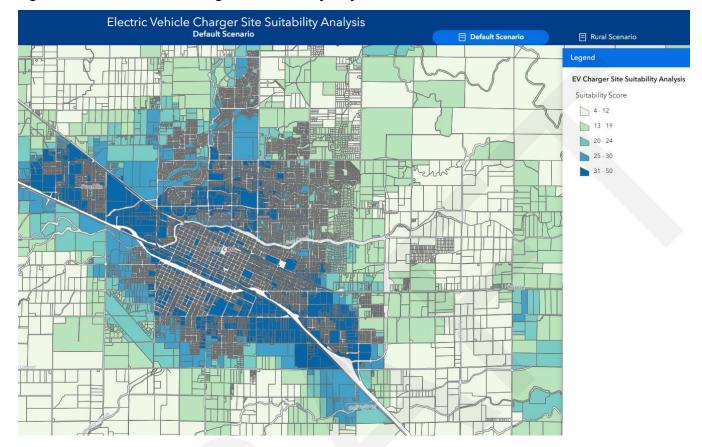


Figure 4-35 Merced EV Charge Site Suitability, City of Merced

Source: MCAG EV Charge Site Suitability Interactive WebMap.<sup>11</sup>

 $<sup>^{11}\,</sup>https://experience.arcgis.com/experience/9ada3c33705b45d9ae730ac0800d9e23/page/Default-Scenario$ 

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#### **Market and Economic Conditions**

This chapter summarizes citywide data and key findings from the analysis of market and economic conditions prepared for the Merced General Plan Update and Downtown Station Area Plan (DSAP).

# **Demographic and Market Conditions**

To contextualize Merced's current demographic and economic conditions, this section compares citywide conditions with peer cities, as well as to three counties in the San Joaquin Valley, including:

#### **Peer Cities**

- Modesto
- Stockton

#### **Larger Reference Areas**

- Merced County
- San Joaquin County
- Stanislaus County

Table 5-1 summarizes findings for several economic and demographic data categories. Merced has a lower median income and median home value, fewer homeowners, and less taxable sales per capita than the peer cities and counties. Further, Merced has the highest unemployment rate and poverty rate.

Table 5-1 Comparison to Peer Cities and Reference Areas

Data Category	Peer Cities (Modesto & Stockton)	Reference Areas (Merced County, San Joaquin County, Stanislaus County)
Median Household Income	Lowest of the three	Below all counties
Unemployment Rate	Highest (12.3%) vs. 7–8% in others	Above all three counties
Poverty Rate	Highest overall and among children	Well above county benchmarks
% with Bachelor's Degree or Higher (25+)	Slightly lower than Stockton, close to Modesto	Higher than Merced County, lower than others
Household Size	Larger than both peer cities	Among the highest
% Owner-Occupied Housing	Lowest (44.4%)	Below all counties
Median Home Value	\$347K — well below peers and counties	Lowest among all benchmarks
% of Renters Cost-Burdened (35%+)	High at 44.5%	Comparable to regional norms
Taxable Sales Growth (2015–2024)	+37% — below County and State	Lags behind county trends
Taxable Sales per Capita (2024)	Well below peers	Lowest among regional counties

Source: Summary of Key Datasets Report – City of Merced General Plan Update (GPU) and Downtown Station Area Plan (DSAP), June 2025

#### **Key Findings**

#### Age and Household Composition

Merced has a young population with 45 percent of residents under age 25, compared to 36 percent in Modesto and 37 percent in Stockton. The City also has a relatively large average household size (3.22) and family size (3.73), both of which are higher than regional peer averages. In Merced, 43 percent of households include one or more people under 18 years, the highest share among all benchmarks.

#### Commute and Work Behavior

Merced has the shortest mean travel time to work (26.9 minutes) among peer cities and counties. A large majority (75.4 percent) of workers drive alone, while only 0.8 percent use public transportation. Merced also reports the highest rate of working from home (7.9 percent) among peer cities.

#### **Labor Market Conditions**

The unemployment rate in Merced is 12.3 percent, the highest among peer cities and counties. Merced's labor force participation rate (61.8 percent) is similar to regional averages, though the employment-to-population ratio (54.2 percent) is slightly lower that the region.

#### **Industry and Occupation Profile**

Merced has a higher concentration of employment in:

- Education, healthcare, and social assistance (25.9 percent), above both Modesto (22.8 percent) and Stockton (22.2 percent).
- Natural resources, construction, and maintenance occupations (15.0 percent) higher than Modesto (11.2 percent) and Stockton (11.8 percent). Merced also has a greater share of government workers at 21.1 percent, compared to 15.0 percent in Modesto and 14.6 percent in Stockton.

#### **Income and Poverty**

According to U.S. Census Bureau's, American Community Survey (ACS) data, Merced's median household income was estimated to be \$59,938 in 2023<sup>1</sup>, the lowest among peer cities and counties. In Merced, 23.0 percent of residents live below the poverty line, including 30.9 percent of children under 18. Additionally, the data indicates that 30 percent of households in Merced received SNAP benefits in 2023, which was nearly double the share in Modesto (15.8 percent).

#### **Educational Attainment**

<sup>&</sup>lt;sup>1</sup> American Community Survey provides population, demographic, and economic data between census years; the most recently published dataset at the time of writing includes estimates through 2023. This dataset provides sufficient detail to inform evaluations of existing conditions and change over time. This data has been supplemented by input received directly from developers through stakeholder interviews held in 2025.

Among residents aged 25 or older in Merced, 18.0 percent hold a bachelor's degree or higher, compared to 20.3 percent in Modesto and 19.1 percent in Stockton. The high school graduation rate is 77.2 percent, slightly lower than in Modesto (83.3 percent) and about the same as Stockton (77.1 percent).

#### **Housing Characteristics**

Merced has the lowest homeownership rate (44.4 percent) and the highest rental rate (55.6 percent) among peer cities and counties. The median home value according to the American Community Survey was \$347,700 in 2023, the lowest across all benchmark geographies. Among renters, 44.5 percent spend 35 percent or more of their income on housing, indicating a high level of cost burden. The median rent is \$1,293, lower than Modesto (\$1,609) and Stockton (\$1,495). Over 29 percent of housing units were built since 2000, a higher share than in Modesto or Stockton.

#### **Housing Market**

Existing residential development in Merced and surrounding area is primarily focused on entry-level single-family construction, according to local residential developers active in the region. There is currently limited market potential for upscale higher-density products in Merced (especially for rental products). According to developers, current market rents will not support this type of development based on current construction costs However, as Downtown Station Area evolves, particularly the downtown area and areas close to the courthouse neighborhood, the market would be more likely to support higher density housing. Although this likely won't be the first type of new development in the area, it would most likely follow the more general growth in the area, as it becomes a more thriving urban core environment.

Policies that reduce parking minimums for these types of residential projects would be one key element to making them more financially feasible for developers. Potentially, the City could leverage AB 2097 and/or potential parking sharing agreements to use existing parking facilities to reduce overall development costs.

#### **Retail Sales and Economic Activity**

From 2015 to 2024, Merced's taxable retail sales increased by 37 percent, below both the county and state growth rates. Taxable sales per capita in 2024 are lower than in all comparison geographies, including Modesto, Stockton, Merced County, San Joaquin County, and Stanislaus County. Retail sales performance is especially weak in categories such as motor vehicle and parts dealers and general merchandise stores, relative to state and peer city benchmarks.

#### Commercial Real Estate Market Overview

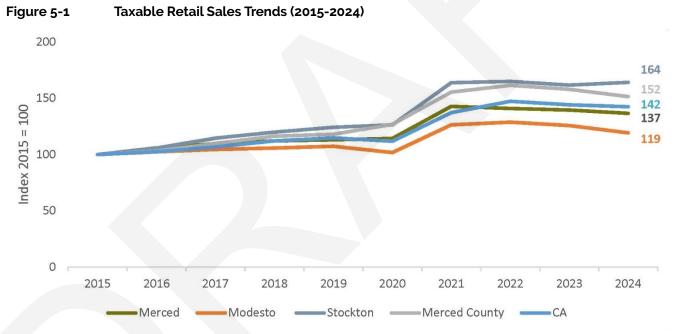
- Retail Market: Vacancy increased to 6.3 percent in Q2 2025 (from 5.3 percent the prior year);
   net absorption was negative for the second consecutive year.
- Office Market: Vacancy remains low at 1.8 percent, though net absorption turned negative in the latest period.
- Industrial Market: Vacancy rose from 13.6 percent to 15.6 percent, with continued negative net absorption and modest rent increases.

#### **Taxable Sales Data**

The following figures provide a summary of Merced's taxable sales performance relative to other regional benchmarks, including Merced, Modesto, Stockton, Merced County, San Joaquin County, and Stanislaus County. The taxable sales data and demographic data provided in the figures are from the California Department of Tax and Fee Administration (CDTFA) and the California Department of Finance (DOF).

#### **Taxable Sales Trends**

Figure 5-1 compares Merced's taxable retail sales performance relative to Modesto, Stockton, Merced County, and California. The figure normalizes the base year sales data (2015 = 100) to provide relevant comparisons among the four geographies. Thus, the 2024-year value of 137 implies that Merced's taxable retail sales increased by 37 percent during this period, below the county and state benchmarks.



Source: California Department of Tax and Fee Administration (CDTFA), The Natelson Dale Group (TNDG), 2025.

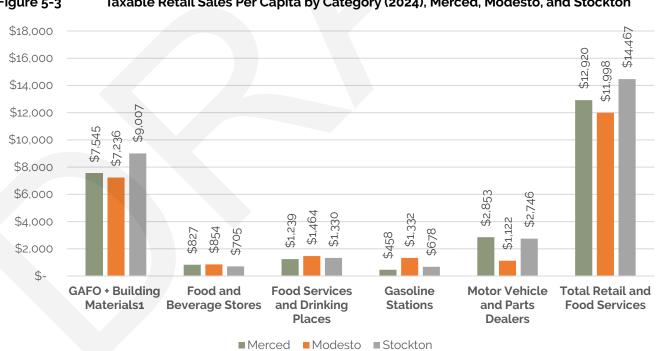
#### Taxable Sales per Capita

The figures below provide estimates of taxable sales per capita for Merced, Merced County, San Joaquin County, Stanislaus County, and California. For the most recent calendar year, the figure shows that Merced's taxable sales per capita are well below the state and most county benchmarks.

\$25,000 \$21,269 \$20,000 \$15,887 \$15,768 \$14,467 \$15,000 \$12,920 \$11,998 \$10,193 \$10.000 \$5,000 \$-California Merced Modesto Stockton Merced San Joaquin **Stanislaus** 

Figure 5-2 Taxable Retail Sales Per Capita (2024)

Source: CDTFA; DOF; TNDG.



Taxable Retail Sales Per Capita by Category (2024), Merced, Modesto, and Stockton Figure 5-3

County

County

County

\*GAFO represents sales at stores that sell merchandise normally sold in department stores. Source: CDTFA; DOF; TNDG.

# Commercial and Industrial Real Estate Market Data

This section provides a summary of the retail, office, and industrial real estate markets in Merced, compared to the benchmark regions.

#### **NET ABSORPTION**

Net absorption is the rate at which rentable area is leased up over a period of time in a given market. The net absorption figure considers construction of new space, demolition of existing space and any additional vacancies during that period. It is often used to forecast demand and supply trends and is thus a key indicator for both property owners and developers, significantly influencing their pricing and timing decisions.<sup>2</sup>

#### MARKET CAP RATE.

The capitalization rate, or cap rate, in commercial real estate, is an estimate of the rate of return on an investment property reached by dividing its net operating income by its current market value.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> https://www.adventuresincre.com/glossary/net-absorption/

<sup>&</sup>lt;sup>3</sup> https://www.investopedia.com/terms/c/capitalizationrate.asp

#### **Retail Market**

The tables below show key **retail** market indicators for Merced, Modesto, and Stockton for the most recent quarter (2025, Q2) and one year earlier. In addition, the tables show the typical range for these indicators along with the 10-year average. The data indicates that the retail vacancy rate is highest in Merced (6.3 percent), however asking rents and market sales prices have increased in the last year. The current market cap rate in each city is above the 10-year average in Merced and Stockton.

Table 5-2 Key Retail Market Indicators, Merced

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	6,070,461	(54,417)	6.3%	\$19.98	\$166	7.4%
Prior Period	6,070,461	(38,300)	5.3%	\$19.67	\$163	7.3%
	+0%	-41.9%	+1.0%	+1.6%	+1.5%	+0.1%
Typical Range		(50,254)-72,508	4.27%-6.75%	1.9%-3.9%	\$137-\$159	7.07%-7.34%
10 Yr Avg		11,072	5.52%	2.9%	\$148	7.21%

Source: CoStar, Market Analytics, 2025 Q2.

Table 5-3 Key Retail Market Indicators, Modesto

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	15,900,000	(199,965)	5.9%	\$20.73	\$197	6.9%
Prior Period	15,900,000	(63,800)	4.4%	\$20.29	\$192	6.9%
	0%	-213.1%	+1.5%	+2.1%	+2.6%	0%
Typical Range		(111,072)-172,253	3.87%-5.49%	\$16.38-\$19.53	\$146-\$182	6.95%-7.22%
10 Yr Avg		30,608	4.68%	\$17.95	\$164	7.09%

Source: CoStar, Market Analytics, 2025 Q2.

Table 5-4 Key Retail Market Indicators, Stockton

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	15,500,000	193,505	4.4%	\$19.94	\$192	7.3%
Prior Period	15,400,000	22,500	5.5%	\$19.57	\$195	7.1%
	+0.1%	+758.8%	-1.1%	+1.9%	-1.3%	+0.2%
Typical Range		(107,374)-156,941	3.92%-5.36%	\$15.92-\$18.86	\$151-\$187	7.07%-7.41%
10 Yr Avg		25,000	4.64%	\$17.39	\$169	7.24%

Source: CoStar, Market Analytics, 2025 Q2.

#### Office Market

The tables below show key **office** market indicators. The data indicates that Merced has a smaller inventory and higher vacancy rate among existing office properties, The market sales price in Merced decreased slightly in the last year, however, the market cap rate is currently higher than the typical range and 10-year average.

Table 5-5 Key Office Market Indicators, Merced

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	2,619,714	(9,187)	1.8%	\$22.66	\$144	9.9%
Prior Period	2,619,714	44,300	1.5%	\$22.37	\$147	9.7%
	+0%	-120.7%	+0.3%	+1.3%	1.9%	+0.2%
Typical Range		(20,104)-51,460	2.05%-5.53%	\$18.02-\$21.71	\$140-\$157	7.82%-9.21%
10 Yr Avg		15,678	3.79%	\$19.87	\$149	8.51%

Source: CoStar, Market Analytics, 2025 Q2.

Table 5-6 Key Office Market Indicators, Modesto

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	6,900,000	(26,616)	4.5%	\$22.55	\$171	9.4%
Prior Period	6,900,000	17,100	4.6%	\$22.21	\$184	9.0%
	0%	+55.9%	-0.1%	+1.5%	-6.7%	0.4%
Typical Range		(19,591)-128,368	3.95%-6.72%	\$17.58-\$21.65	\$175-\$205	7.20%-8.50%
10 Yr Avg		54,315	5.14%	\$19.61	\$190	7.84%

Source: CoStar, Market Analytics, 2025 Q2.

Table 5-7 Key Office Market Indicators, Stockton

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	9,296,790	145,407	5.0%	\$22.52	\$150	9.4%
Prior Period	9,296,790	(94,400)	6.6%	\$21.98	\$149	9.3%
	+0%	+254.1%	-1.6%	+2.4%	-0.5%	+0.1%
Typical Range		(53,869)-268,254	5.17%-9.15%	\$16.80-\$21.28	\$136-\$162	7.63%-8.81%
10 Yr Avg		107,307	7.15%	\$19.04	\$149	8.22%

Source: CoStar, Market Analytics, 2025 Q2.

#### **Industrial Market**

The tables below show key industrial market indicators. As shown, Merced has a significantly smaller inventory, but the lowest vacancy rate and increasing rents, indicating strong demand for industrial space in the city.

Table 5-8 Key Industrial Market Indicators, Merced

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	6,500,000	(131,113)	15.6%	\$7.13	\$93	7.5%
Prior Period	6,500,000	(632,000)	13.6%	\$7.10	\$92	7.3%
	+0%	+79.3%	+2.0%	+0.4%	+1.2%	+0.2%
Typical Range		(296,571)-254,359	4.72%-13.60%	\$4.91-\$6.73	\$59-\$91	6.31%-7.10%
10 Yr Avg		(21,241)	9.15%	\$5.82	\$75	6.71%

Source: CoStar, Market Analytics, 2025 Q2.

Table 5-9 Key Industrial Market Indicators, Modesto

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	37,100,000	(1,062,183)	6.2%	\$8.21	\$80	7.4%
Prior Period	37,100,000	132,000	2.9%	\$8.17	\$81	7.1%
	0%	-904.2%	3.3%	+0.5%	-2.2%	0.3%
Typical Range		(269,897)-854,359	2.15%-4.74%	\$5.58-\$7.73	\$51-\$81	6.27%-7.06%
10 Yr Avg		292,876	3.44%	\$6.66	\$66	6.67%

Source: CoStar, Market Analytics, 2025 Q2.

Table 5-10 Key Industrial Market Indicators, Stockton

Time Period	Inventory SF	12 Mo Net Absorption SF	Vacancy Rate	Market Asking Rent / SF	Market Sales Price/SF	Market Cap Rate
Current	71,765,257	(183 ,412)	12.4%	\$8.74	\$126	6.5%
Prior Period	71,765,257	1,600,000	8.6%	\$8.87	\$127	6.2%
	+0%	-88.6%	+3.6%	-1.5%	-0.7%	+0.3%
Typical Range		413,597-2,388,748	4.30%-8.72%	\$5.45-\$8.38	\$67-\$121	5.81%-6.58%
10 Yr Avg		1,402,548	6.50 %	\$6.92	\$94	6.27%

Source: CoStar, Market Analytics, 2025 Q2.

#### **Market Forecasts**

Table 5-11, below, highlights the key findings from preliminary detailed market demand forecasts for the following major land uses: office, retail, industrial, residential (single-family and multifamily), and hospitality. The table shows a range of citywide forecasts between baseline and aggressive scenarios.

BASELINE SCENARIO
Assumes continuation of existing development trends.

AGGRESSIVE SCENARIO
Assumes increased demand for industrial and office uses.

Based on baseline scenario, Merced is forecasted to see a significant increase in retail and industrial demand of 700,000 square feet and 550,000 square feet, respectively. Demand for office space is expected to increase (+195,000 square feet) as well. The aggressive scenario forecasts an additional 55,000 square feet of office space and 135,000 square feet of industrial space.

Under either scenario, the forecasts identify demand for more than 7,000 single-family units and nearly 4,000 multifamily units by 2045.

Table 5-11 Potential Demand for New Development

	Existing Development	Forecast Scenario (2025-2045)			
Land Use Type	(square feet)	Baseline	Aggressive		
Office	2,455,663	+195,000	+250,000		
Retail	5,903,638	+700,000	+700,000		
Industrial	5,572,961	+550,000	+735,000		
Residential – SF (units)	19,292	+7,237	+7,237		
Residential – MF (units)	8,607	+3,930	+3,930		
Hospitality (rooms)	1,110	TBD	TBD		

Note: SF = Single Family; MF = Multi Family; TBD = To be determined Source: TNDG, Real Estate Demand Models, 2025.

# References

Source: CoStar, Market Analytics, 2025 Q2.

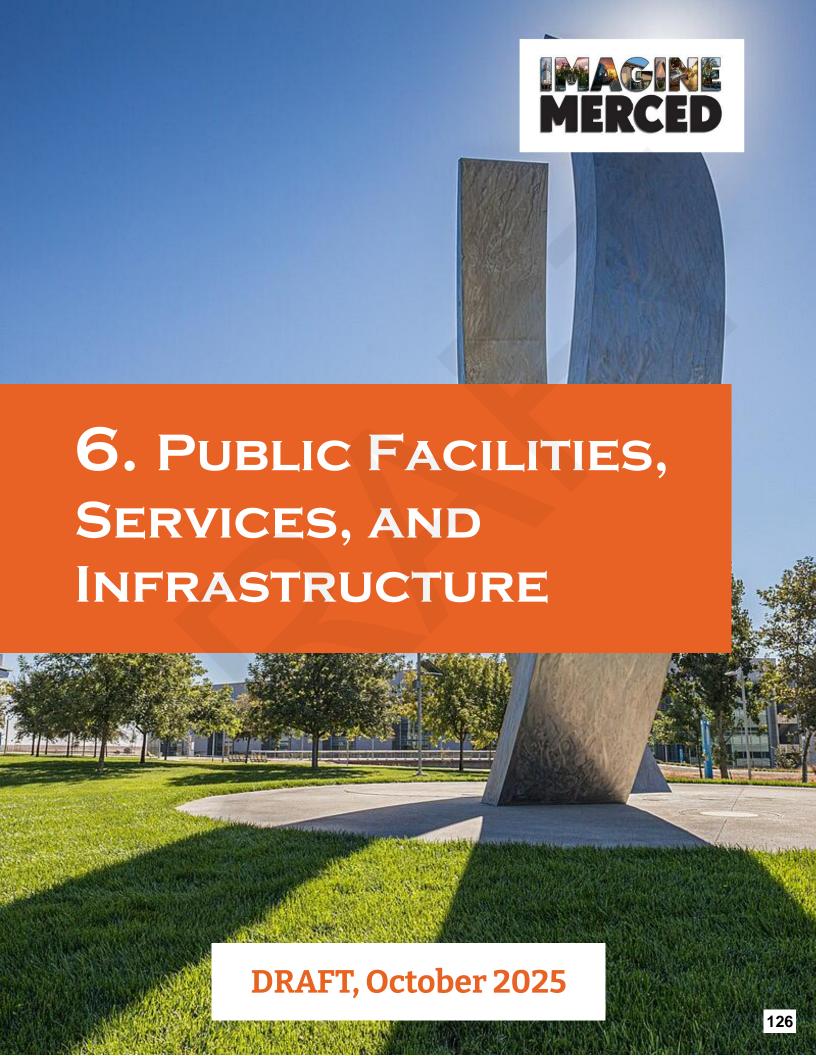
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#### What are Public Facilities, Services, and Infrastructure?

Public facilities, services, and infrastructure are essential to building a well-functioning city that supports a high quality of life, protects public health, and ensures the safety of its residents. To anticipate the future needs of the community, it is important to understand the current state, as well as the history, of the services provided to Merced residents. This section provides an overview of the City of Merced's public facilities, services and infrastructure.

