### **Circulation and Mobility**

**Existing Conditions Report** 





#### Introduction

This report summarizes analysis of Marina's transportation and mobility conditions and issues. This analysis will serve as the baseline for the General Plan Update and environmental review, providing an important snapshot of the community.

#### Topics include:

- Mobility Background (Regulatory Overview and Existing Policies)
- Roadway Hierarchy and Traffic Volumes
- Mode Split
- Bicycles
- Pedestrians
- Transit
- Crashes, Safety Plans and Programs
- Key Findings



## Mobility Background



#### Planning and Regulatory Framework

The Circulation Element (Government Code Section 65302 (b)) identifies the extent of the existing and future multimodal transportation network in the City for all users (cars, trucks, transit, pedestrians, and bicycles). The circulation element has a direct relationship with the land use element.

- 1. SB 1000: requires the City to address environmental justice for circulation
- **2. AB 1358:** requires Complete Streets to provide a well-balanced, connected, safe, and convenient multimodal transportation network
- **3. SB 743:** shifts transportation metric from LOS to VMT for CEQA purposes
- **4. AB 32:** Noise, Safety, Evacuation and Environmental Justice Circulation is affected by land use and is related to Greenhouse Gas Emissions
- **5. SB 375**: reflects the Regional Context of transportation (AMBAG SCS/RTP process)

## Current General Plan Transportation Policies and Regulations - Vehicular

Reduce the length and travel time of work trips generated by residents by maximizing opportunities for residents to work within the community

Where necessary and feasible, <u>accept some traffic congestion</u> to achieve other community goals, such as <u>encouraging</u> the integrity of neighborhoods and the use <u>of alternative means of travel</u>

Reduce the number and length of vehicular trips and limit overall traffic congestion by promoting land use patters which allow for multipurpose trips and trip deferral during peak travel times

The Marina Heights Specific Plan may be considered consistent with Policy 3.3.2 based upon contribution of appropriate impact fees, implementation of adequate mitigation and provision of design features and amenities necessary to reduce travel times to areas designated as employment centers

<u>Protect</u> existing and future <u>residential areas from through-traffic</u> that creates safety, noise, pollution problems

Make all <u>transportation decisions</u> within a broad policy <u>context</u> that considers visual, environmental, economic and social objectives rather than being solely responsive to existing or projected traffic problems

## Current General Plan Transportation Policies and Regulations - Multimodal

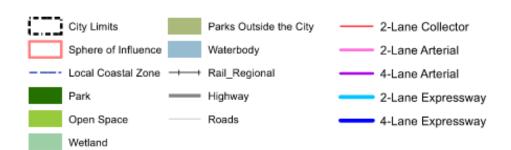
- 1. Develop future areas of the City, and redevelop existing areas, in patterns and to densities that make the provision of frequent regional and local transit economically feasible.
- 2. The City of Marina shall coordinate with surrounding jurisdictions and agencies to pursue projects that <u>develop new pedestrian and bicycle routes</u>. New routes shall be link to existing routes wherever possible.
- 3. <u>Link</u> existing and future <u>areas</u> of the City with an integrated system of roads, transit, footpaths and bikeways that connects neighborhoods, commercial areas, schools, parks, and other major community-serving destinations.
- 4. The City of Marina shall ensure that <u>walking and bicycling</u> routes are <u>integral parts</u> of street design and form a <u>safe</u> and preferred <u>transportation network</u>