# **Water Supply and Delivery**

The City of Merced Water Division of the Public Works Department is responsible for the maintenance and operation of drinking water production and distribution in the city. The Water Division is responsive to water system emergencies 24 hours a day, seven days a week. The Water Division is responsible for maintaining active well sites and infrastructure. The City's Public Works Department is the only municipal water purveyor in the city and provides service to an estimated total population of 99,100 residents (as of the year 2020), including UC Merced.

The City water system has 20 groundwater wells with a total well capacity of 54,400 gpm. In 2020, the City supplied 20,076 AF of potable water and 4,050 AF of recycled water. Potable water demands are projected to increase to 31,825 AF by 2040 due to population increases in the city, including the UC Merced population. The City's water supply is projected to sufficiently meet expected demands through 2040 through the installation of additional groundwater wells and construction of a 10 million gallon per day (mgd) surface water treatment plant (SWTP). The SWTP is projected to use surface water supplied by Merced Irrigation District (MID) and begin operation by 2030.<sup>1</sup>

The Water Division manages a 500+ mile-long distribution system that includes over 25,000 service connections, nearly 3,000 fire hydrants, approximately 25,000 meters, 7,000 main line valves, and over 2,500 backflow devices. A complete Supervisory Control and Data Acquisition (SCADA) system is used to monitor the water quality and ensure adequate supply by providing 24-hour real-time data on water pressure and motor run times. The Water Conservation Coordinator (WCC) promotes water conservation through public outreach by educating the community on how and why to conserve water.

Additionally, the Merced Irrigation District (MID) supplies water to agricultural users throughout the county. MID's conveyance system spans more than 860 miles and serves approximately 2,200 growers (100,000 acres). MID owns and operates the New Exchequer Reservoir and the McSwain Reservoir with a combined storage capacity of 1,034,730 acre feet. MID also maintains 215 wells in support of its conjunctive management activities for groundwater and surface water.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> City of Merced, 2020 Urban Water Management Plan, available at: <a href="https://www.cityofmerced.gov/home/showpublisheddocument/15282/637672157705300000">https://www.cityofmerced.gov/home/showpublisheddocument/15282/637672157705300000</a>, accessed September 2025.

<sup>&</sup>lt;sup>2</sup> Merced Irrigation District, mercedid.org, accessed September 2025.

# **Wastewater Collection and Disposal**

The City of Merced Public Works Department, via the Merced Wastewater Treatment Facility (MWWTF), oversees wastewater collection and disposal in Merced. Its Plant Operations Division is responsible for treating all incoming raw sewage and maintaining facility equipment. The wastewater and sewer system consists of a 260-mile network of pipes that direct flow to the MWWTF, which receives an average of 7.2 million gallons per day from residential and commercial sources. The Water Quality Control (WQC) Division regulates sewer and storm drain discharges, monitors groundwater contamination, and educates the public on proper disposal of pollutants such as oil, paint, and grease. The Wastewater Collection System Master Plan, part of the City's Vision 2030 General Plan, serves as Merced's comprehensive guide for wastewater infrastructure and future planning.



**Merced Wastewater Treatment Facility**Photo Credit: The Merced FOCUS

# **Stormwater Drainage**

Stormwater drainage is managed by the Merced Storm Water Group (MSWG) and is guided by the Storm Water Management Program (SWMP). The MSWG is a coalition of municipalities including the City of Atwater, the City of Merced, and Merced County. The MSWG is responsible for implementing the SWMP, which is intended to limit the discharge of pollutants from the MSWG's sewer system. The goals of the SWMP are to reduce the potential impacts of pollution from urban areas on waters of the State and United States and to develop and implement an effective stormwater program.

# Solid Waste and Recycling

The City of Merced provides both residential and commercial refuse service, including general trash collection, recycling, green waste, organic waste, and construction and demolition disposal. Additional services include street sweeping, leaf collection, alley cleanup, tire amnesty, and a dropoff site for larger items. Additionally, residents may dispose of household hazardous waste at the Highway 59 Landfill, which is managed by the Merced County Regional Waste Authority (RWA).

### **Utilities And Telecommunications**

Natural gas and electrical power in Merced are supplied by Pacific Gas and Electric (PG&E). PG&E's electric service area includes the entire county, as well as the vast majority of the San Joaquin Valley and northern California. PG&E provides a wide variety of pricing options, competitive industrial rates, financial incentives, economic and financial analysis, and assistance with facility siting. Electricity is generated by many sources, including hydropower, gas-fired steam, and nuclear energy. PG&E's hydroelectric systems includes 100 reservoirs, mostly within the Sierra Nevada mountains, as well as 67 powerhouses. Additionally, PG&E acquires electricity from over 400 plants owned by independent power producers or qualified facilities, as well as from customers from sources outside of PG&E's California service area, which is transmitted across several states.

PG&E's natural gas service serves more than 70,000 square miles from Eureka to Bakersfield and includes more than 42,000 miles of gas distribution pipelines and 6.700 miles of transmission pipelines. Natural gas is a key energy source for customers in California, and is primarily used for heating and cooking.

The Merced Irrigation District (MID) is provides low-cost electric power in eastern Merced County, including in parts of Merced. Within the city, MID serves primarily industrial and commercial users, and some residential neighborhoods. MID managers the Merced River Hydroelectric Project, which includes hydroelectric powerhouses at New Exchequer Dam and McSwain Dam, and operates the Merced Falls hydroelectric project. The combined output of the three facilities is 107 megawatts of clean, renewable energy. On average, the Exchequer Dam generates over 300,000,000 kilowatthours per year.

Merced has a sophisticated telecommunications system that includes a fiber optic network in the downtown business district. Fiber optic coverage is estimated at 17 percent of the city. Additionally, there are 10 internet providers and six business providers serving the city.

#### **Law Enforcement**

The Merced Police Department provides several services to the city, including patrol and detective services, and several special units, including traffic, disruptive area response team (DART), gang violence suppression unit (GVSU), school resource officers, and the canine unit.

The Police Department operates from two police stations, the South Police Station and the Central Police station. Authorized staffing includes 98 sworn personnel, including a Chief, two Captains, four Lieutenants, 12 Sergeants, and 79 Officers.



Merced Police Department
Photo Credit: Merced Police Department

The Department is also authorized for 46 non-sworn positions in administration and management, parking enforcement, records, and dispatch. Non-sworn positions also include Community Service Officers.

## **Fire Protection**

The Merced Fire Department (MFD) was established in 1873 and provides fire, rescue, emergency management services, and fire safety inspections. The MFD is responsible for a 23 square mile area and includes 85 sworn personnel, five stations, seven engines, one truck, and one ambulance.



**Merced Fire Department** Photo Credit: City of Merced

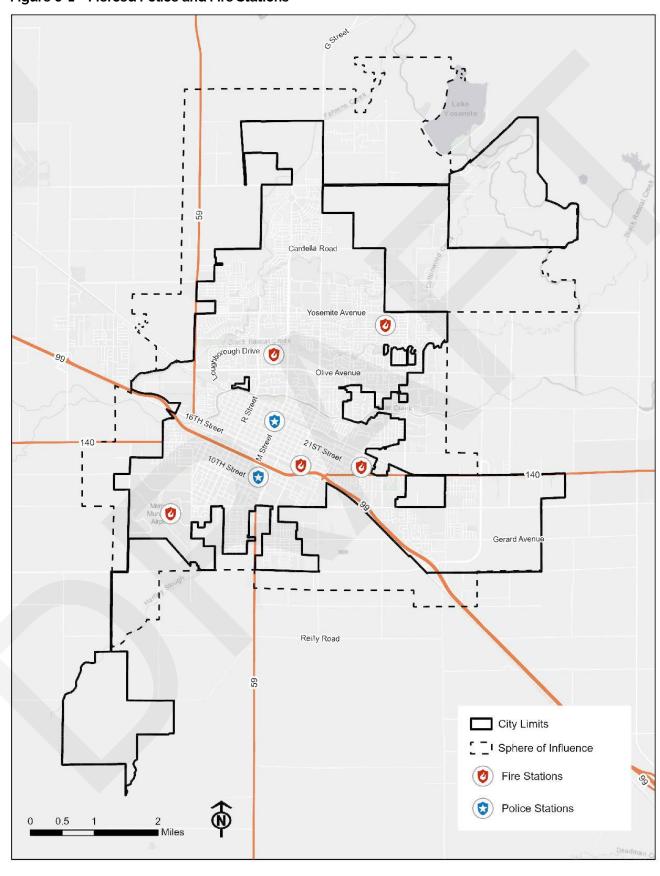


Figure 6-1 Merced Police and Fire Stations

#### **Health Care**

Healthcare services in the city are provided by county-level public health services, local hospitals, and private insurance companies. The Merced County Department of Public Health is committed to promoting, protecting, and preserving healthy living and safe environments throughout the county. The Dignity Health Mercy Medical Center is a 186-bed facility and offers a range of services including a family birth center, cancer center, and several clinics.

#### **Schools And Education**

#### **Elementary and Middle Schools**

Most elementary and middle schools in Merced are part of the Merced City School District (MCSD), which encompasses 14 elementary schools and four middle schools. Serving approximately 11,400 students from preschool through eighth grade, MCSD is supported by more than 1,400 staff members. The district is divided into five subdistricts, all of which serve Merced.

In addition, a portion of southern Merced falls under the jurisdiction of the Weaver Union Elementary School District.

#### **High Schools**

Merced's high schools are a part of the Merced Union High School District (MUHSD), which includes 10 high schools, four of which are located in Merced. The MUHSD has a student population of 11,120 students and its district office is located in Atwater. The MUHSD includes five subdistricts, and Merced is served by districts one, two, four, and five.

#### Other Schools

In addition to the elementary, middle, and high schools mentioned above, there are several other educational institutions in Merced. These include four K-12 private schools, Merced Christian, Stone Ridge Christian, and Harvest Christian, as well as several head start and special education schools. Additionally, St. Paul Lutheran School serves students from preschool through sixth grade and Our Lady of Mercy School serves students from preschool through eighth grade.

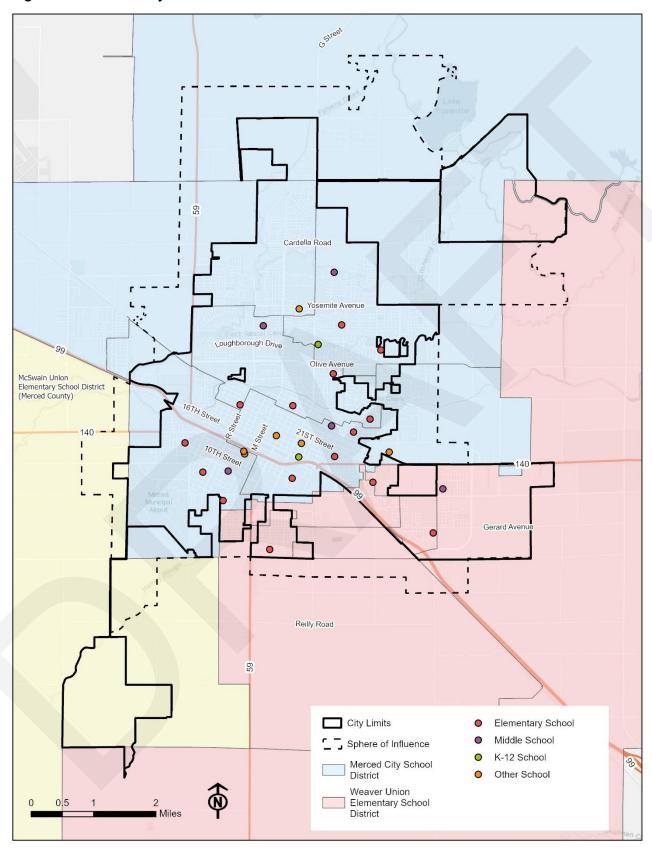
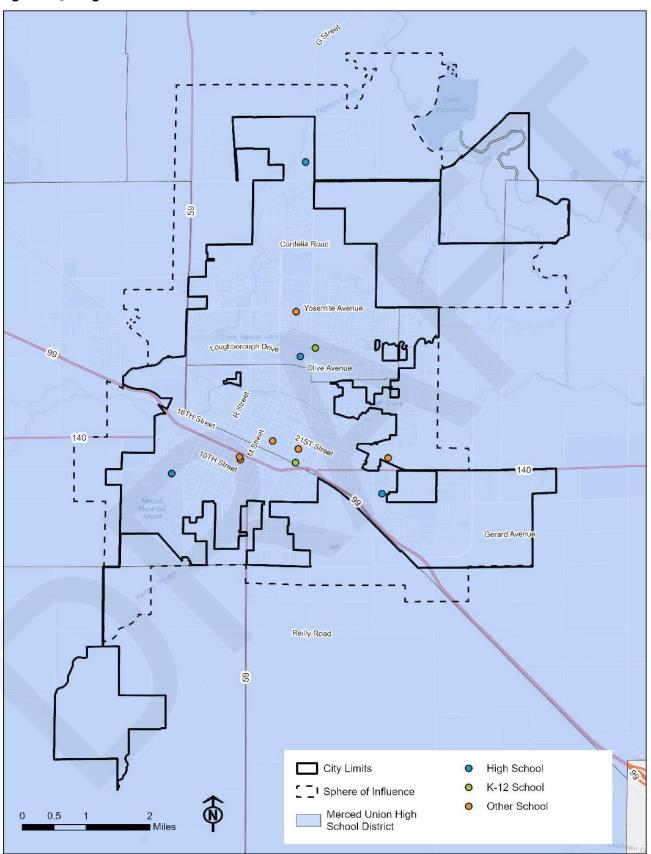


Figure 6-2 Elementary and Middle Schools

Figure 6-3 High Schools



# **Higher Education**

#### **UC Merced**

University of California Merced (UC Merced) is a public land-grant research university located in the north of the city near Yosemite Lake. UC Merced opened to undergraduates in 2005 as the newest campus in the University of California system, and is the youngest university to earn a Carnegie research classification. A top-100 research university and the fastest-growing public university in the nation, UC Merced is on the cutting edge of



**UC Merced Campus** Photo Source: Dave Burk

sustainability in campus construction and design, and supports high achieving and dedicated students from the underserved Central Valley and throughout California. UC Merced offers 25 majors, 25 minors, and 18 graduate programs taught by more than 450 faculty members, along with visiting professors and lecturers from some of the world's top-ranked universities.

UC Merced has three academic schools including the School of Engineering, the School of Natural Sciences, and the School of Social Sciences, Humanities and Arts, as well as a Health Science Research Institute, Sierra Nevada Research Institute, Community Labor Center, and Center for Information Technology Research in the Interest of Society (CITRIS). The total student enrollment including both undergraduate and graduate students was 9,110 for the Fall 2024 semester.

UC Merced has 1,900 employees and a monthly payroll of nearly \$24 million. Based on an economic impact study by EMSI Inc., in 2018-2019, UC Merced contributed \$372.9 million to the economy of Merced County and \$514.6 million to the economy of the San Joaquin Valley.<sup>3</sup>

Regarding athletics, UC Merced has will begin Division II competition as of the 2025/2026 academic year following official acceptance by the National Collegiate Athletics Association (NCAA) announced in 2024.

<sup>&</sup>lt;sup>3</sup> UC Merced, About, available at at http://ucmerced.edu/about, accessed September 2025.



**Merced College Entrance** Photo Source: Merced College

#### **Merced College**

Merced College is a public community college located roughly two miles north of downtown Merced on the northern side of West Yosemite Avenue. The total enrollment at Merced College was 11,839 students for the 2023/2024 school year. About 41 percent of students are full-time and the most common areas of study are liberal arts and sciences, agricultural mechanics and equipment, and automobile mechanics technology.

As shown in Figure 6-5, Merced's total college student population has experienced consistent growth over the past two decades. Today, more than 24,000 students are enrolled across the city's higher education institutions.

Figure 6-4 Higher Education Population Over Time

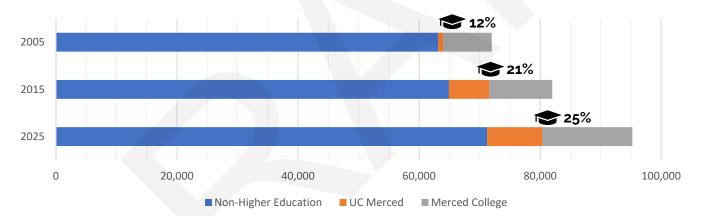
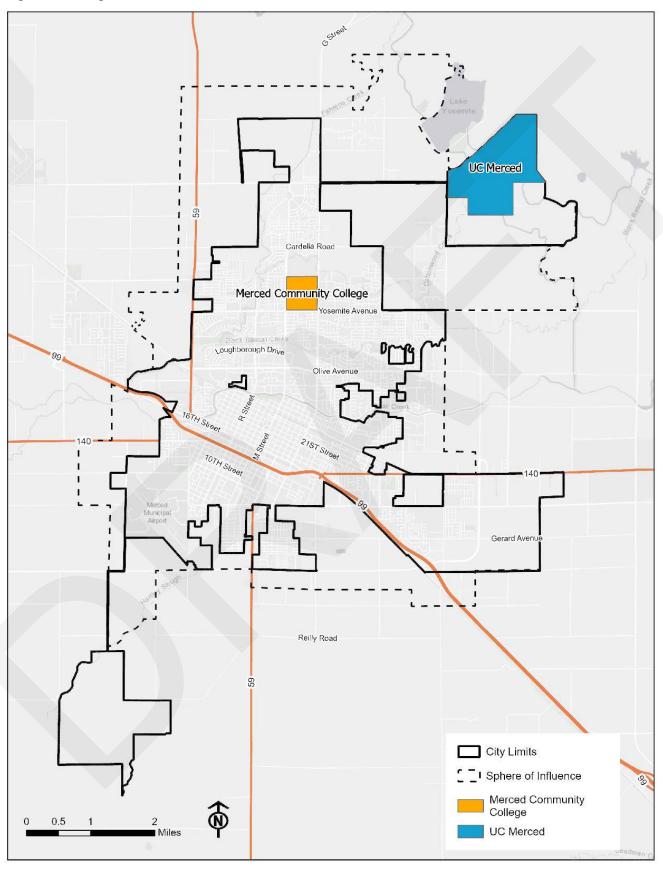


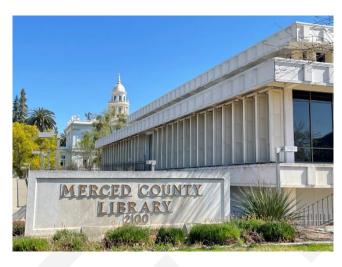
Figure 6-5 Higher Education



#### Libraries

The city is served by a single library, the Merced County Library, which is part of the San Joaquin Valley Library System. The San Joaquin Valley Library System connects all member library collections through ValleyCat, the online catalog created for easy access to materials held at any San Joaquin Valley library, including a total of more than three million books, movies, CDs and other materials to choose from

The Merced County system includes five locations: Merced, Atwater, Delhi, Livingston, and Los Banos. The Merced branch offers a large book collection, an extensive online database, e-



Merced County Library
Photo Source: Merced County Library

books, and programs such as the free Read and Succeed literacy program, the Cover-to-Cover Reading Program, and Summer Reading recommendations. It also hosts a public book club. Additionally, there are multiple events each day that include movie days, teen and adult coloring, children's activities, and bilingual story time.

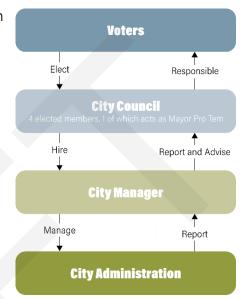




#### **Government Services**

The City of Merced is a Charter City and has a council-manager form of government. The City Council has seven members, six elected on a nonpartisan basis within their district and the mayor. Each City Council member and the mayor serve a four-year term and are limited to a maximum of two terms. The City Council is responsible for establishing policies, approving ordinances and resolutions, making land use decisions, approving agreements and contracts, and hearing appeals on decisions made by City staff and advisory committees.

The City has the following departments and divisions: Airport, Building Division, City Attorney, City Clerk, City Manager, Development Services, Economic Development, Engineering, Finance, Fire, GIS, Housing Division, Information Technology, Insurance, Parks and Community Services, Planning Division, Police, and Public Works.



#### What is a Council-Manager Form of Government?

The Council-Manager form of government is structured like a private corporation. The City Council's role is like that of a Board of Directors and the city manager serves as the chief executive officer, with citizens acting as the shareholders. The City Council is responsible for establishing policy direction, overall goals, adopting laws and regulations, and approving the city's budget. The city manager is responsible for implementing the policy direction of the City Council, overseeing daily operations and staff of the organization, and developing recommendations for council consideration.

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# 7. OPEN SPACE, PARKS, AND RECREATION



**DRAFT, October 2025** 

#### What are Parks, Open Spaces, and Recreation in Merced?

Parks, open space, and other recreational uses are public facilities that provide community spaces, connect residents to nature, offer natural habitats for local wildlife, and provide space for other entertainment and recreational pursuits. These uses also make neighborhoods more attractive and bring environmental, social, cultural, health, and economic benefits to the city and its residents.

# Parks and Open Space Master Plan

The City of Merced Park and Open Space Master Plan was adopted in 2004. The Plan is a long-range guide for parks and recreational services in the city, and gives direction for acquiring and developing parks, open space, trails, and other recreational facilities. The recommendations and implementation for parks, recreation facilities, and trails in this Plan aim to address community needs and improve the City's park system and recreational programming over the following 20 to 25 years.

The overall concept for this Plan consists of a vision for an "ideal" parks and recreation system made up of various categories of park types that each offer different functions, but collectively serve the entire needs of the community. Ideally, at least one park would be located within a half-mile radius of most residents. This Plan categorizes the City's parks as follows:

- Mini-parks are small, single-purpose play lots that are limited in size.
- **Neighborhood parks** are designed for non-organized recreation activities and are generally small in size (between three and seven acres).
- **School parks** are similar in function to neighborhood parks and are provided adjacent to school sites.
- **Community parks** provide spaces for active and structured recreational opportunities and sports. These parks are usually larger in size (between 15 and 20 acres) and offer more facilities than smaller parks.
- Large urban parks are similar in function to community parks; however, these parks provide specialized sports and recreational facilities that may require more supportive facilities, such as parking and restrooms.
- **Linear parks** are open spaces that follow linear corridors, such as creek corridors, trail corridors, abandoned railroad rights-of way, and other similar features. These parks usually contain trails, landscaped areas, and may connect to other parks.
- **Urban plazas** are small, passive parks that provide a gathering space for the community in urban locations.
- Athletic parks are special use sites where sports fields are the central use.