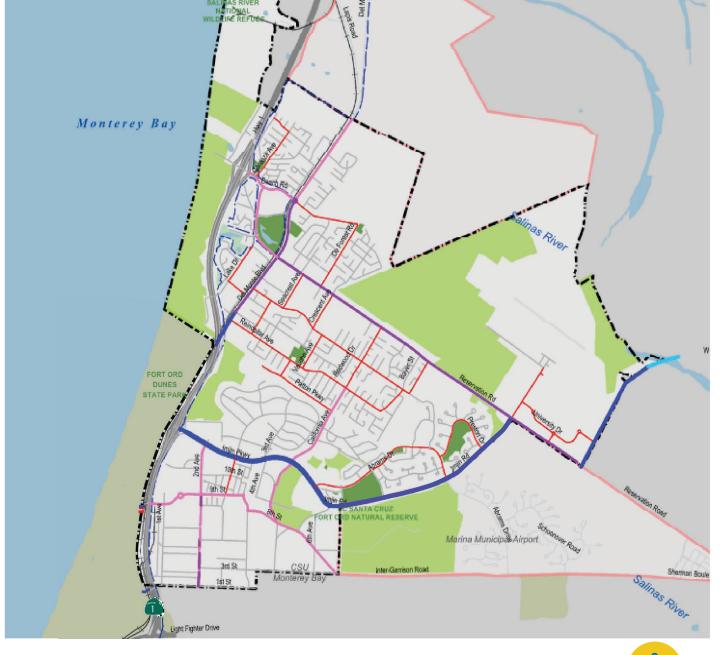
## **Current Transportation Conditions**



# Current Roadway Classification System

The city's roadway network is a mixture of 2- and 4-lane roadways, with collectors providing internal access to residential neighborhoods and a limited number of arterials providing wider connections.



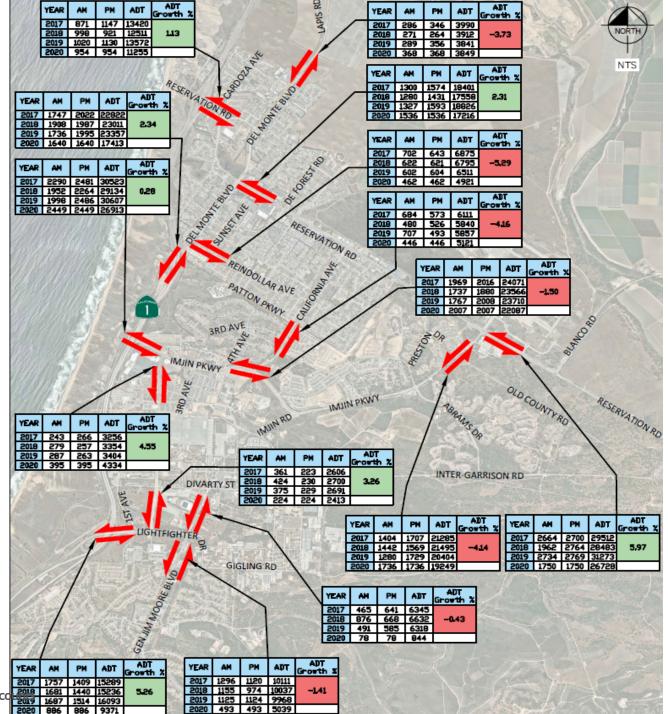


#### TAMC Tube Count Data

Traffic growth has occurred on the major arterials in the area between 2017 and 2019:

- Highway 1
- Reservation Road
- Del Monte Boulevard
- Imjin Parkway
- 2nd Avenue

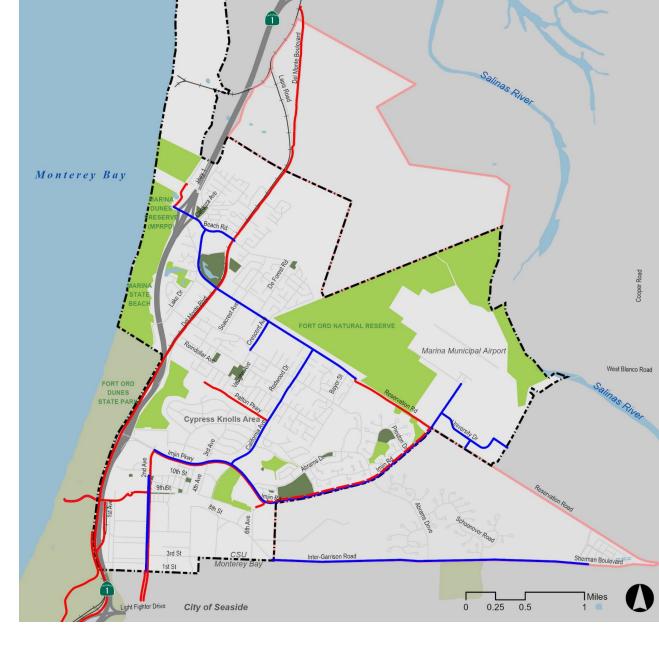
Most congestion occurs at the intersections along Imjin Parkway in the westbound direction in the mornings and in the eastbound direction in the afternoons, caused by regional traffic. 2nd Avenue congests due to diversion from Highway 1 in the mornings.



## Existing Bike Routes (2023)

Existing bicycle facilities are concentrated on Del Monte, Reservation Rd, 2<sup>nd</sup> Ave, and Beach Rd

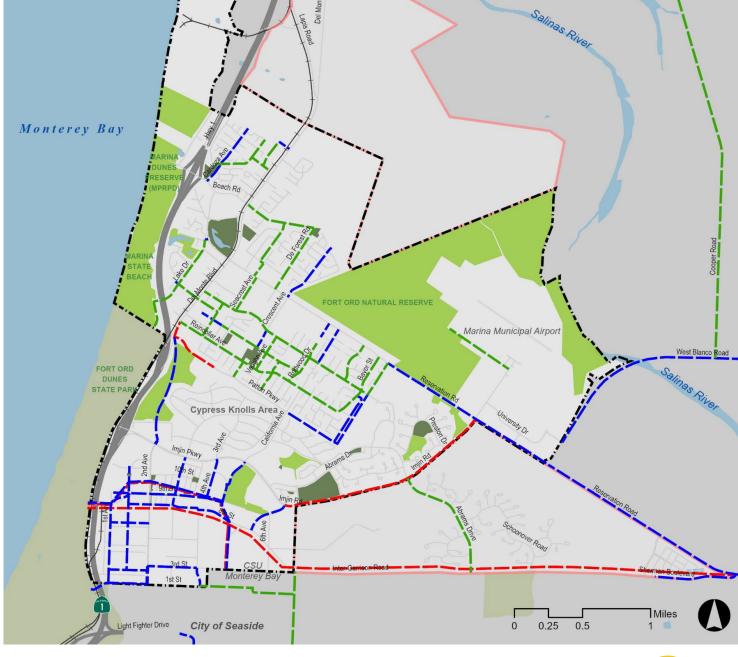




### Proposed Bike Routes (TAMC)

The city has plans which propose Class I off-street paths along Patton Parkway and Inter Garrison Road; and Class II bike lanes along many arterials including Imjin Parkway, Reservation Road, Second Ave, and Ninth Ave.

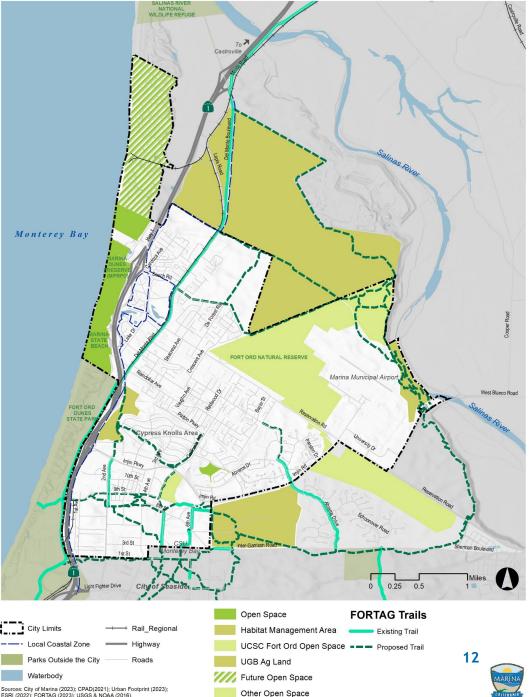




### **FORTAG Regional Trail**

- The Fort Ord Regional Trail and Greenway is proposed as a 30-mile regional network of paved recreational trails and greenways
- FORTAG will connect Marina to the Ford Ord National Monument and promote active transportation options.