## **Open Space**

Merced does not have any designated open space areas within the City Limit. However, Lake Yosemite, a County park, is located immediately adjacent to the City's Sphere of Influence, just north of the UC Merced campus. Lake Yosemite is managed by the County of Merced, with the reservoir owned by the Merced Irrigation District. The lake's water is distributed to local growers to support the region's strong agriculture industry. Amenities include marina facilities, beach areas, a man-made reservoir, canoe and kayak rentals, green space, covered picnic areas, volleyball court, horseshoe pits, boardwalks, and more. The onsite Fish and Game Building can also be rented for events.



Source: Merced County Events, 2023

Visitors must pay a small fee to enter the park space.

### **Trails**

Merced has three named trails, as described below. In addition to these three named trails, a number of unnamed class 1 bike paths are located throughout the northern half of the city, which can also be considered as urban trails. Residents and visitors also have access to a number of trails in the surrounding county, including those found in nearby Great Valley Grassland State Park and McConnell State Recreation Area.

The **Sunset Trail** is a paved class 1 trail in northern Merced that generally follows Fahrens Creek between Sophie Court (off of Irma Drive) and the Merced Dog Park. From the dog park, residents can travel along a bike path to Fahrens Park.

The **Michael O. Sullivan Bike Path** is a paved class 1 bike trail that generally follows Bear Creek between the intersection of Highway 59 and West Olive Drive and McKee Road. Most of the bike path follows the southern bank of the creek; however, paths follow both the north and south banks of the creek east of G Street. The path travels from the western edge of the city outside the eastern edge of and provides access between Applegate Park and a wide range of residential neighborhoods.

The **Black Rascal Creek Bike Path** is a paved class 1 bike trail that is located between the intersection of Highway 59 and West Olive Drive and McKee Road in northern Merced. The path travels from the western edge of the city to outside the eastern edge and provides access between Fahrens Park, Black Rascal Strip Park, Rahilly Park, and a wide range of residential neighborhoods.

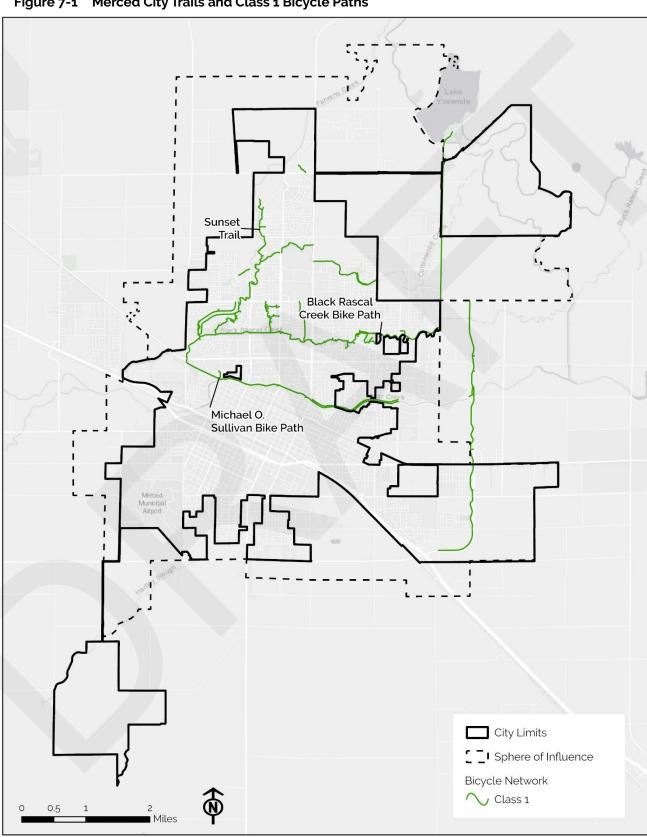


Figure 7-1 Merced City Trails and Class 1 Bicycle Paths

Last updated: August 4, 2025

#### **Parks**

Merced has 38 acres of parks that offer playgrounds, sports areas, picnic areas, barbeque grills, dog areas, walking and bicycle paths, and more for the enjoyment of all residents.

#### **Mini Parks**

**Benjamin Banneker Memorial Park** is a small park in southern Merced with green space, a playground, picnic tables, and a barbeque grill. This mini park connects to nearby apartments and residences.

Black Rascal Creek Bike Way Park is located in northern Merced, approximately at the middle point of the Black Rascal bike path. This park offers green space, a playground, and a barbeque grill.

Charles Richard Drew Park is a small park in southern Merced with green space, a playground, and picnic tables. The park is located kitty-corner from the Tenaya Middle School.

**Childs & B Street Park** is a small park in southern Merced with a playground and benches.

**Dennis Chavez Park** is a small park in southern Merced with a playground, picnic tables, and a barbeque grill

**Diego Rivera Park** is a small park in southern Merced with green space and a playground.

**Frank Gasper Park** is a small park in central Merced with trees, green space, and a playground.





Source (from top to bottom): (1) Benjamin Banneker Memorial Park, Google Street View, (2) Neighborhood Park, Google Street View

**Frederick Douglass Park** is a small park in southern Merced with trees, green space, a playground, picnic tables, and a barbeque grill

**Hansen Park** is a small park in northern Merced with a playground, picnic tables, and barbeque grills.

**Harriet Tubman Park** is a small park in southern Merced with green space, a playground, and benches. The park is adjacent to Golden Valley Health Centers and other services.

Little Angels Park is a small park in southern Merced with a playground.

**Macready Park** is a small park in southern Merced with green space and picnic tables. The park is adjacent to the Merced Regional Airport,

Neighborhood Park is a small park in southern Merced with green space and a playground.

**Old Fahrens Park** is a small park southwest of Fahrens Park with green space, a playground, and benches.

**Santa Fe Park** is a linear park in northern Merced that connects West Yosemite Avenue, West Donna Drive, and Buena Vista Drive to M Street/Veterans Boulevard. The park includes green space, walking paths, playgrounds, picnic tables, and a barbeque grill.

**The Love Veasley Family Park** is a small park in southern Merced with green space and a playground.

**William Lloyd Garrison** is a park in southern Merced with green space, trees, a playground, picnic tables, and barbeque grills.

#### **Neighborhood Parks**

**Ada Givens Park** is a park in eastern Merced with green space, sports fields, and a small public pool. It is adjacent to the Ada Givens Elementary School.

**Bob Carpenter Neighborhood Park** is a park in northern Merced with trees, green space, picnic tables, barbeque grills, and a playground.

**Burbank Park** is a park in northern Merced with trees, green space, picnic tables, barbeque grills, and a playground.

Carol Gabriault Neighborhood Park is a park in western Merced with green space, picnic tables, barbeque grills, a basketball court, and a playground.

**Davenport Park** is a park in northern Merced with trees, green space, picnic tables, barbeque grills, and a playground.

**Dwight Amey Neighborhood Park** is a park in eastern Merced with trees, green space, picnic tables, barbeque grills, a playground, walking paths, and general use sports fields.

**Elmer Murchie Park** is a park in northern Merced with trees, green space, basketball hoops, picnic tables, barbeque grills, a playground, benches, and walking paths.





Source (from top to bottom): (1) Mural at Carol Gabriault Neighborhood Park, City of Merced Parks and Recreation, (2) Elmer Murchie Park, Abraham T.

**Flanagan Park** is a park in southern Merced with trees, green space, picnic shelters, barbeque grills, a playground, and a basketball court.

**Gilbert Macias Neighborhood Park** is a park in southern Merced with trees, green space, picnic shelter, barbeque grills, a playground, and a basketball court.

**Richard Bernasconi Neighborhood Park** is a park in northern Merced with trees, green space, baseball fields, basketball courts, picnic tables, and a playground.

Roland D. Brooks, Jr. Neighborhood Park is a park in southern Merced with trees, green space, a soccer field, picnic tables, barbeque grills, and a playground.

Rudolph Joseph Merino Neighborhood Park is a park in northern Merced with trees, green space, picnic tables, barbeque grills, a playground, basketball court, and baseball field.

**Stephen Gray Neighborhood Park** is a park in western Merced with trees, green space, picnic tables, barbeque grills, a playground, and a basketball hoop.

**Stephen Leonard Park** is a park in southern Merced with trees, green space, picnic tables, barbeque grills, a playground, a basketball court, splash park, skatepark, and youth center. The park is adjacent to Margaret Sheehy Elementary.

#### **Community Parks**

Fahrens Park is a large park with green space, a disc golf course, picnic tables, a playground, and barbeque area along the Fahrens Creek. The Black Rascal bike path connects this park to other areas of the city.

Joe Herb Park is a large tree-filled park in the eastern portion of the city that offers baseball and soccer fields, horseshoe pits, picnic shelters, a playground, and barbeque area,







Source (from top to bottom): (1) Gilbert Macias Neighborhood Park, Homes.com, (2) Stephen Leonard Park splash area, City of Merced, and (3) Fahrens Park, Merced County Events

McNamara Park is a large park in southern Merced that offers several sports fields and facilities, including baseball and soccer fields, basketball courts, a swimming pool, skate park, and recreation hall, as well as other amenities such as a playground, picnic shelter and barbeque grill.

Rahilly Park is a large, tree-filled park in northern Merced with green space, a soccer field, a playground, a picnic shelter, and barbeque grill. The Black Rascal bike path connects this park to other areas of the city.

### **Regional Parks**

Applegate Park is a large park just north of downtown Merced that has a number of amenities, including the Merced Applegate Park Zoo, Kiwanis Kiddieland, Laura's Fountain, a rose garden, a playground, a skatepark, tennis courts, volleyball nets, picnic shelters, barbeque grills, and green space. The Michael O. Sullivan bike path travels along the northern edge of the park, adjacent to Bear Creek.

Merced Dog Park is a park in northern Merced with dog areas for small and large dogs, a bocce ball court, picnic tables, and green space. A bike path/trail connects this park to northern residential areas as well as south to Fahrens Park.

Nannini Youth Sports Complex is a sports complex in southern Merced with multiple baseball and soccer fields and a concessions stand. The complex can be rented for tournaments.

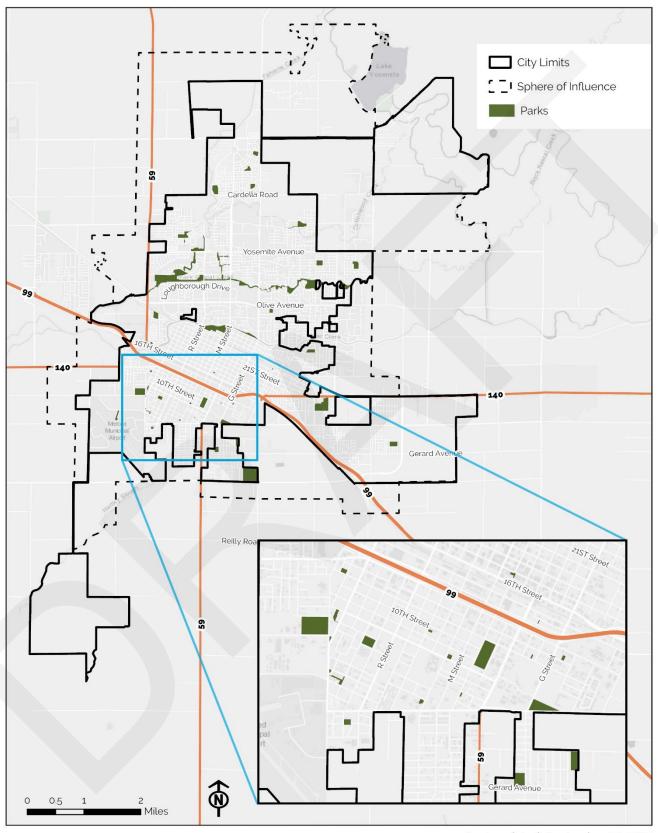






Source (from top to bottom): (1) Rahilly Park, Merced County Event, (2) Merced Dog Park, Adam Blauert, and (3) Applegate Park Fountain, Gray Brechin

Figure 7-2 Merced City Parks



Last updated: September 25, 2025

## **Public Art**

Public art installations are an important factor in beautifying public spaces, reflecting local culture and values, improving public safety, and making art more accessible. In Merced, public art takes the form of:

**Murals.** Citywide, murals have been installed on larger building walls, highway overpasses, community centers, and buildings in or near public parks.

Painted utility boxes. Most of the City's painted utility

boxes were completed as a part of the 2021 Utility Box Beautification Project, a collaborative effort between the City of Merced Arts & Culture Advisory Commission and the Merced County Arts Council. As a part of this project, 15 artists were selected and paid to create and paint their design on a utility box.

**Gateway monuments.** Merced has several gateway monuments that welcome motorists travelling along Highway 99. These signs celebrate the Merced Tower and the greater community.

**Sculptures.** UC Merced has several prominent public art installations on campus, including the "big rufus" and "beginnings" sculptures as well as other sculptures and murals across campus.

As of 2024, the City aims to bring even more public art to the community. Periodically, the City hosts public art exhibitions to celebrate the work of local artists and bring together the community.

#### Did you know?

The City of Merced hosts a seasonal, free Brown Bag Concert Series in the Bob Hart Square that showcases local musicians and music groups.













Source (from left to right, top to bottom): (1) Mural near the skatepark at Applegate Park, Merced Sun-Star, (2) mural on the wall of the Highway 99 Martin Luther King Jr. Way overpass, Merced Sun-Star, (3) painted utility box at 18<sup>th</sup> Street and Canal Street, Malachi Sanchez, (4) "Beginnings" sculpture, US Merced, (5) gateway monument, Andrew Kuhn, and (6) "Big Rufus," UC Merced.

## **Other Community Facilities**

#### **Applegate Park Zoo**

Merced's Applegate Park Zoo opened in 1962 and is home to approximately 75 Native California mammals, birds, and reptiles, most of which came from wildlife rescue centers. The zoo is open from Thursdays to Sundays from 10 a.m. to 4 p.m. Admission is free for children under two years old and is under \$4.00 for all other age groups.

#### **Senior Community Center**

The Senior Community Center is located at 755 West 15th Street in downtown Merced and is open Monday through Friday. The Center offers a wide variety of activities for seniors, including a theater class, yoga, tai chi, dancing, craft activities, and more.

#### **Programming and Activities**

#### **Youth and Adults Sports**

The City of Merced Parks and Community Services Department offers both youth and adult recreation programs. Youth programs vary by season. Summer programs include baseball, tennis, hockey, pickleball, and swimming. Flag football is offered in the fall and basketball is offered in late winter/early spring. All youth programs, with the





Source (from top to bottom): (1) Mural at Applegate Park Zoo, Merced Sun-Star, (2) dance class, City of Merced Parks and Recreation

exception of swimming courses, are free of charge for residents and offered at a low cost to non-residents. Adult sports include spring softball and basketball leagues.

#### **Summer Camp**

The Parks and Community Services Department offers a Summer Wilderness camp between June and August. The summer camp is open to children in kindergarten through 6<sup>th</sup> grade and offers nature-based activities at the Rossotti Ed-Zoo-Cation Center at Applegate Park Zoo. Activities are available in English, Spanish, and Hmong. Scholarships are available for low-income families through the Parks and Community Services Department to expand access to youth recreational activities.

#### Classes

Over ten classes are offered for residents through the Parks and Community Services Department, covering a range of activities such as yoga, jiu jitsu, kabaroan escrima, pickleball, badminton, dance

(including tap, ballet, and folklorico), Zumba, and hunting at the waste water treatment plant property. Yoga and Zumba classes are offered for free, with all other classes ranging in price.

#### **Other Events**

The Parks and Community Services Department offers other special events throughout the year, including parades and movie screenings in parks throughout the city. "Movies in the Park" events are free of charge and family-friendly.

## References

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# 8. AIR QUALITY



#### What is Air Quality?

Air quality refers to the condition of the air in our environment. The quality of air is determined by the concentration of pollutants. In general, air pollution refers to harmful particles or molecules released into the atmosphere. Air pollutants can cause harm to humans, animals, and plants when they breathe or otherwise absorb them. The level of harm depends on the type and concentration of the pollutant.

This section provides an overview of the current air quality conditions in Merced, covering emissions sources, ambient air quality conditions, greenhouse gas (GHG) emissions, and the identification of sensitive receptors to both air pollutants and GHG emissions.

#### **Air Pollutants of Concern**

Merced is located within the boundaries of the San Joaquin Valley Air Basin ("air basin"), which encompasses eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the western portion of Kern. The United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (CARB) have established national and state standards for "criteria air pollutants" to protect public health and welfare by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. Criteria air pollutants include ozone ( $O_3$ ), carbon monoxide ( $CO_3$ ), nitrogen dioxide ( $CO_3$ ), sulfur dioxide ( $CO_3$ ), respirable and fine particulate matter ( $CO_3$ ), and lead. Reactive organic gases ( $CO_3$ ) and nitrogen oxides ( $CO_3$ ) are considered ozone precursors.

For each criteria air pollutant, air basins are classified as in "attainment" when the Federal and State standards have been achieved, or "nonattainment" when the pollutant exceed permissible levels and does not meet standards. As described below, criteria air pollutants of concern in the air basin include ozone and particulate matter; the air basin is in non-attainment status with respect to the federal and state standards for these pollutants. The air basin is in attainment for all other pollutants. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has prepared plans to bring the air basin into attainment for ozone and particulate matter. These plans are the 2024 Plan for the 2012 Annual PM<sub>2.5</sub> Standard (SJVAPCD 2024) and the 2022 Plan for the 2015 8-Hour Ozone Standard (SJVAPCD 2022). The SJVAPCD attainment status is presented in Table 8-1.

In addition to criteria air pollutants, air pollution includes toxic air contaminants (TACs). TACs are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. The main TACs of concern are diesel particulate matter (DPM) and fine particulate matter (PM $_{2.5}$ ). Particulate matter is a complex mixture of solids and aerosols composed of small droplets of liquid, dry solid fragments, and solid cores with liquid coatings. DPM is exhaust particulate emissions from diesel fuel combustion. PM $_{2.5}$  is fine particulate matter from combustion sources of all fuel types, including diesel, along with particulates such as from road dust. PM $_{2.5}$  is considered by far to be the most harmful air pollutant in the air basin in terms of the associated impact on public health and can result in a wide range of health effects.

Table 8-1 SJVAPCD Attainment Status

Pollutant and Averaging Time	Designation/Classification		
	State Standards	Federal Standards	
Ozone (1-hour)	Non attainment (Cayaya	Revoked <sup>a</sup>	
Ozone (8-hour)	Non-attainment/Severe	Non-attainment/Extreme	
Carbon Monoxide (CO)	Attainment/Unclassified	Unclassified/Attainment	
Nitrogen Dioxide (NO₂)	Attainment	Unclassified/Attainment	
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Unclassified/Attainment	
Respirable Particulate Matter (PM <sub>10</sub> )	Non-attainment	Attainment	
Fine Particulate Matter (PM <sub>2.5</sub> )	Non-attainment	Non-attainment	

Abbreviations: CO = carbon monoxide; NO<sub>2</sub> = nitrogen dioxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = particulate matter with an aerodynamic diameter equal to or less than 10.0 microns; PM<sub>25</sub> = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.

Source: SJVAPCD, 2025. Air Quality Standards and Attainment Status. Available at <a href="https://valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainment-status/">https://valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainment-status/</a>. Accessed August 13, 2025.

#### Notes:

a. Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the Federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the District as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). The District Governing Board adopted the 2023 Maintenance Plan and Redesignation Request and submitted to EPA in June of 2023. Although the standard is revoked, anti-backsliding provisions can be terminated upon final approval of the Maintenance Plan from EPA.

The SJVAPCD regulates TACs by using a risk-based approach as opposed to establishing a concentrations standard. This risk-based approach uses a health risk assessment to determine the specific sources and TACs to control as well as the level of control necessary to reduce risk to acceptable levels. A health risk assessment analyzes exposure to toxic substances and human health risks based on the dose and potency of the toxic substances. In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB, 2000).

#### **Emission Sources**

Sources of air pollution in Merced include stationary, area wide, and mobile sources. Stationary sources include fuel combustion, waste disposal, cleaning and surface coating, petroleum production, and industrial processes. Additional area wide sources include residential fuel combustion, farming operations, construction and demolition, paved road dust, fires, waste burning and disposal, and wind-blown dust. Area wide sources include solvent evaporation from activities like pesticide and fertilizer application, asphalt paving, and refrigerants. Mobile sources of air pollution include on-road vehicles and off-road vehicles throughout the city. Due to the large amount of vehicular traffic moving through the city, the largest contributor to emissions in Merced are transportation-related sources.

These emission sources increase the levels of harmful smog in the city and expose residents to potential harm such as difficulty breathing, inflammation, and long-term effects such as asthma, bronchitis, and emphysema.

## **Ambient Air Quality Data**

CARB operates air pollutant monitoring stations throughout the state; the station in Merced is in the southeastern portion of the city between State Routes 99 and 140 at 385 South Coffee Avenue. Data from the most recent three years of monitoring are presented below in Table 8-2.

Table 8-2 Ambient Air Quality Monitoring Data for Merced, CA (385 S. Coffee Avenue)

Pollutant Standards	2021	2022	2023
Ozone			
Maximum 1-hour concentration (ppm)	0.099	0.096	0.096
Maximum 8-hour concentration (ppm)	0.089	0.083	0.079
Number of days standard e	xceededa		
NAAQS 1-hour (>0.12 ppm)	0	0	O
CAAQS 1-hour (>0.07 ppm)	2	2	1
NAAQS 8-hour (>0.07 ppm)	7	2	3
Particulate Matter (PM <sub>2.5</sub> )b			
Maximum 24-hour concentration (µg/m³)	77.3	39.6	35.7
Annual average concentration (µg/m³)e	11.2	9.8	8.4
Number of days standard e	xceededa		
NAAQS 24-hour (>150 µg/m³) <sup>f</sup>	13	1	1
Particulate Matter (PM <sub>10</sub> )b			
Maximum 24-hour concentration (µg/m³)	86.9	46.4	109.3
Annual average concentration (µg/m³)e	32.2	19.0	31.5
Number of days standard e	xceededa		
NAAQS 24-hour (>150 µg/m³) <sup>f</sup>	0	0	0
CAAQS 24-hour (>50 µg/m³) <sup>f</sup>	10	60	50

Notes: CAAQS = California ambient air quality standards. NAAQS = national ambient air quality standards.