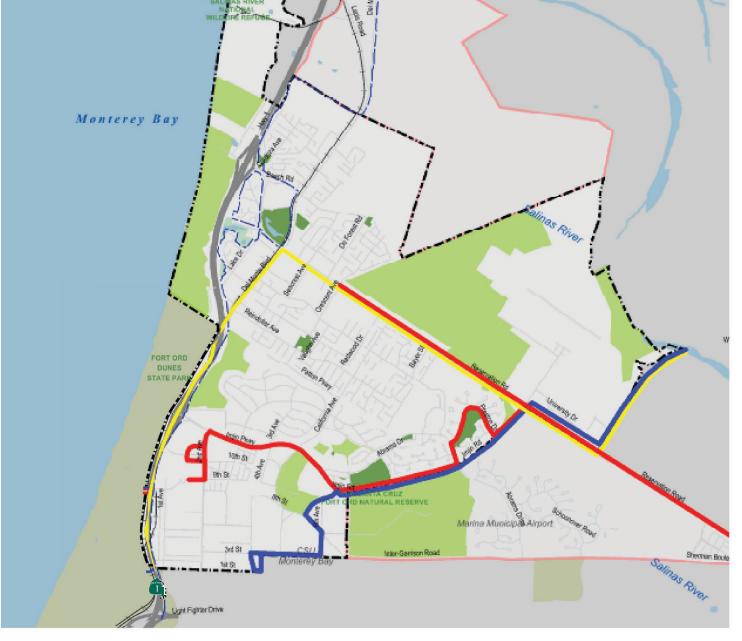
Source: http://www.fortag.org/



## **Existing MST Transit Routes**

The city has three existing MST routes:
Route 61 on Imjin/Reservation
Route 25 from CSUMB to Salinas
Route 20 along Hwy 1 and Reservation Rd







#### Average Daily Trip Mode Split

In 2015, the City had a fairly typical mode split, with over 62% of commutes being drive alone trips. The city has a higher-than-average number of shared ride trips and walk trips.

Drive Alone Trips: 37,600 (62%)

Shared Ride Trips: 16,400 (27%)

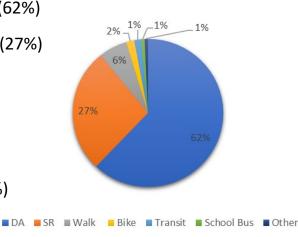
Walk Trips: 3,700 (6%)

Bike Trips: 1,100 (2%)

Transit Trips: 850 (1%)

School Bus trips: 480 (<1%)

Other: 440 (<1%)



Source: 2015 AMBAG Model Data

In 2022, the City had a similar mode split, with over 62% of commutes being drive alone trips. The city has a higher-than-average number of shared ride trips and walk trips.

Drive Alone Trips: 44,300 (62%)

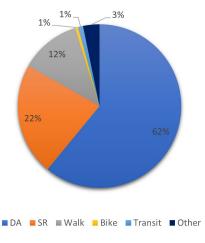
Shared Ride Trips: 16,100 (22%)

Walk Trips: 8,700 (12%)

Bike Trips: 400 (1%)

Transit Trips: 20 (<1%)

Other: 2400 (3%)



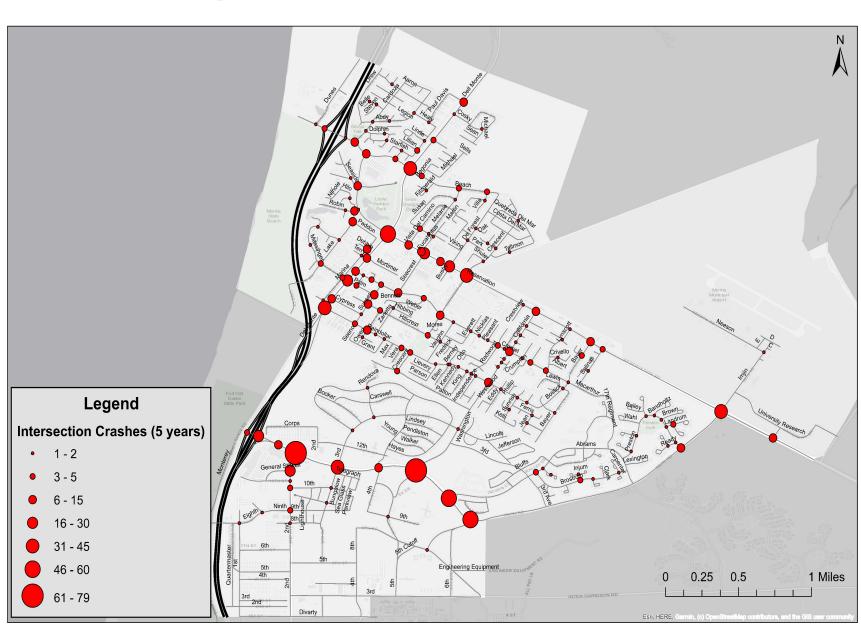
Source: 2022 Replica Big Data

## Crashes

#### **Vehicle Intersection Crashes**

Major intersection crash locations are along Imjin Parkway, Reservation Road and Del Monte Boulevard.

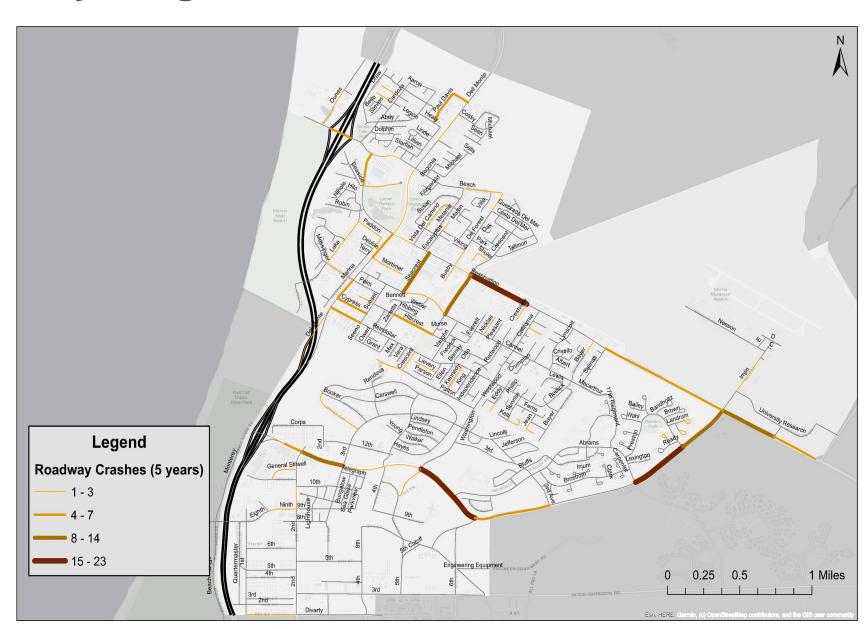
Reindollar and Carmel Avenues are also locations of frequent crashes.



#### Vehicle Roadway Segment Crashes

Major segment crash locations include:

- Imjin Parkway between Reservation Road and Abrams Road
- Imjin Parkway between Imjin Road and California Street
- Imjin Parkway between 3<sup>rd</sup> and 2<sup>nd</sup> Avenue
- Reservation Road between California and Crescent Avenues