Values in **bold** font indicate an exceedance.

- \* Insufficient data to determine a value
- a. An exceedance is not necessarily a violation. It should be noted that the Federal ozone 1-hour standard has been revoked by EPA.
- b. Measurements usually are collected every 6 days.  $PM_{10}$  data monitored at the 385 S. Coffee Avenue station.

- c. National statistics are based on standard conditions data. In addition, national statistics are based on samplers using federal reference or equivalent methods.
- d. State statistics are based on local conditions data, except in the South Coast Air Basin, for which statistics are based on standard conditions data. In addition, State statistics are based on California-approved samplers.
- e. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
- f. Mathematical estimate of how many days concentrations would have been measured as higher than the level of the standard had each day been monitored.

Source: CARB, 2025. Available at: https://www.arb.ca.gov/adam/topfour/topfourdisplay.php. Accessed August 1, 2025.

## **Sensitive Receptors**

Sensitive receptors are locations with people who may have a significantly increased sensitivity or exposure to contaminants by virtue of their age and health and duration of exposure to pollutants. Schools, hospitals, and convalescent homes are sensitive receptors because children under 14, the elderly over 65, and people with cardiovascular and chronic respiratory diseases have greater susceptibility to respiratory distress and other air quality-related health problems. Additionally, residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with greater associated exposure to ambient air quality. In addition, children, the elderly, and people with respiratory illness could be present at residences. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

Within the city, there are several day care centers, elderly assisted living centers, nursing homes, and the Mercy Medical Center Hospital, which are all especially at risk from emissions. Most residential areas are north of State Route 99, with many adjacent to State Route 99. This freeway is a major source of criteria and toxic air pollutants. A substantial amount of heavy diesel trucks travel on State Route 99 and are sources of DPM.

## **Vulnerable Communities**

CalEnviroScreen is a model that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. While CalEnviroScreen was originally developed as part of Senate Bill (SB) 535 and used to identify disadvantaged communities for the purposes of allocating funding from the State's Cap-and-Trade regulation, its application and scope have expanded over the years. The model uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. The CalEnviroScreen model is made up of four components – two pollution burden components (exposures and environmental effects) and two population characteristics components (sensitive populations and socioeconomic factors). The four components are further divided into 20 indicators. An indicator is a measure of either environmental conditions, in the case of pollution burden indicators, or health and vulnerability factors, in the case of population characteristic indicators.

- **Exposure** indicators are based on the measurements of different types of pollution that people may encounter. Exposure indicators include: air quality (ozone and PM<sub>2.5</sub>), children's lead risk from housing, diesel particular matter, drinking water contaminants, pesticide use, toxic releases from facilities, and traffic density.
- Sensitive population indicators measure the number of people in a community who may be more severely affected by pollution because of their age or health. Sensitive population indicators include: asthma, cardiovascular disease, and low birth weight in infants.
- Environmental effects indicators are based on the locations of toxic chemicals in or near communities. Environmental effects indicators include: educational attainment, housing burden, linguistic isolation, poverty, and unemployment.

According to the OEHHA CalEnviroScreen 4.0 model, Merced includes several census tracts with CalEnviroScreen scores near 70 to 80, with some above 90, qualifying them as disadvantaged communities based on the SB 535 definition. The following indicators for these communities generally contribute the most to their high percentile scoring:

Table 8-1 CalEnviroScreen 4.0 Percentile Scores Summary

Indicator	Percentile Score	
Exposure		
Ozone	73	
PM <sub>2.5</sub>	88	
Children's Lead Risk from Housing	66	
Diesel Particular Matter	61	
Drinking Water Contaminants	66	
Pesticide Use	38	
Toxic Releases from Facilities	13	
Traffic Density	44	
Sensitive Population		
Asthma	93	
Cardiovascular Disease	98	
Low Birth Weight Infants	63	
Environmental Effects		
Educational Attainment	77	
Housing Burden	70	
Linguistic Isolation	61	
Poverty	87	
Unemployment	88	

Source: CalEnviroScreen 4.0.

## **Greenhouse Gas Emissions**

#### **Greenhouse Gases**

Carbon dioxide (CO2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are the principal greenhouse gases (GHGs) contributing to global climate change. CO2 is the reference gas for climate change, as it is the GHG emitted in the highest volume. In emissions inventories, GHG emissions are typically reported as metric tons (MT)1 of CO2 equivalent (CO2e). CO2e is calculated as the product of the mass emitted of a given GHG and its specific global warming potential (GWP). While methane and nitrous oxide have much higher GWPs than CO2, CO2

<sup>&</sup>lt;sup>1</sup> The term metric ton is commonly used in the U.S. to refer to the metric system unit, tonne, which is defined as a mass equal to 1,000 kilograms. A metric ton is approximately 1.1 short tons and approximately 2,204.6 pounds.

is emitted in higher quantities, and it accounts for the majority of GHG emissions in CO2e, both from land development and human activity in general.

#### **City of Merced Climate Action Plan**

In 2008, residential GHG emissions contributed 26 percent, commercial/industrial GHG emissions contributed 36 percent, transportation GHG emissions contributed 36 percent, and solid waste GHG emissions contributed three percent of total emissions in Merced (City of Merced 2011). In 2012, the City of Merced adopted a Climate Action Plan (CAP), which includes goals, strategies, and actions to reduce local community GHG emissions. Goals listed in the CAP include enhancing mobility of all transportation modes, sustainable community design, water conservation and technology, protection of resources, waste reduction, increase the use of renewable energy sources, building energy conservation and public outreach and involvement (City of Merced 2012). Benefits of implementing the City's CAP include:

- A vibrant downtown, urban centers, and livable neighborhoods
- Walkable communities with increased mobility options
- Efficient and convenient transportation systems and services
- Energy efficient/low-cost utility buildings
- Increased water supplies
- Reduced conversion of agricultural, resource, and open space lands
- Improved air quality
- Less municipal waste
- Informed and engaged citizenry/opportunities for community partnerships

#### References

California Air Resources Board (CARB). *Diesel Risk Reduction Plan*, 2000, available online: <a href="https://ww2.arb.ca.gov/resources/documents/guidance-documents">https://ww2.arb.ca.gov/resources/documents/guidance-documents</a>, accessed August 6, 2025.

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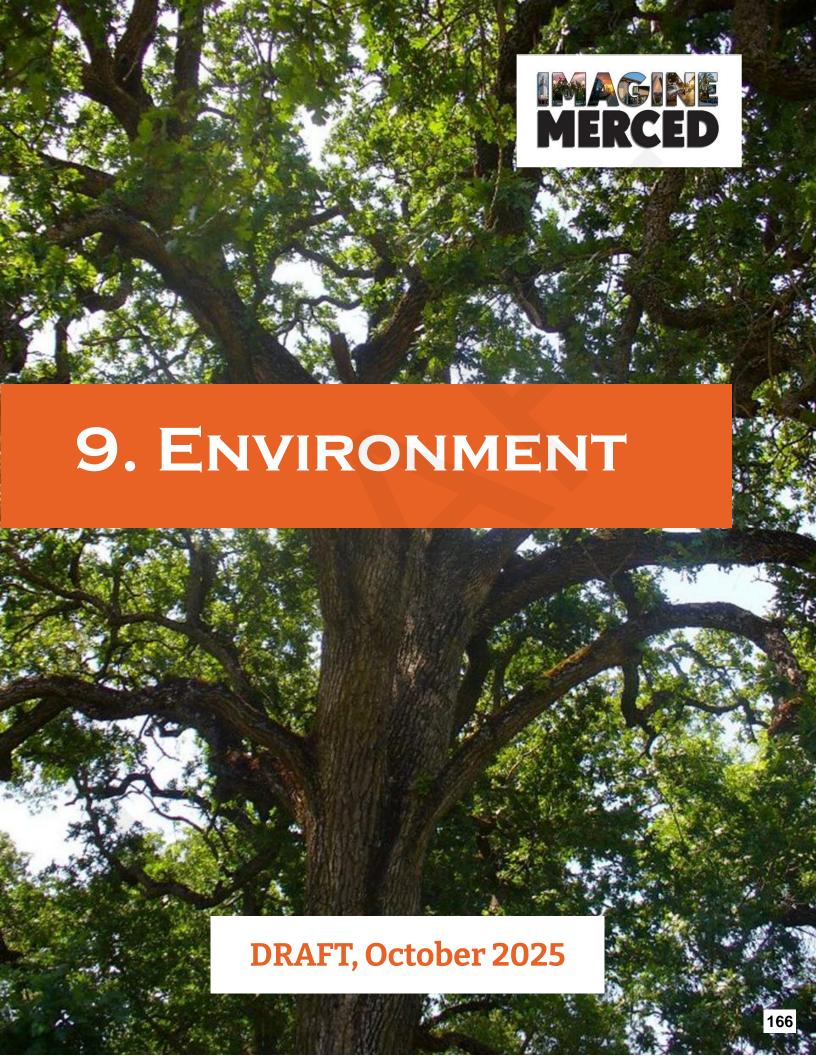
City of Merced. City of Merced Climate Action Plan Background Report, 2011, available online: <a href="https://www.cityofmerced.gov/business-and-development/planning/historical-data/climate-action-plan/-folder-2359#docfold\_14\_2446\_2443\_2359">https://www.cityofmerced.gov/business-and-development/planning/historical-data/climate-action-plan/-folder-2359#docfold\_14\_2446\_2443\_2359</a>, accessed August 7, 2025.

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San Joaquin Valley Air Pollution District (SJVAPCD). 2024 Plan for the 2012 Annual  $PM_{2.5}$  Standard, available online: <a href="https://valleyair.org/media/gw5bacvj/2024-pm25-plan.pdf">https://valleyair.org/media/gw5bacvj/2024-pm25-plan.pdf</a>, accessed August 6, 2025.



#### What does the Environment Consist of in Merced?

The Environment section describes the existing conditions related to the environmental resources and sustainability in Merced. This section includes hydrology and water quality, biological resources, cultural resources, energy resources and soil resources.

#### **Water Resources**

#### **Water Service**

Merced is serviced by the City's Water Division. The Water Division provides potable and recycled water services, however, although the Division can produce disinfected tertiary recycled water, use of the effluent as a water source within the City water service area is constrained by the remote location of the wastewater treatment facility and the high cost associated with constructing the necessary infrastructure. Potential uses of recycled water include agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, and other uses allowed by applicable recycled water standards.

Merced's sole source of water comes from 20 groundwater wells with a total well capacity of 54,400 gallons per minute (gpm) from the Merced Groundwater Basin In 2020 the City supplied 20,076 acre-feet of potable water, and 4.050 acre-feet of recycled water. Potable water demands are projected to increase to 31.825 acre-feet by 2040 due to increase in population. The water supply is projected to sufficiently meet expected demands through 2040 through the installation of additional groundwater wells and construction of a 10 million gallon per day surface water treatment plant (SWTP). The SWTP is projected to use surface water supplied by Merced Irrigation District and begin operation by 2030.

#### **Water Reliability**

In September 2014, Governor Brown signed the Sustainable Groundwater Management Act into law to require the sustainable management of groundwater supplies by local agencies. The Merced Subbasin Groundwater Sustainability Plan was adopted in 2025 with the goal of achieving sustainable groundwater management on a long-term average basis by increasing recharge and/or reducing groundwater pumping, while avoiding undesirable results (Woodward & Curran 2025). The goal will be achieved by coordinating the implementation of programs and projects to increase both direct and in-lieu groundwater recharge, which will in turn increase the available water supply. The Merced Urban Water Management Plan reliability analysis indicates that normal year, single dry year, and five-consecutive-year drought supplies are adequate to meet projected demands.

#### **Water Quality**

The City of Merced reported in their 2024 annual water quality report that the City's Water Division consistently provided high-quality drinking water, meeting or surpassing every public health requirement set by the State Water Resources Control Board (State Water Board) and the U.S. Environmental Protection Agency. Results are posted annually in the Annual Water Quality Report on the City's website.

#### Hydrology

Merced is in the Merced River watershed. Major surface water features in the planning area include Bear, Black Rascal, Cottonwood, and Fahrens creeks. Fahrens Creek flows south/southwest through the eastern portion of the planning area; its tributaries include Cottonwood and Black

Rascal creeks, which flow into Fahrens Creek approximately two and a half and one and half miles north/northwest of downtown Merced, respectively. Bear Creek flows east to west through the central portion of the planning area a little over a half mile from Downtown Merced. Fahrens and Bear creeks join in the far western portion of the planning area where they flow together for about a half mile before separating into the Hesse and Meadowbrook laterals.

## **Biological Resources**

The City's planning area encompasses many biological resources, including sensitive habitats such as vernal pools, special-status plants and wildlife species, and vegetation communities that provide habitat for both special-status species and commonly occurring plants and wildlife. The City of Merced is committed to conserving these natural resources for its residents and the public to enjoy.

## Threatened, Endangered, and Special-Status Plants and Wildlife

Multiple special-status species, which are plant and wildlife species that receive protections under the Federal and State Endangered Species Acts and receive special considerations for protection under the California Environmental Quality Act, occur within the planning area. Special-status wildlife species include California tiger salamander, San Joaquin kit fox, northwestern pond turtle, western spadefoot, western burrowing owl, Swainson's hawk, monarch butterfly, valley elderberry longhorn beetle, vernal pool fairy shrimp, Conservancy fairy shrimp, and vernal pool tadpole shrimp. Special-status plant species that may occur in the planning area include hairy Orcutt grass, San Joaquin valley Orcutt grass, Colusa grass, Keck's checker-mallow, and fleshy owl's clover (USFWS 2025a, CDFW 2025a). These species occupy both general and sensitive habitats that are found within the planning area, which include annual grasslands, oak woodlands, seasonal wetlands, vernal pools, creeks, and agricultural lands, including agricultural waterways such as drainages and canals.





Left to right: California tiger salamander and western burrowing owl

Source: Joseph Huang, ESA





Left to right: San Joaquin kit fox and vernal pool fairy shrimp

Source: USFWS



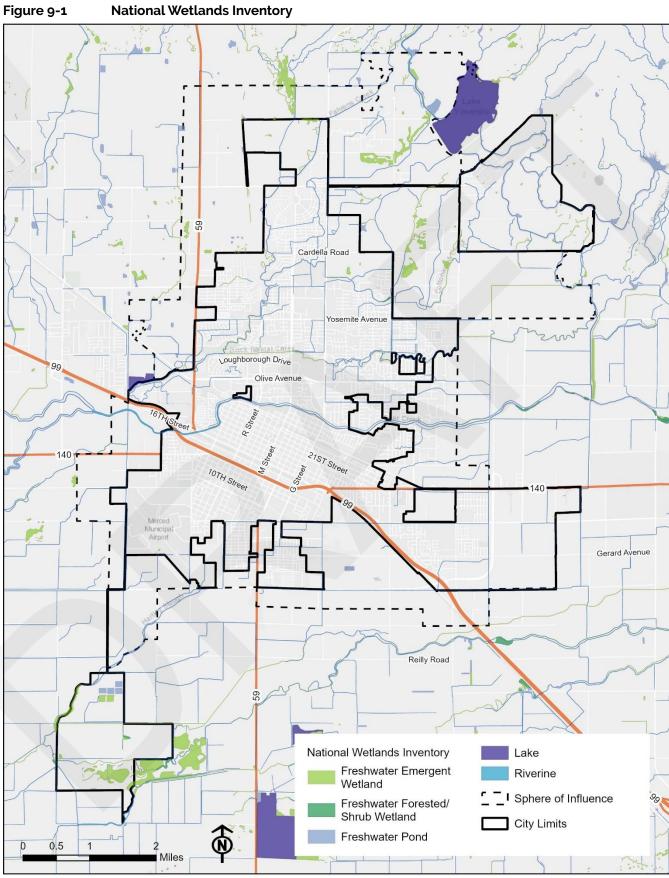


Left to right: San Joaquin Valley Orcutt grass and succulent owl's clover

Source: Calflora

#### **Sensitive Habitats**

The area around Merced supports several habitat types that serve as important refugia to sensitive wildlife and plant species. Seasonal wetlands- including freshwater emergent wetlands, freshwater forested/shrub wetlands, and vernal pools occur in small patches throughout the planning area, as shown in Figure 9-1. Vernal pools are particularly sensitive; ephemeral wetlands found within the planning area provide essential habitat for special-status species such as the California tiger salamander, vernal pool fairy shrimp, Conservancy fairy shrimp, vernal pool tadpole shrimp, San Joaquin Valley Orcutt grass, and fleshy owl's-clover. Critical habitat has been designated by the U.S. Fish and Wildlife Service for the above species, and some of the critical habitat areas also overlap the planning area as shown in Figure 9-2. As wetlands and vernal pools have declined significantly across California, many of these habitats are now protected under the federal Clean Water Act and State's Lake and Streambed Alteration Program. These aquatic systems are especially vulnerable to human activities that can lead to habitat loss and water quality degradation.



Source: U.S. Fish and Wildlife Service 2025b

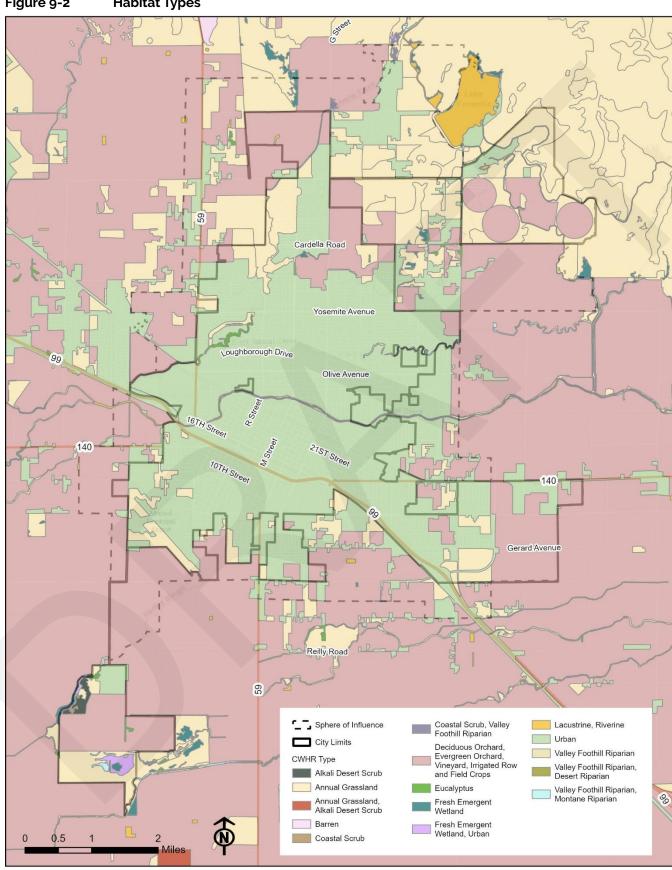


Figure 9-2 **Habitat Types** 

Source: California Department of Fish and Wildlife 2025b

Bear Creek and Fahrens Creek, within the Merced River watershed, flow through Merced. These waterways and the surrounding riparian habitats support a variety of wildlife species. Fish such as largemouth bass, catfish, and bluegill inhabit the creeks year-round. The riparian trees along the creek banks also offer nesting and foraging habitat for birds and raptors, including Swainson's hawks, great horned owls, California scrub-jays, and western kingbirds. Currently, the City of Merced is engaged in a project along Bear Creek, which includes the removal of invasive plant species to enhance the ecological health of the Bear Creek corridor.





Left to right: Bear Creek and Vernal pool

Source: City of Merced and UC Natural Reserve System

#### **Vegetation Communities**

The vegetation communities within the planning area reflect those commonly found across the predominantly flat landscape of the San Joaquin Valley. The Mediterranean climate of the planning area is exemplified by the cold wet winters and hot dry summers. Figure 9-3 illustrates the different habitat types present throughout the planning area including both natural and urban environments. Natural vegetation communities in the area include riparian woodlands that line creeks and other waterways. These habitats support a diverse range of native plants and tree species such as valley oak, cottonwood, black willow, and coyote brush. Non-native plant species are also present in these riparian areas, including giant reed, ripgut brome, shortpod mustard, and Johnsongrass. Annual grassland plants typically consist of a mix of native and non-native species such as soft chess, annual beardgrass, wild oat, field bindweed, and foxtail barley. In wetland and vernal pool habitats, plant species may include annual checkerbloom, popcorn flower, and coyote thistle.

Additionally, there are small patches of oak woodland and eucalyptus groves located near the outer edges of the City Limit. The planning area also encompasses agricultural lands, including crop fields and orchards, which have become important habitat for various wildlife species that have adapted to these managed landscapes.

59 Cardella Road Yosemite Avenue Loughborough Drive Olive Avenue 16TH Street 10TH Street Gerard Avenue Reilly Road Critical Habitat Greene's tuctoria California tiger Salamander San Joaquin Valley Orcutt grass Vernal pool fairy shrimp Colusa grass Conservancy fairy I Sphere of Influence shrimp City Limits Fleshy owl's-clover 0.5

Figure 9-3 Critical Habitats

Source: California Department of Fish and Wildlife 2025b

#### **Cultural Resources**

#### **Historic Sites**

Merced traces its history back to the construction of the Central Pacific Railroad through the central San Juaquin Valley in 1871. The street grid was aligned to the tracks, forever referencing the important role the railroad played in the early development of the city. Its prominence was firmly established in 1872 when Merced became the county seat of Merced County. Initial growth of the city was strong between 1880 and 1930, and many of the oldest buildings in Merced date to this period. A second wave of expansion followed the end of World War II, prompting the City to adopt its first zoning ordinance (1950) and general plan (1959).

In 1983, the City established criteria for a local historic register and gave the Planning Commission the duties to oversee designations (MMC 17.54). Additionally, the Planning Commission reviews alteration and demolition permits that would alter a designated historic resource. To aid in the initial identification of these resources, a historic resource survey of central Merced was undertaken in 1985. More recently, the 2030 General Plan included two policies related to historic resources.

- SD-2.2 Identify and preserve the city's historic and cultural resources.
- SD-2.3 Develop and promote financial incentive programs for historic preservation efforts.

Since the 1985 survey, additional historic resources have been identified throughout the city. There are 12 buildings officially listed on the National Register of Historic Places, one listed on the California Register of Historical Resources, and one listed on the local register. All of these structures are clustered within a one-mile radius in and around downtown Merced (Figure 9-4). In addition to those buildings officially listed at the Federal, State, or local level there are hundreds more that have been determined eligible for such listing, including six historic districts and nearly 350 individual buildings. This speaks to the great abundance of history represented in the architecture throughout Merced.