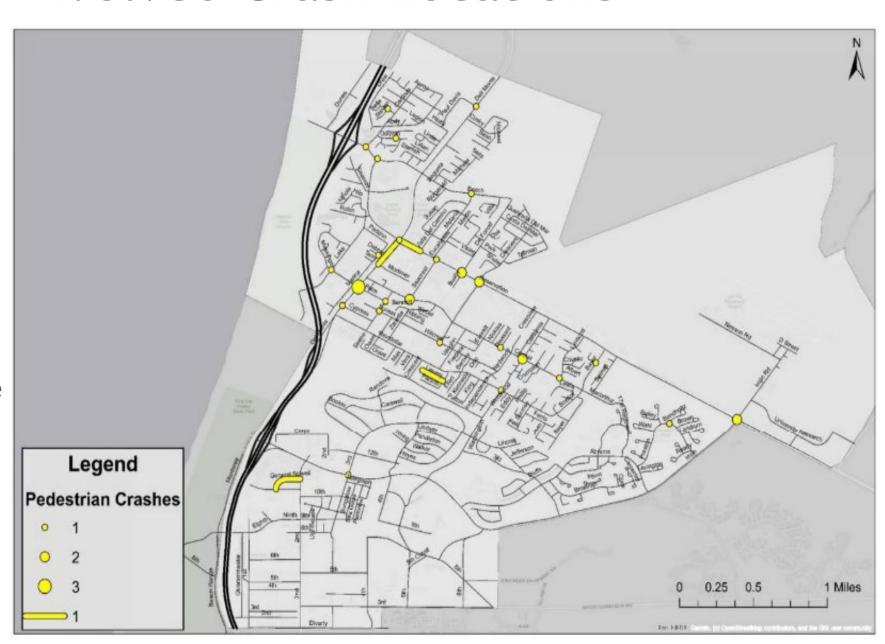


#### Pedestrian-Involved Crash Locations

The highest concentration of pedestrian crashes occur in Downtown Marina along Reservation Road and Del Monte Boulevard.

Carmel Avenue is also a source of many crashes

Beach Drive has a few crashes.



#### Bicycle-Involved Crash Locations

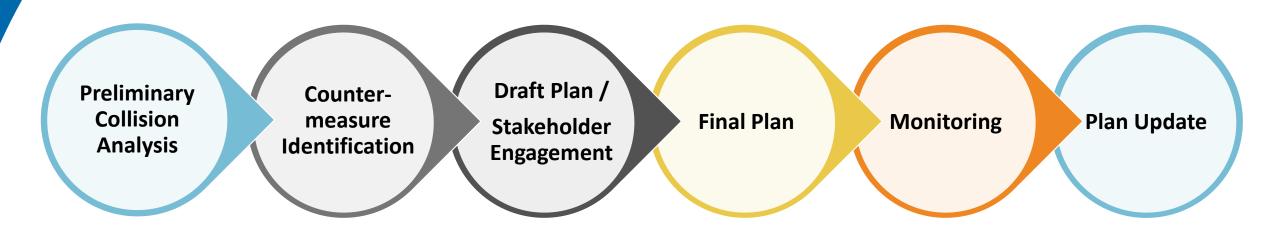
The highest concentration of bicycle crashes occur along Reservation Road and Del Monte Boulevard.

Legend **Bicycle Crashes** 

## Safety Plans and Programs

#### City of Marina Local Roadway Safety Plan

The LRSP is a comprehensive plan which was completed in 2022. The Plan identifies, analyzes, and prioritizes roadway safety improvements on local roads. This framework for addressing unsafe roadway locations in the City helps with finding grants to implement necessary roadway improvements.



## LRSP Safety Toolbox: Emphasis Areas and Potential Countermeasures



#### Speed Management

- Edge line striping
- Speed limit signs and pavement legends
- Signal retiming
- Speed feedback signs





#### **Speed Management**

- Curb bulb-outs
- Leading Pedestrian Interval timing
- Midblock crosswalks
- Buffered bike lanes
- High visibility crosswalks



#### **Speed Management**

- Retroreflective Backplates
- Improved roadway and intersection lighting
- Emergency Vehicle Preemption



### Safe Routes to School (SRTS) Program

TAMC developed a Safe Routes to School Program for Marina through Measure X to improve safety for school children and to promote alternative modes of travel. School traffic is a major source of congestion and results in unsafe drive behavior. The City's Safe Routes to School program is aimed at developing better and safer options than driving the majority of children to school, educating children and the surrounding community how to safely walk and bicycle, and encouraging children to use active transportation that will lead to a healthier lifestyle.