Left to right: Merced Theater and Tioga Hotel

Source: Mark Miller and Architects + Artisans

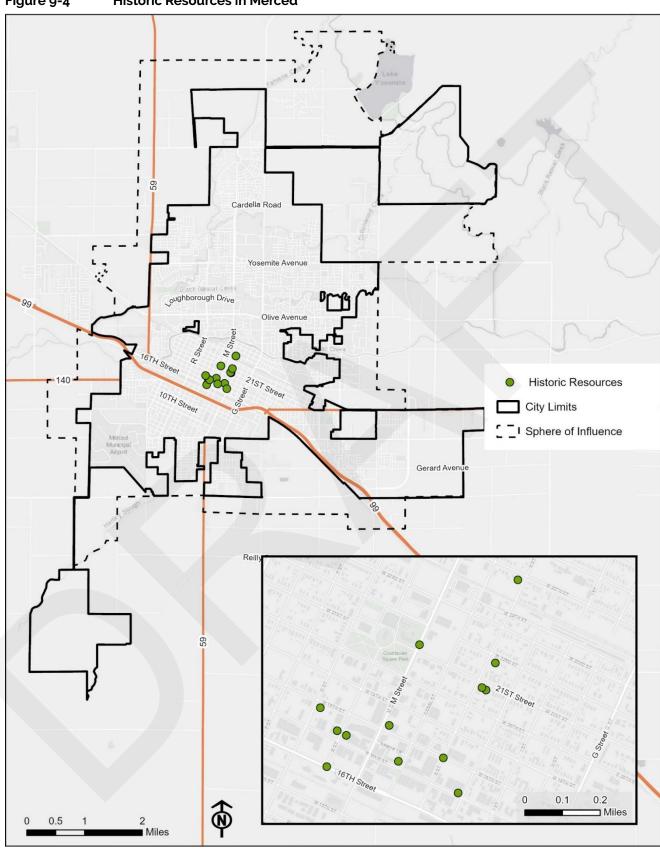


Figure 9-4 **Historic Resources in Merced** 

Source: California Office of Historic Preservation 2025

#### **Tribal and Cultural Resources**

Merced is within the traditional tribal territory of the Yokuts peoples. Yokuts were organized into distinct groups, each of which had their own name, dialect, and territory. Today Yokuts people are currently represented by members of several contemporary Federally recognized and California recognized Native American tribes and are interested in the protection and preservation of their historic and indigenous past as well as their modern traditional lifeways.

## **Energy Resources**

#### **Energy Consumption in the City**

Merced's energy system includes electricity, natural gas, and petroleum. The production of electricity requires the consumption or conversion of energy resources including natural gas, coal, water, nuclear, and renewable sources such as wind, solar, and geothermal. Electricity and natural gas for are used for residential and commercial energy needs. For transportation energy needs, gasoline and diesel fuel are the main sources of energy. Regular unleaded gasoline is used primarily to fuel passenger cars and small trucks. Diesel fuel is used primarily in large trucks and construction equipment. Both types are used widely in the city.

#### **Renewable Energy Programs**

There are several State and local renewable energy programs available to Merced residents to reduce their energy consumption. At the state level, the GoGreen Home Energy Financing program, provides low-interest loans to homeowners and renters for energy efficiency and renewable energy projects. Furthermore, the Disadvantaged Communities - Single-family Solar Homes program provides solar and storage systems to low-income households in disadvantaged communities while the Net Energy Metering program provides financial credit to customers who generate their own solar power and send excess energy back to the grid. Next, the California Solar Initiative Thermal Program provides incentives for solar water heating systems while the California Alternate Rates for Energy and Energy Savings Assistance program provides reduced energy rates and energy-saving upgrades to low-income households. Finally, at the local level, the Merced Irrigation District provides rebates for homeowners that incorporate ENERGY STAR® appliances, heating and cooling equipment, and other qualifying products in their home that lead to energy savings.

### **Soil Resources**

Merced is situated in the heart of the San Joaquin Valley—one of the most productive agricultural regions in the world. Merced is well-suited for agriculture thanks to fertile alluvial soils, including clay loam soils from the Merced Series, which are highly productive under irrigation, alongside other soils like the Dos Palos and Edminster series (FMMP 2025). Merced's agricultural setting has had a pronounced influence on its economy. Surrounding farmlands are intensely managed for agriculture and planted with various crops and orchards. Regional agricultural cropland provides an economic base for the city, and the long-term economic health of the city is directly linked to conserving the productive capacity of regional farmland. To this degree, the City has established urban expansion policies directing urban growth away from prime agricultural soils and protecting farmland along the urban perimeter.

## **Mineral Resources**

According to the State Mining and Geology Board, Merced contains no mineral deposits requiring managed production. In 1975, the California Legislature enacted the Surface Mining and Reclamation Act, which established Mineral Resource Zones (MRZs) for areas with minerals of statewide or regional importance. No MRZs lie within Merced's planning area. Accordingly, the General Plan is neither required to map mineral resource locations nor to include mineral-management policies.

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## **Hazards and Safety**

This Hazards are an important concern for communities because they pose risks to public safety, disrupt essential services, and can cause lasting social, economic, and environmental damage. Natural hazards in Merced are similar to those experienced in other communities in the San Joaquin Valley. Threats from earthquakes, flooding, urban and wildland fires, climate change, drought, and extreme heat are among the highest concerns in the city. Additionally, threats related to hazardous materials, noise, crime, and aviation activity can pose risks to the health and welfare of residents. This chapter describes environmental and material hazards in Merced, including emergency preparedness and response planning efforts.

# Geological & Seismic Hazards

Merced does not have any active faults within the City Limit, but is subject to seismic shaking from regional faults. The nearest active faults are shown on Figure 10-1, and include the Great Valley Thrust Fault System, Ortigalita Fault, and Quien Sabe Fault, located 30 to 57 miles west of the city. Historically, the city has received several jolts a year.

The Modified Mercalli Intensity (MMI) scale, used by the U.S. Geological Survey (USGS) and California Geological Survey (CGS), classifies earthquake intensity based on the severity of ground shaking. Intensity levels reflect the extent of potential damage to buildings, infrastructure, and the natural environment, as well as how strongly the shaking is perceived by people. The scale and scope of actual damage caused from an earthquake is dependent on the distance and intensity of the earthquake, the buildings and infrastructure involved, and the landscape characteristics. Historically, the city has experienced earthquakes with a relatively low severity of shaking. The City of Merced Local Hazard Mitigation Plan (HMP) ranks the hazard threat from earthquakes as a moderately low hazard.

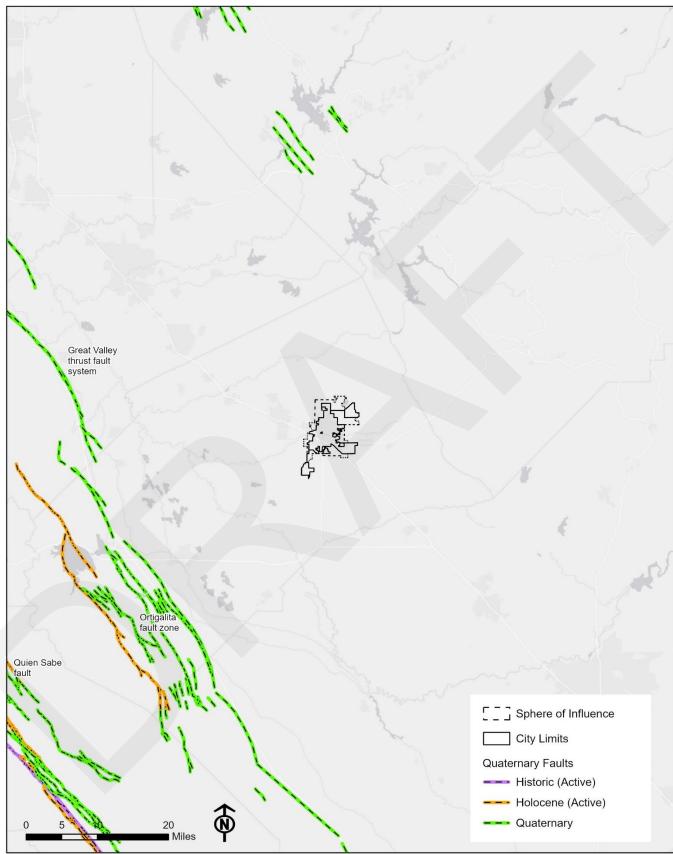
Liquefaction occurs when seismic waves from an earthquake travel through loose, granular soils, which are less stable than the bedrock underlying the hills and mountains surrounding Merced. According to the USGS, liquefaction takes place when loosely packed, waterlogged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. Although Merced is not located within an identified liquefaction hazard area, the future potential of liquefaction is recognized because unconsolidated sediments and a high-water table do coincide in many areas.

# WHAT IS THE MODIFIED MERCALLI INTENSITY SCALE (MMI)

MMI measures ground shaking severity at a given site according to damage done to structures, changes in earth surface and personal accounts.

ММІ	Shaking
ı	Not Felt
11-111	Weak
IV	Light
V	Moderate
VI	Strong
VII	Very Strong
VIII	Severe
IX	Violent
X, XI, XII	Extreme

Figure 10-1 Regional Faults



Source: CGS 2025.

## **Fire Risks**

While large wildfires are less common within Merced's urban core, the surrounding grasslands and agricultural areas present fire hazards, especially during hot, dry summers. The City mitigates this risk through regulated fuel clearance, updated fire codes, and active community education. Residential areas near open terrain, particularly on the southern and rural fringes, warrant heightened vigilance and preparedness.

### **Urban and Wildland Fire Risks**

The California Department of Forestry and Fire Protection (CAL FIRE) is required to identify fire hazard severity statewide. Based on factors such as fuel, terrain, and weather, CAL FIRE identifies Fire Hazard Severity Zones (FHSZs) and determines an area's level of service rating within State Responsibility Areas (SRAs)¹ and Local Responsibility Areas (LRAs).² Merced is located within an LRA (Figure 10-2). Moderate FHSZs are located to the south of Merced and within and adjacent to the northern and northeastern portions of the City limits and the City's Sphere of Influence (SOI). Moderate FHSZs in LRAs are areas that have been identified as having a moderate risk of wildfire based on factors like vegetation, terrain, and weather patterns. There are no High FHSZs in the city.

According to CAL FIRE, the greatest potential for significant damage to life and property from fire exists in areas designated as Wildland Urban Interface (WUI) areas. A WUI area defines the condition where highly flammable vegetation is adjacent to developed areas. A significant portion of the area surrounding Merced is used for agricultural purposes. Thus, the city does not include any areas designated as WUI areas by CAL FIRE.

### Fire Hazard Risk Areas

There are hundreds of acres of unimproved lands within the city, which produce quantities of annual grasses. These grasses cure during the late-spring and early-summer months to develop a receptive fuel bed of light, flashy fuels. The unimproved lands range in size, from a portion of a residential lot, to an entire lot, to multiple lots, to several hundred contiguous acres. The northern and southern areas of the planning area are at the greatest risk of a wildfire based on annexations, which have resulted in incomplete residential developments, and the comingling of structures and unimproved areas. Central areas of the city have been built out, however, scattered vacant lots pose an ongoing fire risk.

<sup>&</sup>lt;sup>1</sup> State Responsibility Areas are designated geographic areas in California where the State of California, specifically CAL FIRE, is financially responsible for preventing and suppressing wildfires.

<sup>&</sup>lt;sup>2</sup> In Local Responsibility Areas, fire protection is primarily the responsibility of local government agencies, such as city or county fire departments. CAL FIRE does not directly provide fire protection services in LRAs, though they may offer support or guidance.

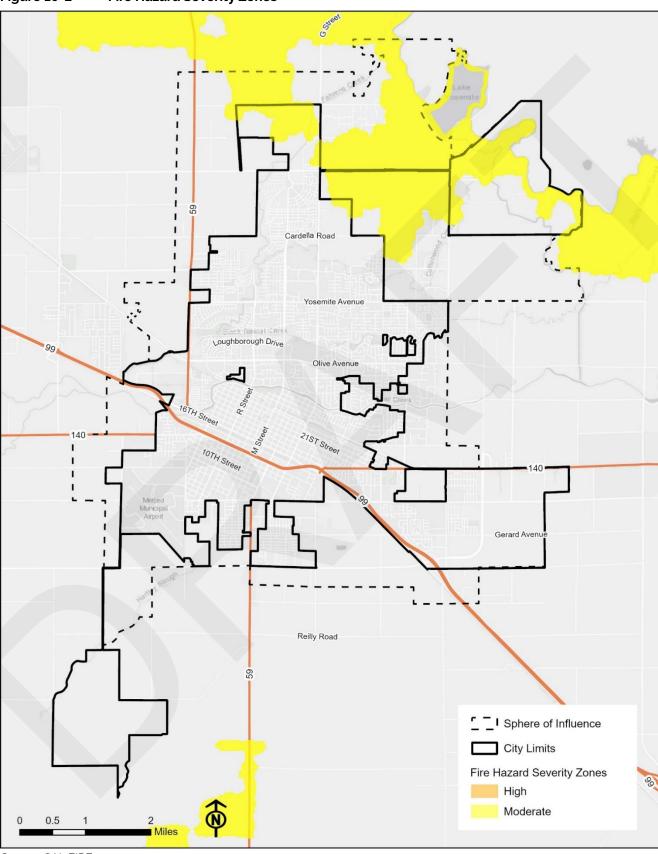


Figure 10-2 Fire Hazard Severity Zones

Source: CAL FIRE 2025.

### **Fire Protection Resources**

The Merced Fire Department (MFD) provides fire protection, rescue, and emergency medical services from five fire stations throughout the urban area. MFD personnel consist of 88 sworn staff and five civilian staff. The fire administration consists of the Fire Chief, one Deputy Fire Chief, three 56-hour Battalion Chiefs, two 40-hour Battalion Chiefs, one Fire Marshal, and one Management Analyst. Fire Department personnel are typically assigned on a three-platoon work schedule, which provides the city coverage 24 hours a day, seven days a week. MFD equipment includes engine companies, ladder companies, reserve engines and ladder trucks, airport emergency vehicles, and other miscellaneous support vehicles.

# Climate Change

California's climate is among the most variable in the nation, and climate change is amplifying this volatility. In recent years, the state has swung between extremes—from the worst drought in its recorded history (2012–2016), to the wettest season on record (2016–2017), back to one of the most severe droughts (2021), and then to unusually high rainfall in 2023. These dramatic shifts reflect a growing pattern of climate instability.

The continued release of greenhouse gases, primarily from fossil fuel combustion, has driven climate change and its cascading impacts. In Merced, residents are increasingly vulnerable to existing hazards that are being intensified by these changes. Below is a discussion of how each hazard is affected in distinct ways:

- Temperature: annual average temperatures are projected to rise at an accelerated pace, contributing to broader climate instability.
- Drought: California has already experienced some of its most severe droughts in the past decade, and projections suggest this trend will continue, with longer and more intense drought periods expected throughout the century.
- **Extreme Heat:** the number of extreme heat days will increase as temperatures climb, with more days exceeding the threshold of 98.5°F.
- **Flooding**: the potential for high-intensity rainfall events is increasing, raising the likelihood and frequency of flooding—particularly in Federal Emergency Management Agency (FEMA)-designated flood zones and other vulnerable areas.
- **Precipitation:** while total annual precipitation may remain relatively stable, the swings between wet and dry conditions will intensify, leading to longer and more severe droughts and storm events.
- **Wildfire:** rising temperatures, more frequent extreme heat days, and prolonged dry periods will heighten wildfire risk in and around Merced.

# **Drought**

California is susceptible to dry periods, and times of extended drought are likely to occur in the future. Drought is a result of lower-than-average rainfall over extended periods of time. Projections show average annual precipitation in the area is likely to remain the same over the next 20 years; however, temperatures across the state are expected to rise about 3.9°F. Increased temperature in Merced could result in less retainable water for groundwater recharge, which could strain the City's water supply. Between 2011 and 2014, the state of California experienced the driest period in recorded history. The resulting drought lasted from 2012 to 2017, dried up wells, and killed millions of trees. According to the U.S. drought monitor, currently Merced is in moderate drought conditions. Drought events are likely to increase in frequency and severity as climate change brings increased temperatures and decreased or similar average precipitation to the area.



Department of Fish and Wildlife photographic timeline of the river habitat conditions upstream of Hatfield Park bridge. The river channel started narrowing in early June and became completely disconnected at this location by July 7, 2022. The riverbed remained dry until early October 2022.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> https://wildlife.ca.gov/Drought/Projects/Lower-Merced

### **Extreme Heat**

Extreme heat events are defined as prolonged periods (typically two to three days) of high temperatures exceeding 90°F. These events pose significant public health risks, particularly for vulnerable populations such as older adults, individuals with respiratory conditions, and other sensitive groups.



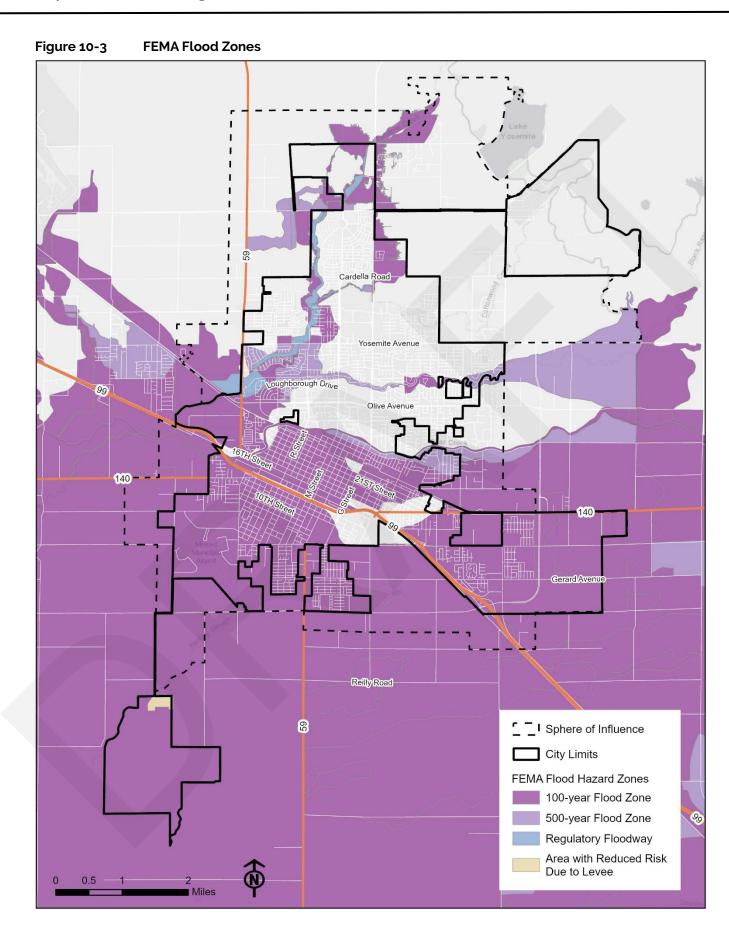
Currently, Merced experiences an average of five extreme heat events per year. However, projections from Cal-Adapt indicate a sharp increase over the next two decades, with the annual average rising to approximately 15 extreme heat events by 2045.

# **Flooding**

The Federal Emergency Management Agency (FEMA) produced Flood Insurance Rate Map (FIRM) identifying 100- and 500-year floodplains and areas of increased flood risk. A 100-year floodplain has a 1.0 percent chance each year of experiencing a flood in any given year, while a 500-year floodplain has a 0.2 percent chance in any given year. Approximately 25 square miles, mostly in the southwestern portion of the planning area, are located within the 100-year flood plain, as shown on the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA) (Figure 10-3). Although areas of the city north of Bear Creek have reduced flooding risk, scattered areas in this northern portion are within a 100- and 500-year floodplain.



Flooding experienced in Merced, California, January 10, 2023. Photo by Josh Edelson.



## **Noise**

Sound and vibration are physical effects –vibratory disturbances sent by pressure waves through air, water, soil and other media. Noise is considered unwanted sound that is typically construed as loud, unpleasant, unexpected, or undesired. Common sources of noise in Merced and most other communities include transportation sources such as cars, trucks, trains, and aircraft, and non-transportation sources such as construction activities, commercial and industrial facilities, and local land use activities. Exposure to excessive noise levels can affect health, quality of life, and experience living in, working in, and visiting Merced.

## Noise From Major Roadways and Highways

Cars, trucks, buses, and other vehicles on major roads and highways are a persistent source of noise in Merced. State Route (SR) 99, SR 59, and SR 140 are highways that link Merced to regional and statewide destinations, while arterial and collector roads such as G Street, M Street, Olive Avenue, and Childs Avenue move traffic into and through the city and link residential areas to downtown, commercial, industrial, and other areas within the city. The volume of traffic on the road, the types of vehicles travelling (e.g., car or truck), and the speed at which vehicles travel all effect roadway noise levels. While highway traffic is largely a function of statewide growth, increases in vehicle traffic and traffic-related noise on local arterial and other roadways are primarily a function of the city's growth and planning and development patterns. For example, residential expansion in the northern part of the city and the development of the University of California Merced Campus has increased traffic on the north-south roads that connect to SR 99 (e.g., M Street).

### Noise From Railroads and Aircraft

Railroads had, and will continue to have, a key role in the development of Merced. Present day passenger and freight train lines continue to run through the city, parallel to 16th Street (freight rail only) and 24th Street/Santa Fe Avenue (passenger and freight rail), with industrial spur lines in the northern part of the city. The existing Amtrak Merced Station on 24th street provides connections to county and regional bus lines; the station is planned for relocation to 16th Street, between R Street and O Street to support the future California High Speed Rail (CHSP) line that will be installed adjacent to 16th street. In addition, the expansion of Altamont Corridor Express (ACE) service to Merced is also planned. Existing and future rail service in the city will generate noise from a variety of sources, including the use of horns and railroad crossing warning devices at the approximately 15 at-grade crossings in the city.

The Merced Regional Airport (MacReady Field), located within the city, is a public airport that has increased flight service over time. In 2024, there were approximately 9,500 flights into and out of the airport (approximately 27 flights per day), primarily to Los Angeles and Las Vegas. Other airport facilities in the vicinity of Merced include Castle Airport (located northwest of the city). In addition, Mercy Medical Center, located in the north eastern part of the city, includes an emergency heliport. Development that occurs within certain planning areas would continue to be reviewed for compatibility with airport noise and safety policies contained in the Merced County Airport Land Use Compatibility Plan.

### **Noise From Stationary Sources and Other Activities**

While road and rail traffic are the primary contributors to overall ambient noise levels in the city, other sources generate localized noise levels, including, but not limited to, stationary and other equipment at industrial and commercial facilities, the downtown area, and special events. Noise from these sources can affect noise sensitive land uses, particularly if nighttime operations occur. Industrial and commercial facilities can include the operation of stationary and mobile equipment that can generate noise, including process equipment, loaders, forklifts, pneumatic and impact tools, truck trips, and commercial grade heating, ventilation, and air conditioning equipment. The city's downtown area includes shops, restaurants, and bars that attract residents and visitors to the downtown area, including at night, and some establishments play recorded or live music during business hours. Schools, athletic fields, and other outdoor use areas such as the County fairgrounds can generate audible noise at nearby properties.

### **Noise-Sensitive Areas and Sites**

Noise sensitive land uses and receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. In Merced, noise-sensitive land uses include residential dwellings; motels, hotels and transient shelters; hospitals; hospitals and nursing homes; educational facilities; libraries; religious institutions; and parks, recreation, and open space areas.

### **Ground Vibration**

While vibrations can impact structures and sensitive equipment, the primary concern related to vibration is usually the potential to annoy those working and residing in an area. In Merced, sources of groundborne vibration include construction activities and train travel near occupied buildings. The future expansion of CHSP and ACE service to Merced could increase the number of train events generating perceptible vibrations in the city.







## **Hazardous Materials**

Highways 99, 140, and 59 pass through Merced. Consequently, transportation-related accidents pose the most significant hazardous materials risk to city residents. All three highways pass through the center of Merced, with Highway 99 serving as a key statewide corridor for transporting hazardous materials. A significant release of such materials resulting from a traffic accident along any of these routes could pose serious health and safety risks to city residents.



An accidental release of hazardous materials could occur along designated truck routes (Figure 10-4) within and through the city.

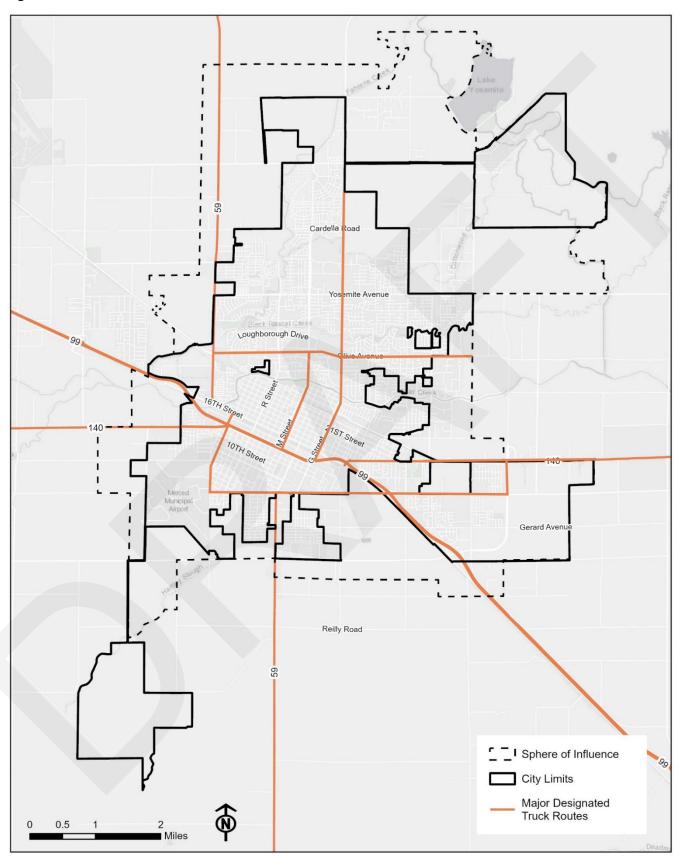
In addition to roadway risks, residents may also face potential exposure from the network of oil, fuel, and natural gas pipelines located throughout the city.

The use of hazardous materials in both agricultural and residential settings also carries the potential for environmental release, posing a risk to the health and safety of the community.





Figure 10-4 Truck Routes



Source: City of Merced 2025.

## **Aviation Hazards**

Merced Regional Airport is approximately two miles southwest of downtown Merced and handles primarily general aviation and is non-towered.<sup>4</sup> Castle Airport (formerly Castle Air Force Base) is located approximately six miles northwest of Merced in Merced County. Castle Airport serves general aviation and private operations and occasionally hosts noise testing of large jets. Merced Regional Airport (MacReady Field) is owned and operated by the City of Merced while Castle Airport is owned and operated by Merced County.

While Merced Regional Airport and Castle Airport generally handle low-to-moderate traffic, aviation-related hazards include wildlife strike potential, obstacle interference near flight paths, noise and low-flying aircraft, and standard general aviation risks. Effective hazard management involves community coordination, Federal Aviation Administration oversight, routine wildlife mitigation, and transparent operations for both scheduled and unscheduled aviation activities.

The City's General Plan includes policies that require any development near MacReady Field to be consistent with the Merced County Airport Land Use Compatibility Plan. The General Plan also includes policies to protect the airport from incompatible uses, discourage residential development in clear zones, reduce noise impacts from the airport on surrounding uses, protect approach areas and control zones for both existing and future runway systems through land use regulations and property acquisition, and prevent the encroachment of potential hazards to flights within the airport's airspace. In addition, the City's Zoning Ordinance restricts the height of structures within two miles of the airport. Although the City does not have direct control over operation of Castle Airport, the City's General Plan includes several policies to encourage the Merced County Airport Land Use Commission to require stringent noise reduction standards for Castle Airport.



Merced Regional Airport, located two miles from the town center of Merced, has a single 5,914-ft runway with lighted taxiways, serving 60+ airport-based aircraft plus transient traffic averaging 175 operations a day. In addition, the airport includes a small public terminal. 5

<sup>&</sup>lt;sup>4</sup> Non-towered airports operate without an air traffic control tower, relying on pilots to self-announce their position and intentions on a designated common frequency to maintain situational awareness and coordinate movements.

<sup>&</sup>lt;sup>5</sup> https://forums.x-plane.org/files/file/31151-kmce-merced-regional-airport/

## **Crime and Crime Prevention**

The Merced Police Department (MPD) releases annual public crime statistics that track the total number of reported violent crimes for each year, and recent statistics were summarized and evaluated in the MPD's 2007–2024 Crime Comparisons report. This subsection is informed by the data presented in the report.

Table 10-1 shows the annual number of violent crimes committed against people for the years 2014 through 2024. As shown, the total number of violent crimes against people increased from 1,100 in 2014 to 1,975 in 2024, marking an 80 percent increase over the 10-year period. Assault is the most common type of crime against people committed each year and accounted for 88 percent of crimes against people in 2024.

Table 10-1 Crimes Against People, 2014-2024

Туре	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Murder	14	11	1	8	1	6	7	13	6	6	7
% Change	180%	-21%	-91%	700%	-88%	500%	17%	86%	-54%	0%	17%
Rape	18	32	36	26	29	31	40	37	68	47	62
% Change	-5%	78%	13%	-28%	12%	7%	29%	-8%	84%	-31%	32%
Robbery	140	150	134	158	116	102	133	109	136	176	161
% Change	4%	7%	-11%	18%	-27%	-12%	30%	-18%	25%	29%	-9%
Assault	928	817	767	869	946	1,011	1,030	1,099	1,362	1,684	1,745
% Change	-10%	-12%	-6%	13%	9%	7%	2%	7%	24%	24%	4%
Total	1,100	1,010	938	1,061	1,092	1,150	1,210	1,258	1,572	1,913	1,975
% Change	-7%	-8%	-7%	13%	3%	5%	5%	4%	25%	22%	3%

Source: City of Merced, 2007-2024 Crime Comparisons, available at: <a href="https://www.cityofmerced.gov/public-safety/police/statistics">https://www.cityofmerced.gov/public-safety/police/statistics</a>, accessed, July 2025.

Table 10-2 reports the annual number of crimes against property for the years 2014 through 2024. As shown, the total number of crimes against property increased from 2,667 in 2014 to 2,779 in 2024, marking a four percent increase over the 10-year period. Theft is the most common type of crime against property for each year and accounted for approximately 50 percent of total crimes against property in 2024.

Table 10-2 Crimes Against Property, 2014-2024

Туре	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Burglary	605	587	554	468	383	393	388	292	560	632	845
% Change	-5%	-3%	-6%	-16%	-18%	3%	-1%	-25%	92%	13%	34%
Theft	1,674	1,602	1,614	1,698	1,395	1,426	1,126	1,632	1,526	1,322	1,382
% Change	4%	-4%	1%	5%	-18%	2%	-21%	45%	-6%	-13%	5%
Auto Theft	348	563	599	490	425	497	425	574	409	553	479
% Change	-12%	62%	6%	-18%	-13%	17%	-14%	35%	-29%	35%	-13%
Arson	40	83	81	93	58	69	95	126	126	86	73
% Change	-61%	108%	-2%	15%	-38%	19%	38%	33%	0%	-32%	-15%
Total	2,667	2,835	2,848	2,749	2,261	2,385	2,034	2,624	2,621	2,593	2,779
% Change	-3%	6%	0%	-3%	-18%	5%	-15%	29%	0%	-1%	7%

Source: City of Merced, 2007-2024 Crime Comparisons, available at: <a href="https://www.cityofmerced.gov/public-safety/police/statistics">https://www.cityofmerced.gov/public-safety/police/statistics</a>, accessed, July 2025.

Table 10-3 shows the total number of violent crimes for the years 2014 through 2024. As shown, the total number of violent crimes has increased from 3,767 in 2014 to 4,754 in 2024, marking a 26 percent increase over the 10-year period. Crimes against people accounted for approximately 42 percent and crimes against property accounted for 58 percent of total violent crimes for the year 2024.

Table 10-3 Total Violent Crimes, 2014-2024

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total	3,767	3,845	3,786	3,810	3,353	3,535	3,244	3,882	4,193	4,506	4,754
% Change	-4%	2%	-2%	1%	-12%	5%	-8%	20%	8%	7%	6%

Source: City of Merced, 2007-2024 Crime Comparisons, available at: <a href="https://www.cityofmerced.gov/public-safety/police/statistics">https://www.cityofmerced.gov/public-safety/police/statistics</a>, accessed, July 2025

The City of Merced Police Department (MPD) is responsible for crime prevention in the city. Neighborhood watch is the primary crime prevention strategy exercised by MPD, which enlists the active participation of residents, in cooperation with law enforcement, to reduce crime in communities throughout the city. Neighborhood watch encourages residents to take active measures to prevent crime by developing solutions to neighborhood-specific problems. For more details on the Merced Police Department, see Chapter 6. Public Facilities, Services, and Infrastructure.

# **Local Hazard Mitigation Plan**

Merced's Local HMP, adopted by the City Council in March 2015, is designed to identify, assess, and reduce risks from natural hazards such as flooding, fire, drought, hazardous materials, earthquakes, dam failure, extreme temperatures, tornadoes, fog, and storm-related hazards. Funding support from FEMA helped structure the plan and ensures eligibility for future mitigation grants like hazard mitigation and flood mitigation assistance.

The Local HMP provides a comprehensive risk assessment of local hazards likely to affect the community. Each hazard is analyzed for potential impacts on people, infrastructure, the economy, and the environment. The Local HMP outlines prioritized mitigation projects and policies, including proactive infrastructure improvements, land-use regulations, community education programs, and coordination with agencies to reduce vulnerabilities. Each proposed action includes details on responsible parties, timelines, costs, and potential funding sources to ensure accountability and feasibility. The Local HMP also establishes a maintenance framework to keep the plan current to ensure continual improvement and adaptation to emerging risks or changing community conditions.

# Merced County Multi-jurisdictional Hazard Mitigation Plan (MJHMP)

Merced County, including the participating jurisdictions of Atwater, Dos Palos, Gustine, Livingston, Los Banos, and Merced, have prepared a multi-jurisdictional hazard mitigation plan (MJHMP) to guide hazard mitigation planning to better protect the people and property of the county from the effects of hazard events. The Plan demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This plan was also developed to make Merced County and the participating jurisdictions eligible for certain federal disaster assistance, specifically, the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Assistance (HMA) grants including the Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA) and Building resilient Infrastructure and Communities program, as well as to make the county more disaster resistant. The plan demonstrates the commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources.

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### What is Environmental Justice?

Today, and throughout history, communities with disproportionately lower incomes, lower levels of education, and higher proportions of minority residents often bear a disproportionately large burden of exposure to environmental hazards and health risks. These conditions can often be traced back to a variety of factors, including underinvestment, inequitable land use and zoning practices, and fewer opportunities for public engagement. Environmental justice seeks to minimize the effects of these hazards for all people, regardless of race, ethnicity, or income level, while improving access to healthy foods, clean environments, safe housing, and accessible parks and recreational facilities..

## Introduction

### **Notable State Laws**

Senate Bill (SB) 1000, California Government Code Section 65302(h), requires local jurisdictions to incorporate environmental justice in their general plans by developing policies to reduce the disproportionate exposure to pollution in neighborhoods that also experience increased social and economic challenges. As defined by SB 1000, neighborhoods that are disproportionately affected by environmental justice are known as "disadvantaged communities."

## **Identifying Disadvantaged Communities**

Two geospatial screening tools, CalEnviroScreen 4.0 and U.S. EPA EJScreen, were used to analyze socioeconomic, environmental, and health factors to identify disadvantaged communities (DAC) within Merced...

#### CalEnviroScreen 4.0



CalEnviroScreen 4.0 is a screening tool developed by the California OEHHA that uses 21 indicators to assess pollution burdens and population vulnerabilities by census tract. Individual indicator scores are then combined to determine an overall CalEnviroScreen score. Census tracts in the top 25 percent of overall CalEnviroScreen scores (percentile scores between 75 and 100) are identified as DACs by CalEPA.

### U.S. EPA EJScreen



EJScreen was a screening tool developed by the US Environmental Protection Agency that combines environmental and socioeconomic factors to calculate environmental justice index scores for census block group in the United States. EJScreen provided an environmental justice index score for 12 environmental indicators that then receive a percentile score compared to Statewide data.

#### **Merced Census Tracts**

The environmental justice screening tools discussed above assess environmental and socioeconomic factors based on census tracts within the city. As of 2020, there are 25 census tracts that are found within Merced.

In 2020, the City of Merced completed a redistricting process. As a result of the redistricting, three 2010 census tracts were split, creating census tracts 10.06, 10.07, 10.08, 16.03, 16.04, 26.01, and 26.02. It should be noted that the data sourced in this chapter from CalEnviroScreen 4.0 is based on 2010 census tract boundaries and does not reflect the 2020 redistricting splits.

There are 14 census tracts (2010) in the city that fall within the top 25 percent of overall CalEnviroScreen 4.0 scores (see Table 11-1, Figure 11-1, and Figure 11-2). These 14 census tracts also have percentile scores within the top 25 percent of Statewide EJScreen environmental indicator scores. Census tracts fitting these criteria will be referred to as "Environmental Justice Communities."

Table 11-1 Merced Environmental Justice Communities

Census Tract (2010)	Census Tract (2020)	CalEnviroScreen 4.0 Result
6047001302 <b>(13.02)</b>	No change	98.2
6047001301 <b>(13.01)</b>	No change	98.2
6047001601 <b>(16.01)</b>	No change	96.9
6047001005 <b>(10.05)</b>	No change	94.9
6047001502 <b>(15.02)</b>	No change	93.8
6047001401 (14.01)	No change	92.5
60.470046004600	6047001603 <b>(16.03)</b>	
6047001602 <b>(16.02)</b>	6047001604 <b>(16.04)</b>	92.0
6047001700 <b>(17)</b>	No change	82.1
6047002500 <b>(25)</b>	No change	80.8
	6047001006 <b>(10.06)</b>	
6047001002 (10.02)	6047001007 <b>(10.07)</b>	80.4
	6047001008 <b>(10.08)</b>	
6047001503 <b>(15.03)</b>	No change	79.5
6047001501 <b>(15.01)</b>	No change	77.2
6047001402 (14.02)	No change	76.9
6047001003 (10.03)	No change	75.9

Note: Census tract 6047000901 (9.01) is within city limits and has a CalEnviroScreen 4.0 score of 82.6; however, there are no residences or businesses within city limits in this census tract. Therefore, this census tract has been excluded from this analysis.

Source: CalEnviroScreen 4.0.

The City of Merced is committed to identifying any indicators that point to potential disproportionate environmental burdens in different areas of the city. These findings will be incorporated into the Environmental Justice Element of the City's General Plan update process, including any approaches the City intends to take in addressing environmental justice concerns and ensuring sustainable and equitable development for the community.

19.01 18.01 10.07 Cardella Road 18.01 10.08 10.06 26.02 11.01 h D*riv*e 10.03 10.04 10.05 1677/Street 13:01 13,02 14.02 15,02 14.01 9.01 15.03 16.01 15.01 26.01 Gerard Avenue 16.04 Reilly Road City Limits CalEnviroScreen 4.0 Results >90 - 100 (Highest Scores) \_\_\_\_ Sphere of Influence Census Tracts >80 - 90 >70 - 80 9.01 >60 - 70 >50 - 60 >40 - 50 >30 - 40 >20 - 30 >10 - 20 0 - 10 (Lowest Scores) 0.5

Figure 11-1 CalEnviroScreen 4.0 Results

Last updated: July 28, 2025

19.01 18.01 18.01 10.02 26 11.01 10.03 10.04 10.05 13.01 13.02 14.02 14.01 15.02 9.01 15.03 15.01 16.01 26 Gerard Avenu Reilly Road 9.01 City Limits \_I Sphere of Influence Census Tracts (2010) Merced Environmental Justice Communities 0.5

Figure 11-2 Merced Environmental Justice Communities

# **Exposure to Environmental Hazards**

Exposure to environmental hazards occurs when people come into direct contact with pollutants in the air, water, food, or soil that may be present as a result of nearby incompatible land uses or activities. Consistent exposure to pollutants and other hazards can increase the chance of developing certain health risks, including respiratory infections, cancer, or heart disease. Vulnerable populations such as children, older adults, and low-income households, as well as those who regularly visit sensitive land uses such as schools, medical facilities, and senior living facilities, tend to have physiological traits, health conditions, or community characteristics which make these individuals more susceptible to the negative effects of pollution exposure. Exposure to multiple sources of pollutants can have a compounding effect on these health risks.

### **Pesticide Use**

Although the application of pesticides is regulated by the California Department of Pesticide Regulation, pesticides applied to agricultural lands can become airborne and drift to neighboring properties and communities, potentially becoming a source of pollution exposure for nearby residents. Chronic exposure to harmful pesticides can cause serious health issues, including respiratory illnesses, birth defects, cancer, and neurological impacts. Figure 11-3 shows pesticide use percentile scores, which are determined based on the pounds of active ingredients used per square mile for each census tract within Merced. Pesticide percentile scores in Merced census tracts closer to the edges of city (10.02, 10.05, 12, 14.02, 15.01, 16.02, 17, 25, and 26) range between 71 and 86, meaning pesticide exposure risk in these areas is higher than in 71 and 86 percent of other census tracts in California. This equates to an estimated 44 to 631 pounds of active pesticide ingredients used per square mile in or adjacent to these census tracts between 2017 and 2019. This higher risk of exposure is likely due to the city's close proximity to surrounding agricultural areas that periodically apply pesticides. Census tracts closer to downtown Merced have no score for this metric, as no agricultural pesticides are applied in these areas. This indicates that pesticide exposure is a significant issue for census tracts closer to the edges of the City Limit.

### **Traffic Proximity**

People who live near major roads and highways tend have increased exposure to the health and safety risks associated with high traffic volumes, such as air pollution from vehicle exhaust, noise pollution, and pedestrian/bicyclist collisions. Studies show that people of color and low-income households are more likely to live in high-traffic areas due to lower property or rent costs, resulting in higher rates of traffic-related health impacts (i.e., asthma, lung and heart disease, bronchitis) compared to those of higher-income households.

Both CalEnviroScreen 4.0 and EJScreen reported a medium- to high-traffic proximity for Merced residents living adjacent to Highway 99. This indicates that residents in these areas are exposed to higher levels of noise and air pollution compared to other census tracts in other portions of the city and state. As seen in Figure 11-4, census tracts in western Merced (10.03, 10.04, 10.05, 13.01, 13.02, 14.01, 15.01, 15.02, and 16.01) have higher traffic impacts percentile scores ranging from 54 to 69, meaning that traffic impacts in these areas is higher than 54 to 69 percent of other census tracts in California. Increased traffic impacts in these census tracts are likely a result of their proximity to the convergence of Highway 99 and State Routes 59 and 140. The northern and eastern portions of the city have far fewer traffic impacts.