#### **Evaluation**

Assessing which approaches to Safe Routes to Schools are more or less successful



#### Engineering

improvements to improve traffic flow near schools and make walking and biking safer



#### **Education**

Providing students and families with the skills to get to school safely and informing them on the wide range of transportation choices



#### **Encouragement**

Using events, activities, and programs to raise awareness and build support for safe and healthy transportation such as walking and biking



#### Enforcement

partnering with local law enforcement to deter unsafe behaviors and encourage safe traffic speeds and behaviors



#### **Equity**

Ensuring SRTS initiatives benefit everyone (low-income, color, students with disabilities, and transportation disadvantaged populations

Source: TAMC https://www.tamcmonterey.org



#### Marina SRTS



- School locations and key destinations like parks, libraries, community centers, high density housing
- Trips between these origins and destinations can be made by walking and biking















#### **SRTS Goals**

- Zero collisions involving bike or pedestrians that result in injury or death
- Planned **network** of safe and comfortable bicycle and pedestrian infrastructure connecting schools to parks, community centers and sports fields
- Streets designed for all modes, ages and abilities
- Permanent infrastructure for kids to learn and practice safe travel behaviors (traffic gardens)
- Innovative features to enhance pedestrian/bicyclist safety and comfort
- High-priority safe routes to school projects designated in the community's short-term and long-term capital improvement programs
- Safe and functional Drop-Off/Pick-up Zones
- Marina-specific programs include:
  - Safe Walking and Biking to School Plan to direct key future safety improvements
  - Active Transportation Plan (ATP) overlays
  - Marina/Seaside SR25 Plan

#### **Initial Transportation Policy Gaps**

- Complete Streets: The City does not have a Complete Street Policy in the current General Plan. Complete Streets is part of every roadway design and can be implemented through pavement projects or redevelopment projects:
  - A comprehensive Complete Street Policy will assist in grant funding opportunities.
- Vision Zero: This document will be required for future safety plans and obtaining safety grant funding.
  - TAMC taking the lead on finding grant funding to implement
- VMT Mitigation Measures: The City has a TDM measure plan as part of the VMT tool. A VMT Banking Fee Program will better assist the City in mitigating transportation impacts and collecting fees to build non-automobile infrastructure.
- **Level of Service**: The City continues to use LOS as a metric for future development roadway infrastructure needs and to determine the City Traffic Impact Fees per AB1600.

### VMT (Vehicle Miles Traveled)

#### VMT Thresholds per SB 743

• SB 743 requires the City to use Vehicle Miles Traveled as the CEQA measure to determine transportation impacts for development. The City has adopted the following VMT thresholds, as prescribed by OPR, using AMBAG model data:

Land Use	VMT Threshold	Basis
Residential	10.9 VMT/capita9	15% below existing city-wide average VMT per capita.
Office	6.6 Work VMT/Employee <sup>10</sup>	15% below existing county-wide average Work VMT per employee
Retail	Net regional change	Using the county as the basis
Other Employment	Work VMT/Employee <sup>11</sup>	15% below existing county-wide average Work VMT per employee for similar land uses
Other Customer	Net regional change	Using the county as the basis

TDM measures have been identified to mitigate VMT Impacts.



## **Key Findings**

#### **Existing Conditions - Key Findings**

- The existing Circulation Element is old and does not adhere to the latest Complete Streets and Vision Zero policies & goals
- Transportation policy is reactionary seek to incorporate recent Council guidance into the updated General Plan
- Imjin Parkway is a key commute route between Salinas and the other coastal cities
- The city is not built out based on General Plan projections and traffic congestion is therefore anticipated to increase; need to protect the roadway system capacity
- Opportunities exist for implementing Complete Streets
- More education may be necessary to facilitate implementation of new roundabouts
- Traffic speeds are a concern; need to improve safety for all users
- Sidewalk gaps need to be addressed, especially in older areas
- More work is needed to implement the Bike Plan network
- Desire to promote increased transit use over driving alone