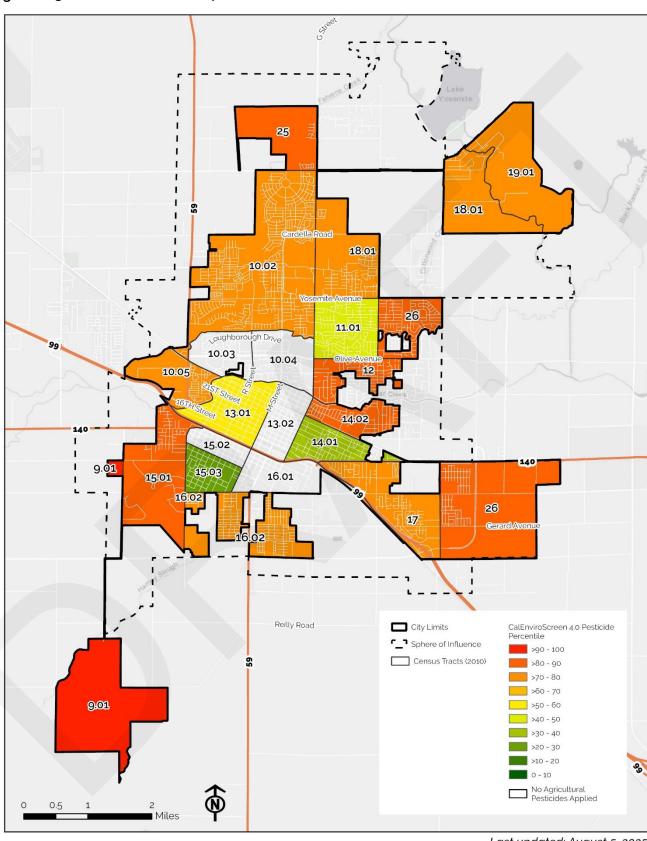


Figure 11-3 CalEnviroScreen 4.0 Pesticide Use Percentile

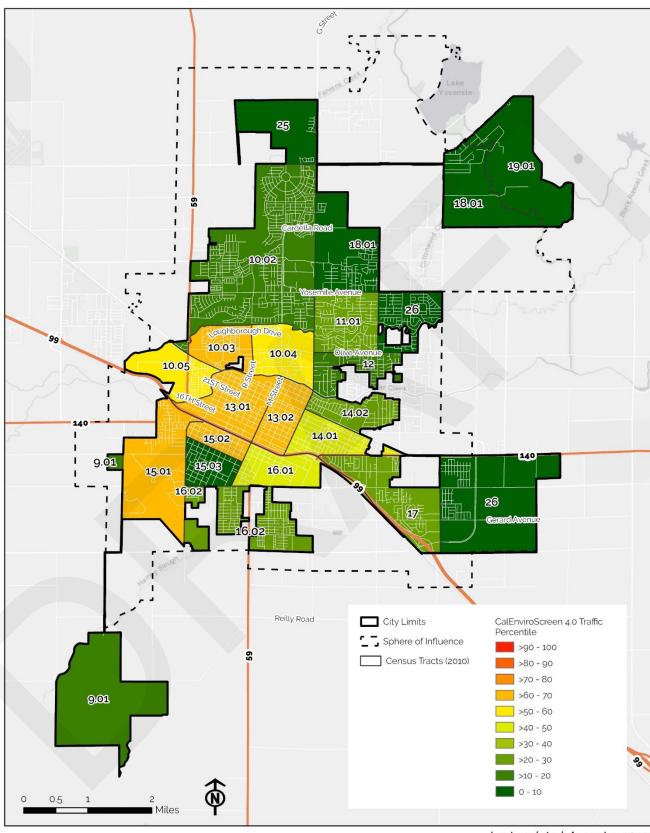


Figure 11-4 CalEnviroScreen 4.0 Traffic Percentile

### **Risk Management Plan Facility Proximity**

The EPA requires facilities that use extremely hazardous substances to develop a risk management plan (RMP), which provides information to local authorities on how to respond to site-specific chemical emergencies and prevent chemical accidents. Residents living near a facility requiring an RMP are at higher risk of negative impacts or need for emergency services in the event of a chemical accident. EJScreen calculates the RMP Facility Proximity score by counting the number of RMP facilities within three miles of a census block group. Figure 11-5 shows RMP facility proximity percentile scores for census tracts in Merced, with census tracts in western Merced scoring the highest. Census tract 10,05 had the highest score for this metric at 64, meaning that RMP facility proximity is higher than 64 percent of other census tracts in California. Adjacent census tracts scored between 51 and 61 for this metric. Census tracts to the north and east of the city scored far lower for this metric, indicating the presence of at least one facility requiring an RMP in or adjacent to the western edge of the city.

# **Healthy and Affordable Housing**

The age, condition, and location of housing can greatly impact the health and safety of residents. Occupants of housing built before 1978 and the widespread adoption of building standards and regulations are at a higher risk of exposure to asbestos and lead paint in their homes. Additionally, older housing may require more expensive repairs and maintenance due to the age of the unit. Housing located near incompatible and pollution-generating land uses (e.g., agricultural fields, industrial uses, highways) can also affect the health and safety of residents by increasing their exposure to pollutants.

### Lead Exposure

Lead is a toxic heavy metal that can enter the bloodstream and cause serious neurological or behavioral health problems, especially in young children. Although the use of lead in common household items has been regulated in the United States since 1978, house paint in older homes may still be a significant source of lead exposure.

As seen in Figure 11-6, census tracts 13.02, 14.01, and 15.02 scored in the 83rd to 92nd percentile for children's lead risk from housing indicator, indicating a higher likelihood of lead exposure from lead-based paint (LBP) based on the age of housing as well as a higher percentage of low-income households with children. Generally, census tracks surrounding downtown Merced have a much higher percentile score for this metric than the surrounding and northern areas of the city.

Table 11-2 provides a breakdown of housing stock by year built and tenure in Merced. As of 2023, there are 27,482 total housing units within the city. Of these total units, approximately 50 percent (12,350) were built prior to 1980. According to the USEPA, homes built prior to 1978 are at a much higher risk of LBP exposure if proper measures have not been taken to test for and mitigate the presence of LBP in the home. This means that around half of the housing units in Merced, many of which are likely found in census tracts 13.02, 14.01, and 15.02, are at higher risk of LBP exposure if steps have not been taken to remove and mitigate the presence of lead paint and other materials in the home. Additionally, over half of these dwelling units are occupied by renters who may not have significant knowledge of the home's history and renovations completed.

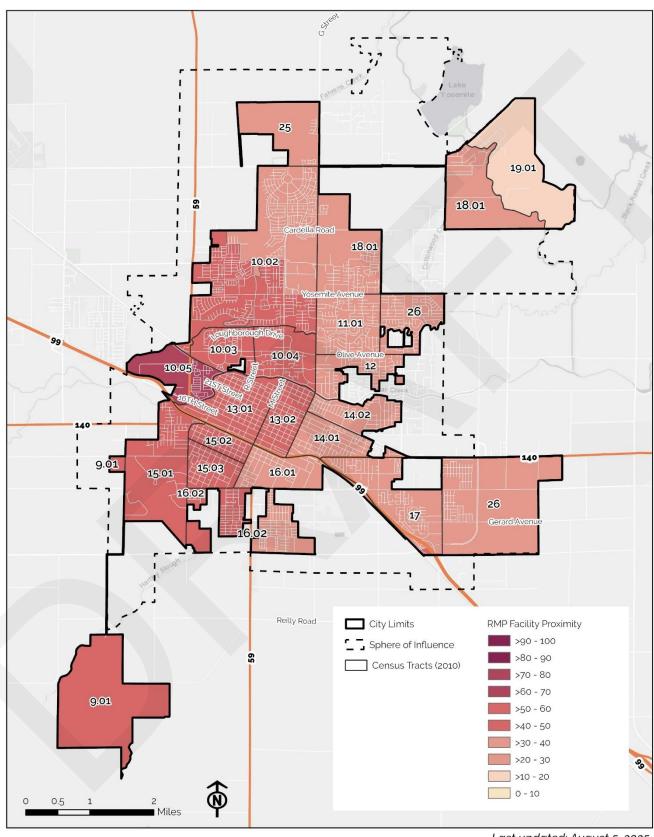


Figure 11-5 **EJScreen RMP Facility Proximity Percentile** 

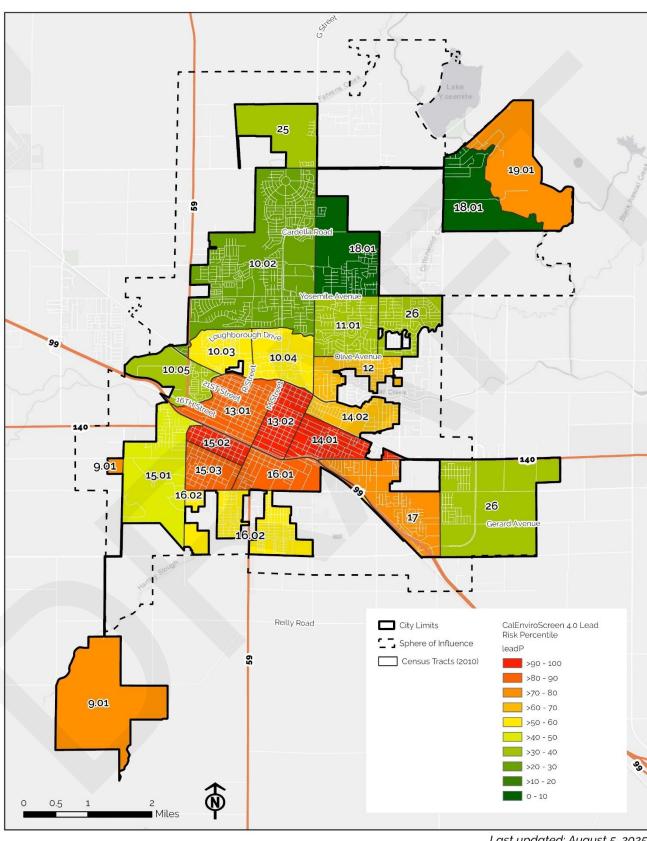


Figure 11-6 CalEnviroScreen 4.0 Lead Risk Percentile

Table 11-2 Housing Stock by Year Built and Tenure

	Renter	Owner	Total	Percent of Housing Stock
Built 2020 or later	117	406	523	1.9%
Built 2010 to 2019	856	975	1831	6.7%
Built 2000 to 2009	2,977	2,678	5655	20.6%
Built 1990 to 1999	1,662	1,207	2869	10.4%
Built 1980 to 1989	2,581	1,673	4254	15.5%
Built 1970 to 1979	2,682	2,177	4859	17.7%
Built 1960 to 1969	1,179	972	2151	7.8%
Built 1950 to 1959	1,605	1,095	2700	9.8%
Built 1940 to 1949	813	587	1400	5.1%
Built 1939 or earlier	801	439	1240	4.5%
Total Housing Stock Built Before 1980	7,080	5,270	12,350	44.9%
Total Housing Stock	15273	12209	27482	100.0%

Source: US Census Bureau, American Community Survey 5-Year Estimates, Table B25036, 2023.

## **Housing Cost Burden**

A household is considered severely cost burdened when more than 50 percent of the household income is spent on housing, including costs associated with rent payments, mortgage payments, and utilities. As shown in Figure 11-7, many low-income households in Merced are housing cost burdened, particularly those living in census tracts in the central and southern portions of the city. Census tracts 10.03, 13.01, 13.02, 14.01, and 16.01 face the greatest housing cost burden of census tracts in the city, with scores ranging from 83 to 96 for this metric, meaning that housing cost burden in these areas is higher than 83 to 96 percent of other census tracts in California. Areas to the north and east of the city generally have much lower scores for this metric.

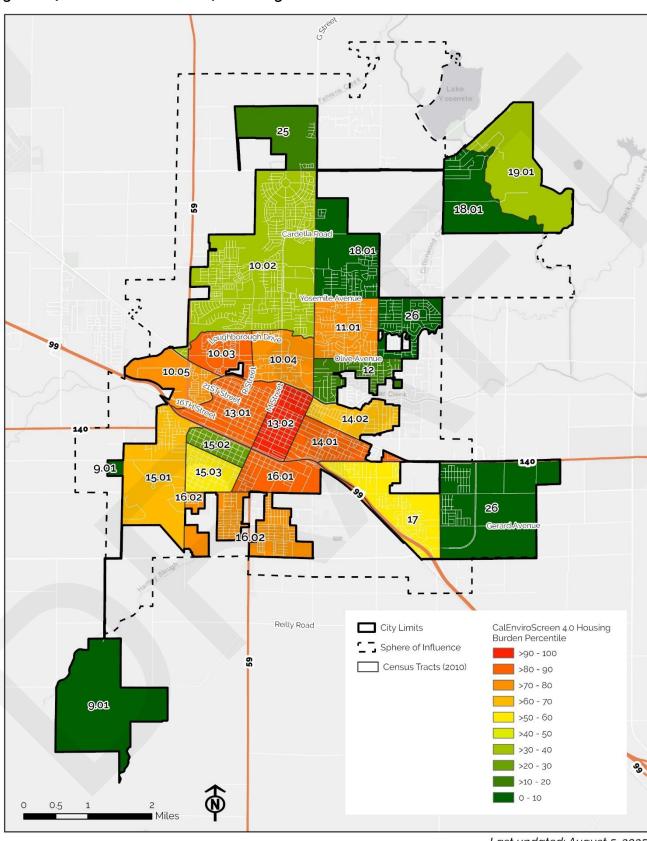


Figure 11-7 CalEnviroScreen 4.0 Housing Burden Percentile

## **Access to Job Markets**

Ample employment opportunities and adequate access to a variety of jobs are important factors in ensuring that households are able to pay for essential items, such as housing, food, and other living expenses. Merced plays a major role in the countywide economy, as it is home to many large employers covering diverse employment sectors such as medical care, public institutions, schools, retail, manufacturing, and more. In 2023, approximately 57 percent of residents 16 years or older were employed, which was higher than employment rates countywide (55 percent) but lower than statewide rates (60 percent)<sup>1</sup>.

Individuals who are unable to find a job, are laid off from their job, or are temporarily unable to work may find themselves unemployed for a period of time. The unemployment rate of residents directly influences the mental, physical, and financial health of those unemployed, their families, and the community at large. Additionally, gaps in employment can significantly reduce the amount of disposal income available to individuals and their families. The stressors associated with being unemployed can cause a number of physical health problems, including high blood pressure, diabetes, and heart disease, as well as mental health problems, such as anxiety and depression.

As shown in Figure 11-8, citywide unemployment rates are unusually high compared to other census tracts in the state. This indicator measures the percentage of people over 16 who are unemployed and eligible for the workforce, excluding retirees, students, homemakers, institutionalized persons except prisoners, those not looking for work, and military personnel on active duty. Most census tracts in the city have employment percentile scores ranging from 92 to 100, meaning that the unemployment rate in these areas is higher than 92 to 100 percent of other census tracts in California. This equates to an unemployment rate ranging from 12 to 34 percent of adults in these census tracts. Only four census tracts in the city have an unemployment percentile score under 90.

<sup>&</sup>lt;sup>1</sup> Source: U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2023.

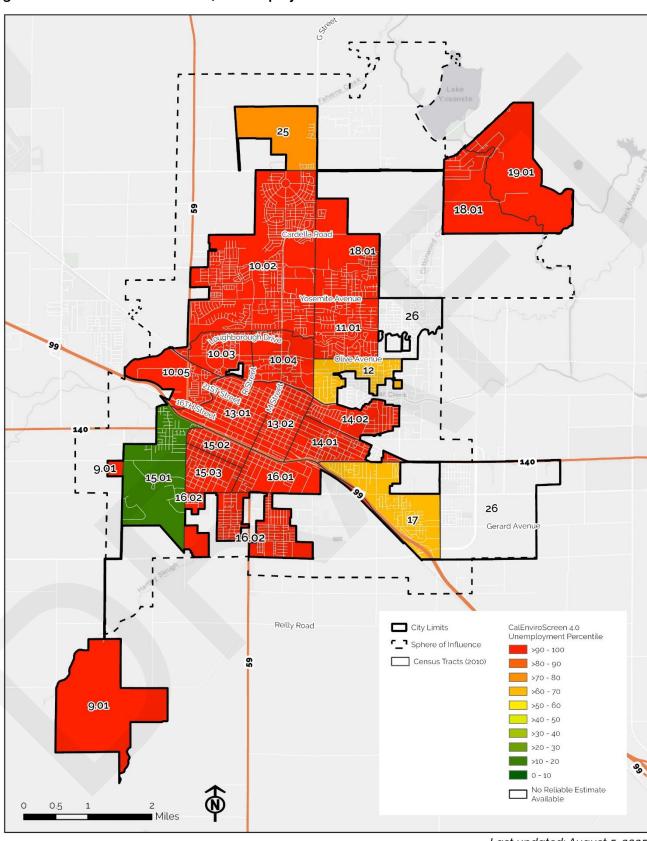


Figure 11-8 CalEnviroScreen 4.0 Unemployment Percentile

# Access to Health Care and Healthy Foods

### **Healthy Food Access**

Access to healthy, affordable, and culturally appropriate food is critical in achieving a high quality of life in any community. Environmental justice communities often have a more difficult time achieving food security, since households in these communities tend to have lower incomes and are less likely to have regular access to a vehicle to drive to grocery stores that are further away.

As of 2025, there are 20 grocery stores within Merced, including:

- Annapurna Indian Grocery Market: 2933 G Street, Merced, CA 95340
- Cardenas Markets: 1136-1140 W Main Street, Merced, CA 95340
- Costco Wholesale: 1445 R Street, Merced, CA 95340
- **DG Market**: 1729 CA-140, Merced, CA 95341
- El Bajio Market: 1010 W 16th Street, Merced, CA 95340
- Food 4 Less: 1115 W Olive Avenue, Merced, CA 95348
- Foodmaxx: 1300 W Olive Avenue, Merced, CA 95348
- Grocery Outlet: 1125 W Main Street, Merced, CA 95340
- Merced Food Center: 1150 Martin Luther King Jr Way, Merced, CA 95341
- Merced Indian Grocers: 3368 N State Highway 59 Ste M, Merced, CA 95348
- Merced Valley Food: 1640 Yosemite Parkway, Merced, CA 95341
- Prime Time Nutrition: 401 Lesher Drive Suite C, Merced, CA 95341
- · Raley's: 3550 G Street, Merced, CA 95340
- Rancho San Miguel: 1930 Yosemite Parkway, Merced, CA 95340
- Save Mart: 150 W Olive Avenue, Merced, CA 95348
- Smart & Final Extra!: 1425 Martin Luther King Jr Way, Merced, CA 95340
- Sprouts Farmers Market: 171 E Yosemite Avenue, Merced, CA 95340
- Target Grocery: 3280 R Street, Merced, CA 95348
- US Foods Chef Store: 3275 R Street, Merced, CA 95348
- Walmart: 3055 Loughborough Drive, Merced, CA 95348

Additionally, there are 15 neighborhood/convenience stores distributed throughout or immediately adjacent to the city, including:

- A & M Market: 402 W 23rd Street, Merced, CA 95340
- Amigos Mini Mart: 645 W 11th Street, Merced, CA 95341
- Best Buy Markets: 1220 W 9th Street, Merced, CA 95341
- Buy & Bye Market: 1108 G Street, Merced, CA 95341
- California Liquor & Grocery: 1122 R Street, Merced, CA 95341
- Choice Food Market: 836 T Street, Merced, CA 95341
- Circle G Mini Mart: 3250 G Street E, Merced, CA 95340
- **D&D Market Taqueria Mexican Food:** 1606 G Street, Merced, CA 95340

- Eltareb Market #3: 561 W 8th Street, Merced, CA 95341
- Lee's Community Food Market: 37 E 15th Street, Merced, CA 95340
- Main Street Market: 211 W Main Street, Merced, CA 95340
- Save More Market: 2030 G Street, Merced, CA 95340
- Shop & Save Market: 1055 W Childs Avenue, Merced, CA 95341
- Sierra Market: 1504 Stretch Road, Merced, CA 95340
- Spices of India: 1277 V Street Ste D, Merced, CA 95341

Nine of these stores specifically focus on culturally-appropriate foods, including stores that mainly sell Hispanic, eastern Asian, or Indian foods and ingredients. Additionally, many grocery and neighborhood/convenience stores in the city accept Women, Infants, and Children Program (WIC) and/or CalFresh EBT benefits. O shows grocery store and neighborhood/convenience store locations in relation to residential areas in Merced within a half mile around each store.

Merced has two farmers markets/swap meets, both of which are held year-round every Saturday. The Merced Certified Farmers Market is held in downtown Merced at the corner of 16th Street and Canal Street in the morning only. The Merced Flea and Farmers Market is held in southern Merced at 900 G Street in the morning through early afternoon. The Merced Certified Farmers Market accepts CalFresh EBT, WIC, and Senior Nutrition Vouchers.

# **Food Insecurity**

While physical proximity to grocery and neighborhood/convenience stores is important, residents may still lack the income, skills, or nutritional education to buy and prepare healthy food on a regular basis. In 2023, the median household income in Merced (\$59,938) was much lower than that of Merced County and the state (\$65,044 and \$96,334, respectively), indicating that more households in Merced are likely to have less income available to purchase food for their family<sup>2</sup>.

Another indicator of households' ability to buy and prepare healthy food is the percentage of residents living twice below the poverty line; twice the poverty level is used as an indicator due to the high cost of living in California compared to other states in the country. As seen in Figure 11-10, census tracts in the central, eastern, and southern portions of the city (10.03, 10.05, 13.02, 14.01, 15.02, 15.03, 16.01, and 17) have the highest poverty indicator scores citywide, ranging from the 92<sup>nd</sup> to 99<sup>th</sup> percentile, meaning that the percentage of residents living below twice the poverty level is higher than 92 to 99 percent of other census tracts in California. However, other census tracts in the city have poverty indicator scores ranging from 21 to 88, indicating that this is a citywide concern.

According to Feeding America, in 2023, the average meal cost in Merced County (\$3.59) was similar compared to the statewide meal cost (\$3.63). However, the countywide food insecurity rate was much higher at 17.7 percent, compared to the statewide rate of 13.7 percent. This indicates that while food prices are relatively consistent between the county and state, typical incomes in Merced County are not keeping up with the cost of food in the county.

<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau, ACS, 5-year Estimates, Table DP03, 2015, 2020, 2023.

Cardella Road Gerard Avenu Reilly Road City Limits Sphere of Influence Residentially Zoned Parcels Grocery Store Neighborhood/ Convenience Store Grocery Store 1/2 Mile Buffer 0.5 ■ Miles

Figure 11-9 Proximity to Grocery Stores

Last updated: August 5, 2025

25 19.01 18.01 18.01 10.02 26 11.01 10.03 10.04 10.05 1674/Street 13.01 14.02 13.02 14.01 15.02 9.01 15.03 15.01 16.01 26 17 Gerard Avenue Reilly Road CalEnviroScreen 4.0 Poverty City Limits Percentile \_\_\_ Sphere of Influence >90 - 100 Census Tracts (2010) >80 - 90 >70 - 80 >60 - 70 9.01 >40 - 50 >30 - 40 >20 - 30 0 - 10 0.5

Figure 11-10 CalEnviroScreen 4.0 Poverty Percentile

Last updated: August 5, 2025

## **Health Care Access**

According to the California Department of Public Health, there are 41 medical facilities in Merced. Residents have access to surgical centers/clinics, community clinics, urgent care, a hospital, outpatient general medicine care, adult day health centers, pediatric day health center, congregate living health facilities, hospice care, dialysis clinics, residential care facilities, and skilled nursing facilities. Residents have two ambulance services, Riggs Ambulance Service and the City of Merced Emergency Medical Services (EMS). At the time of the creation of this workbook, EMS is being reevaluated, therefore the ambulance service provider may change. The City of Merced Fire Department's EMS system includes 9-1-1 Dispatchers, First Responders, Emergency Medical Technicians (EMT's), and Paramedics.

# **Community Equality**

# **Physical Activity**

The built environment plays a key role in determining whether a neighborhood has convenient and safe access to parks, recreational facilities, open space, and well-connected pedestrian and bike networks, all of which provide residents the opportunity to engage in regular physical activity. Disadvantaged communities (DACs) often have inadequate access to these facilities due to discriminatory land use practices and lack of historic investment in their community, providing fewer opportunities for regular physical activity to these residents.

As shown in Table 11-3, there are 38 parks located within Merced. Parks ranging in size and intended audience, from regional parks that serve the greater community to neighborhood parks and mini parks that primarily serve nearby residents. To learn more about the City's parks and recreational opportunities, please read the *Open Space, Parks, and Recreation* chapter of this Workbook.

Table 11-3	Parks in Merced

Park Name	Address
Regional Parks with amenities such as sp	orts areas, bicycle paths, picnic areas, and dog areas
Applegate Park	W 25th Street and R Street
Merced Dog Park	R Street and W Yosemite Avenue
Youth Sports Complex	1800 Wardrobe Avenue
Community Parks with amenities such as	playgrounds, picnic areas, BBQ grills, and sports areas
Fahrens Park	945 Buena Vista Drive, Merced, CA 95348
Joe Herb Park	2200 Yosemite Parkway, Merced, CA 95341
McNamara Park	1040 Canal Street, Merced, CA 95341
Rahilly Park	3400 Parsons Avenue, Merced, CA 95340
Neighborhood Parks with amenities such as	s playgrounds, picnic areas, BBQ grills, and sports areas
Ada Givens Park	Hawthorne Avenue
Bernasconi Park	3770 De Soto Way
Bob Carpenter Park	Parsons Avenue and Silverado Avenue
Brooks Park	E Gerard Avenue and S G Street
Burbank Park	E. Olive Avenue

Park Name	Address
Carol Gabriault Park	1817-1875 Willowbrook Drive
Childs & B Street Park	E Childs Avenue and B Street
Davenport Park	White Dove Avenue and Dunn Road
Dwight Amey Park	Blix Avenue
Elmer Murchie Park	Jacobs Drive
Flanagan Park	Cone Avenue and Las Brisas Street
Gilbert Macias Park	East Childs Avenue and G Street
Rudolph Joseph Merino Park	El Redondo Drive and Pacific Drive
Stephen Gray Park	NW Bear Creek
Stephen Leonard Park	W 7th Street and T Street
Mini Parks with amenities such as p	laygrounds, benches, and picnic tables
Benjamin Banneker Memorial Park	1301 W. 2nd Street
Black Rascal Creek Bike Way Park	Black Rascal Strip Park
Charles Richard Drew Park	Corner of 8th Street and N Street
Dennis Chavez Park	Corner of W Street and W 11th Street
Diego Rivera Park	P Street and W 10th Street
Old Fahrens Park	Cheyenne Drive
Frank Gasper Park	E 23rd Street and Circle Drive
Frederick Douglass Park	W 8th Street and V Street
Hansen Park	1357 Hansen Avenue
Harriet Tubman	West 4th Street and N Street
Little Angels Park	H Street & W 11th Street
Macready Park	Macready Drive
Neighborhood Park	G Street & E 12th Street
The Love Veasley Family Park	W 6th Street and Canal Street
Santa Fe Strip Park	Buena Vista Drive
William Lloyd Garrison	S Street and Home Avenue

Source: City of Merced, 2025.



# **Active Transportation**

In addition to adequate park access, safe and well-connected pedestrian and bicyclist facilities promote physical activity while reducing traffic and pollution. O shows existing bicycle networks in Merced. Most Class 1 bicycle paths are found in northern Merced, including the Black Rascal Bike Path and the Michael O. Sullivan Bike Path. Central and Southern Merced have a mix of Class 2 and Class 3 bicycle lanes and routes. No Class IV facilities exist in Merced as of 2025. The sidewalk network in Merced is generally well-connected, with most neighborhoods having adequate sidewalk access. To learn more about pedestrian and bicyclist facilities in Merced, please read the *Mobility* chapter of this Workbook.

### Class 1 Bicycle Path

Bike Paths are fully separated bike facilities, used exclusively by bicyclists and pedestrians. Along these paths, interactions with vehicles are limited to intersections between the trail and roadways.

### Class 2 Bicycle Lane

Bike lanes are used for oneway bike travel and are designated by a painted, striped buffer between the bike lane and parking or vehicle travel lane.

# **Class 3 Bicycle Route**

Bike Routes (also known as "sharrows") are facilities with shared bicyclist and motor vehicle traffic. These routes provide connections between other Class I or Class II bicycle facilities and are indicated by shared roadway markings along the route. Bike routes include bike boulevards (Class IIIB), which function similarly to bike routes; however, bike boulevards are configured to prioritize bicycle traffic

## **Class 4 Separated Bikeways**

Separated bikeways are bike facilities that are fully separated from motor traffic with a vertical, physical feature or barrier. These facilities function exclusively for use by bicyclists and can reduce levels of stress and improve comfort for bicyclists travelling throughout the city.

Figure **11-11 Merced Bicycle Network** KEY Class I Class II Class III Bellevue Rd 69 Olive Ave Olive Ave Santa Fe Ave (140) Childs Ave Childs Ave Gerard Ave

Source: MCAG Regional Active Transportation Plan, 2024

# **Local Roadway Safety**

In 2024, the Merced County Association of Governments (MCAG) developed the Merced Multijurisdictional Local Roadway Safety Plan (LRSP) to prioritize transportation safety and eliminate traffic-related deaths and serious injuries on local roadways. Collision records on roadways in Merced from 2015 to 2022 were investigated to describe historic collision trends and identify high-risk locations. The LRSP evaluates existing conditions and suggests priority location and project concepts to address identified safety risk factors.

Among other findings, the LRSP concluded that in Merced people walking or biking are particularly vulnerable in the event of a collision, as they lack the protection afforded to them by being inside a motor vehicle. As a result, collisions involving people walking or biking are more likely to result in injury and fatality. As shown in Figure 11-12, people walking and biking are involved in 21 percent of all injury collisions, but 47 percent of collisions resulting in an individual killed or seriously injured (KSI).

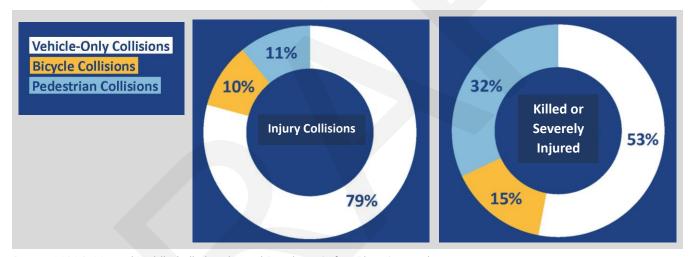


Figure 11-12 Collision Mode Share by Severity, 2015- 2022

Source: MCAG, Merced Multijurisdictional Local Roadway Safety Plan, September 12, 2024.

# **Collisions by Pedestrian Location**

Figure 11-13 illustrates for pedestrian-involved collisions the location of the pedestrian(s) at the time of collision. The most common location for pedestrians at the time of collision is crossing the street, whether at a marked crosswalk (39 percent) or not (38 percent). This is followed by walking in or along the shoulder of the roadway, at 16 percent. For pedestrian KSI collisions, crossing not at a crosswalk was the most common location at 42 percent, followed by walking in or along the shoulder of the roadway at 27 percent, and crossing at crosswalks at 24 percent.

This data points to the importance of ensuring that existing crosswalks are safe and properly protect users. It is also crucial to ensure pedestrian desire lines currently unserved by sidewalks and existing crosswalks are properly served - for example, ensuring that all legs of intersections feature crosswalks - to avoid having pedestrians resort to walking in road or crossing where no crossing facilities exist.

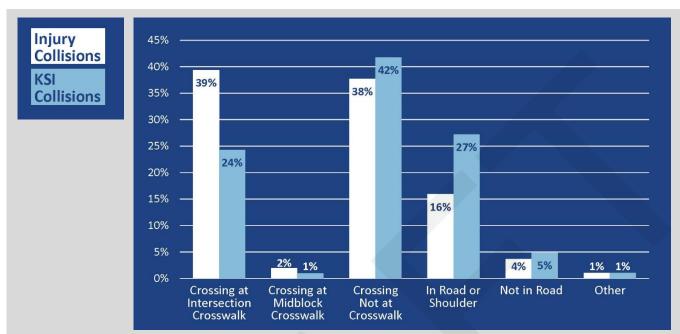


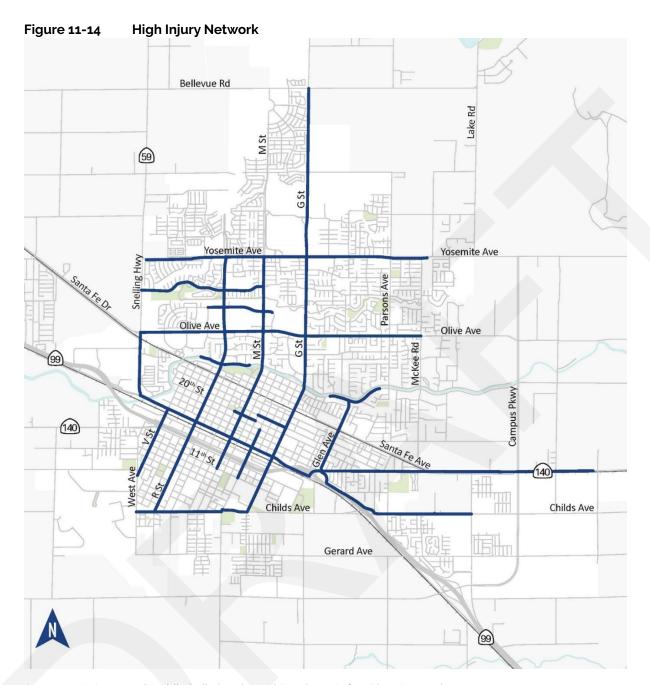
Figure 11-13 Share of Pedestrian Involved Injury Collisions by Pedestrian Location, 2015-2022

Source: MCAG, Merced Multijurisdictional Local Roadway Safety Plan, September 12, 2024.

## **High Injury Network**

From the collision data, a High Injury Network was developed to identify the roadways in Merced with the highest levels of injury collisions, as shown on Figure 11-14.

The High Injury Network consists of just 10 percent of the roadway network in Merced but is the site of the vast majority of injury collisions. 3,363 collisions occurred during the study period. Of these, 2,307, or 69 percent, were located along the network. 325 of these study period collisions were KSIs, of which 214, or 66 percent, were located along the network.



Source: MCAG, Merced Multijurisdictional Local Roadway Safety Plan, September 12, 2024.

# **Equity Considerations**

Both Merced County and the larger Central Valley region have historically been subject to underinvestment and marginalization. The federal government has introduced a number of tools used to identify disadvantaged communities. In particular, two of these, the Climate and Economic Justice Screening Tool (CEJST) and the Equitable Transportation Communities (ETC) Explorer, are of particular note, as they see extensive use by the United States Department of Transportation (USDOT) in delineating disadvantaged areas, especially as part of grant funding opportunities.

Figure 11-15 shows areas in Merced identified as disadvantaged under these two criterion. As shown, most of the city, along with much of the surrounding unincorporated areas, is identified as

disadvantaged by the CEJST. The exceptions are areas in the city's southeastern and southwestern corners, as well as the quadrant of the city north of Bear Creek and east of G Street. In addition, most of the built-up areas in the city identified as disadvantaged by the CEJST are also identified similarly by the ETC Explorer.

The vast majority of collisions in Merced occur within these disadvantaged areas, including 93 percent of all injury collisions and 90 percent of all KSI collisions.

Bellevue Rd MSt 69 Yosemite Ave Yosemite Ave Olive Ave Olive Ave (140) Childs Ave Childs Ave **Gerard Ave** identified as disadvantaged by CEJST identified as disadvantaged by ETC Explorer //// identified as disadvantaged by both

Figure 11-15 CEJST and ETC Explorer Results

Source: MCAG, Merced Multijurisdictional Local Roadway Safety Plan, September 12, 2024.

# **Priority Locations and Project Concepts**



In response to the identified safety risk factors and equity considerations, the LRSP identifies four conceptual projects in Merced. These concept projects, presented in the following pages, demonstrate how the principles outlined in this LRSP can be implemented to address identified safety risk factors.

**G Street.** This conceptual project covers the stretch of G Street between 16th Street and Bear Creek. The stretch contains several of Merced's top collision hotspots, including the intersections at 16th Street, Main Street, 18th Street, 21st Street, 23rd Street, and South Bear Creek Drive. The primary component of this conceptual project is the conversion of the existing unbuffered bike lane into Class I shared-use paths on either side of the roadway.



M Street. This conceptual project covers the stretch of M Street between Olive Avenue in the south and Yosemite Avenue in the north. The stretch contains several of Merced's top collision hotspots, including the intersections at Olive Avenue and Buena Vista Avenue. The largest component of this conceptual project is to narrow the vehicular lanes along this stretch of M Street to 11ft, and using the excess width to create a buffer that allows for upgrading the existing Class II bike lanes to Class IV separated bike lanes.



Olive Avenue. This conceptual project covers the stretch of Olive Avenue between SR 59 in the west and G Street in the east. The stretch contains several of Merced's top collision hotspots, including the intersections at SR 59, R Street, M Street, and G Street. This conceptual project seeks to convert the sidewalks on either side of Olive Avenue to Class I shared-use paths to better serve pedestrian and bicyclist traffic.



R Street. This conceptual project covers the stretch of R Street between 14th Street and the interchange with SR 99 in the south, and 19th Street in the north. The stretch contains several of Merced's top collision hotspots, including the intersections at 14th Street, 16th Street, and 18th Street. The primary component of this conceptual project is the conversion of the existing unbuffered bike lane into Class I shared-use paths on either side of the roadway.

# **Public Facilities**

Access to high-quality public facilities and services are important for the health, safety, and overall quality of life of residents. Public facilities include a wide range of categories, such as emergency services, healthcare facilities, parks, schools, transportation, childcare services, and community centers. Oftentimes, environmental justice communities do not have adequate access to public facilities in their neighborhoods or existing public facilities are not well-maintained or do not meet the needs of the community.

#### **Schools**

Higher educational attainment tends to correlate with higher income and opportunity; therefore, access to a variety of local, public educational facilities is important to improve the quality of life for local residents. Merced is served by two elementary school districts and one high school district. There are 27 public schools, including 14 elementary schools, four middle schools, and four high schools within Merced. The Merced Union High School District also operates the Merced Adult School, which offers a path for adult students to complete a high school diploma or equivalent, gain workforce related skills, and learn English.

Merced has two higher education facilities: Merced Community College and University of California (UC) Merced. Both campuses are located in northern Merced. The community college is located approximately four miles north of downtown, while UC Merced is approximately seven miles northeast of the downtown. Overall, there is adequate access to schools in Merced for primary, secondary, and tertiary education.

For additional information on schools and education in Merced, please see the Public Facilities, Services, and Infrastructure Chapter of this Workbook.

#### Libraries

Merced has one public library. It is located at 2100 O Street and is open Monday through Saturday. The library provides free public access to books, other media (including online media), computers, internet access, and children's and teen services. In addition to its regular library, the County Law Library provides free access to legal information for all members of the public. For additional information on the Merced Library, please see the Public Facilities, Services, and Infrastructure Chapter of this Workbook.

## Childcare

Childcare facilities and after school programs are an important community resource, especially for single-parent households, as they allow parents more freedom to participate in the workforce. According to the California Department of Social Services, there are 21 licensed childcare facilities in Merced, seven of which are infant care centers, ten of which are preschools, and four of which are school age childcare centers, Merced families also have access to more than ten licensed family child care homes.

## **Community Centers and Recreational Facilities**

Community centers and recreational facilities are important resources for any community for improved quality of life. Merced has four community centers, including:

• Merced Civic Center: 678 W 18th Street

Merced Senior Community Center: 755 W 15<sup>th</sup> Street

McCombs Youth Center: 615 W 15th Street

Salvation Army Community Center: 1440 W 12<sup>th</sup> Street

In addition, residents and visitors have access to the Youth Sports Complex that offers over 12 acres of baseball fields, as well as the numerous recreational facilities offered through the City's public parks system, including baseball and soccer fields, basketball courts, swimming pools, a bocce ball court, a disc golf course, and a skate park.

The Boys & Girls Club of Merced County serves youth and families in the cities of Merced, Planada, Gustine, and Los Banos. The Club provides a positive, healthy learning environment for children with a goal of strengthening the academic aptitude, physical fitness, health awareness, and career ambitions of their members. Within Merced, the Boys & Girls Club operates out of the *McCombs Youth Center.* Programs include workforce readiness, digital citizenship, kids in the kitchen, the arts, and athletics.

## **Community Gardens**

Community gardens are shared spaces where members of the public can grow produce for themselves and the greater community. These gardens can enhance communities' access to fresh, local food and can provide additional benefits such as improved mental and physical health. There are three community gardens within the city:

- Healthy House Food to FoRx Community Garden, located at the Shepherd of the Valley Lutheran Church in north Merced
- 18<sup>th</sup> Street People's Garden, located at 936 West 18<sup>th</sup> Street in central Merced
- Campus Community Garden, located on the UC Merced campus

All of these gardens are available for use by the community; however, the UC Merced Campus Community Garden prioritizes students to help fight food insecurity for low-income students.

# **Community Empowerment**

Promoting meaningful community engagement leads to more effective planning processes that cater to the needs of all residents, both present and future. Historically, disadvantaged communities have been marginalized and excluded from these dialogues, resulting in inequitable planning practices. Factors such as language barriers, time and location of public meetings, and prior knowledge of certain topics influence how residents are able to participate in the public decision-making process.

# Language Isolation

Language isolation occurs when households have individuals over the age of 14 who have limited English proficiency. These households are at a disadvantage when seeking information about meetings, engagement opportunities, and other community decisions that can significantly impact their overall health and well-being. As shown in Figure 11-16, census tracts 15.02, 15.03, 16.01, 16.02, and 19.01 have the highest rates of linguistic isolation, with percentile scores for this metric ranging from 88 to 97, meaning that linguistic isolation in these areas is higher than 88 to 97 percent of other census tracts in California. Languages spoken in these census tracts other than English include Spanish and Asian and Pacific Islander languages. It should be noted that only a small portion of census tract 19.01 is located within Merced, including a portion of the UC Merced campus with parking lots and educational buildings; the high score for this metric in this census tract is likely due to households living within this census tract outside of the City Limit. Other census tracts in Merced have relatively low levels of language isolation.

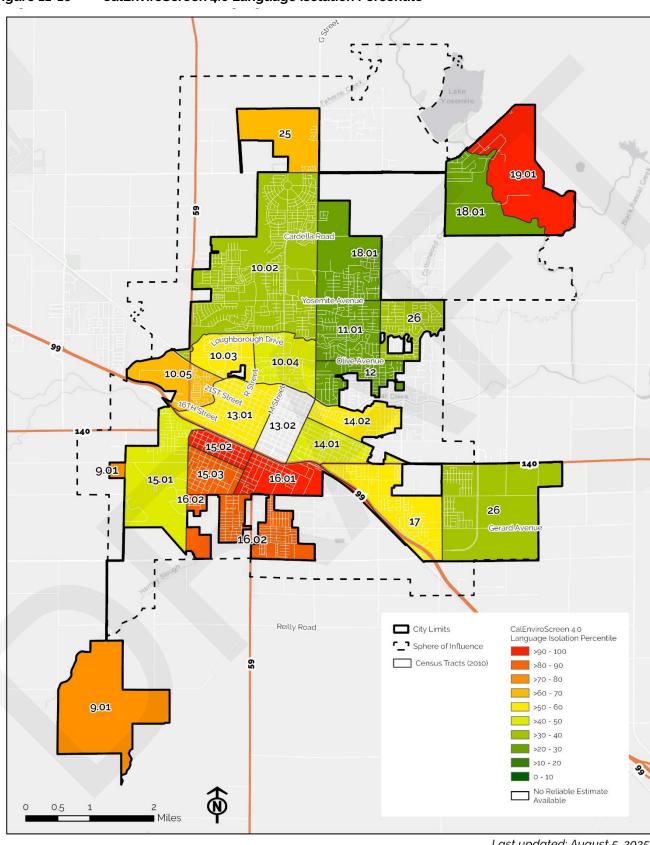


Figure **11-16** CalEnviroScreen 4.0 Language Isolation Percentile

Last updated: August 5, 2025

# **Voter Response Rate**

Another measure used to better understand a community's involvement is their voter response rate. The voter response rate is significant in the context of environmental justice because it directly affects the representation and influence of marginalized communities in decision-making processes. According to the California Healthy Places Index (HPI), between 62 to 87 percent of registered voters in Merced Environmental Justice Communities voted in the 2020 general election, with northern neighborhoods generally having higher voting rates than central and southern Merced. Census tracts with higher levels of language isolation also tended to have lower voter response rates. The citywide voting rate (74 percent) is similar to the countywide voting rate (76 percent).

Table 11-4 Voting Rate in 2020 in Merced Environmental Justice Communities

Census Tract (2010)	Census Tract (2020)	Voting Rate (Percent)
	10.07	
10.02	10.08	77.8
	10.06	
10.03	No change	68.2
10.05	No change	73.0
13.01	No change	73.1
13.02	No change	69.7
14.01	No change	70.8
14.02	No change	78.6
15.01	No change	69.5
15.02	No change	64.7
15.03	No change	62.4
16.01	No change	59.2
16.02	16.04	6.46
	16.03	64.6
17	No change	68.5
25	No change	86.7

Source: California Healthy Places Index 3.0, 2022

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# CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

#### **ADMINISTRATIVE REPORT**

File #: 25-959 Meeting Date: 10/28/2025

Report Prepared by: Jonnie Lan, AICP, Acting Planning Manager, Development Services Department

**SUBJECT:** Requests to Add Items to Future Agenda

#### REPORT IN BRIEF

Provides Commissioners an opportunity to request that an item be placed on a future Bicycle and Pedestrian Advisory Commission agenda for initial consideration.



# CITY OF MERCED

Merced Civic Center 678 W. 18th Street Merced, CA 95340

#### ADMINISTRATIVE REPORT

File #: 25-958 Meeting Date: 10/28/2025

Report Prepared by: Jonnie Lan, AICP, Acting Planning Manager, Development Services Department

**SUBJECT:** Commissioner Comments

#### REPORT IN BRIEF

Provides Commissioners an opportunity to make a brief announcement on any activities they have attended on behalf of the City and/or on future community events/activities that relate to active transportation. The Brown Act does not allow discussion or action by the legislative body under this section.