

BICYCLE, PEDESTRIAN & TRAILS COMMITTEE MEETING AGENDA

Monday, August 26, 2024

6:30 p.m.

**Pleasanton Senior Center
5353 Sunol Blvd**

The meeting will be held at the Pleasanton Senior Center– 5353 Sunol Blvd. You can listen-in on the meeting the below ways:

- Zoom Webinar at <https://cityofpleasanton.zoom.us/j/95673459225> (*listen only*)
- Listen in by phone: 1-669-900-6833 or 1-669-444-9171 with Webinar ID: 956 7345 9225

CALL TO ORDER

- Pledge of Allegiance
- Roll Call

AGENDA AMENDMENTS

MINUTES

1. Approval of the June 3, 2024, meeting minutes.

MEETING OPEN TO THE PUBLIC

2. Introductions/Awards/Recognitions
3. Public Comment from the audience regarding items not listed on the agenda.
Speakers are encouraged to limit comments to 3 minutes.

MATTERS BEFORE THE COMMITTEE

If necessary to assure completion of the following items, the Chairperson may establish time limits for the presentations by individual speakers.

4. Annual Collision Review
5. Mini Street Sweeper Purchase using TDA-Article 3 Funds

COMMITTEE REPORTS

6. Updates from the Planning and Parks and Recreation Commissions
7. Updates from Project/Program/Agency Representatives

8. Other brief reports on any meetings, conferences, and/or seminars attended by the Committee members.

COMMITTEE COMMENTS

STAFF COMMENTS

ADJOURNMENT

Notice

Under Government Code §54957.5, any writings/documents regarding an open session item on this agenda provided to a majority of the Commission after distribution of the agenda packet are available for public inspection at the Community Development Department, 200 Old Bernal Avenue, Pleasanton.

Accessible Public Meetings

The City of Pleasanton can provide special assistance for persons with disabilities to participate in public meetings. To make a request for a disability-related modification or accommodation (e.g., an assistive listening device), please contact Traffic Engineering at (925) 931-5677, PO Box 520, Pleasanton, CA 94566, or Lisa Hatton at lhatton@cityofpleasantonca.gov at the earliest possible time. If you need sign language assistance, please provide at least two working days' notice prior to the meeting date.

**CITY OF PLEASANTON
BICYCLE, PEDESTRIAN & TRAILS COMMITTEE MEETING MINUTES
June 3, 2024**

Chair Deckert called the regular meeting of the Bicycle, Pedestrian & Trails Committee to order at the hour of 6:30 p.m. from the Pleasanton Senior Center located at 5353 Sunol Blvd.

ROLL CALL

Present: Committee members, Chuck Deckert, Anurag Jain, Donna Dubose, Sharon Piekarski, Matt Maciel, Sierra Stewart, Ernie Rodgers

Absent:

Present Staff members, Traffic Engineer Mike Tassano, Associate Traffic Engineer Matt Nelson, Landscape Architect Matt Gruber, Assistant City Manager Pamela Ott, Directory of Community Development Ellen Clark

AGENDA AMENDMENTS

None

CONSENT CALENDAR

1. Approve regular meeting minutes of January 22, 2024

Recommendation: Approve

MEETING OPEN TO THE PUBLIC

2. Introductions/Awards/Recognitions: None
3. Public Comment

Chair Deckert opened public comment.

The following individuals provided comments: None

Chair Deckert closed public comment.

COMMISSION MATTERS

4. Discussion – Funding Pleasanton’s Future

Recommendation: Informational Only

Community Development Director Ellen Clark and Assistant City Manager Pamela Ott presented the item.

Chair Deckert opened public comment.

The following individuals provided comments: Members of the committee.

Chair Deckert closed public comment.

5. Provide Input regarding North Arroyo Mocho Trail Access

Recommendation: Informational Only

Landscape Architect Matt Gruber presented the item.

Chair Deckert opened public comment.

The following individuals provided comments: Members of the committee

Chair Deckert closed public comment.

COMMISSIONER REPORTS

6. Vice Chair Jain provided an update on the Planning Commission Actions.

7. Chair Deckert provided updates for the Parks and Recreation Actions.

COMMITTEE COMMENTS

8. Committee member Piekarski asked for an update on the West Las Positas Project and the Bicycle Pedestrian Master Plan.

9. Committee member Piekarski inquired if there will be an additional representative from the Energy and Environment Commission joining the BPTC Committee.

10. Committee member Piekarski asked about what the different striping colors in the crosswalks mean.

11. Vice Chair Jain asked for an update about the trails damaged from the rain.

STAFF COMMENTS

12. Staff member Matt Nelson and Mike Tassano provided an update on the West Las Positas Project, the Bicycle Pedestrian Master Plan and addressed committee member Piekarski's questions.

13. Staff member Matt Nelson addressed committee member Pierkarski's inquiry about adding a new member from the Energy and Environment Commission to the BPTC Committee.

14. Staff member Mike Tassano provided an explanation of what the different striping colors in the crosswalk represent.

15. Staff member Matt Gruber provided an update on the trails damaged from the rain.

MATTERS INITIATED

None

ADJOURNMENT

Chair Deckert adjourned the meeting at 8:16 p.m.



Bicycle, Pedestrian & Trails Committee Agenda Report

August 26, 2024

Item 4

SUBJECT: ANNUAL BICYCLE AND PEDESTRIAN COLLISION DATA

SUMMARY

The 2024 annual collision analysis is being provided to the BPTC in the August 26, 2024, agenda packet. The report is reviewed annually by personnel from Traffic and the Police Department in order to determine and correct problem areas within the city.

RECOMMENDATION

It is recommended that the Bicycle, Pedestrian & Trails Committee receive and consider this report, and provide staff with any input deemed suitable.

ACTION

No action required – informational item only.

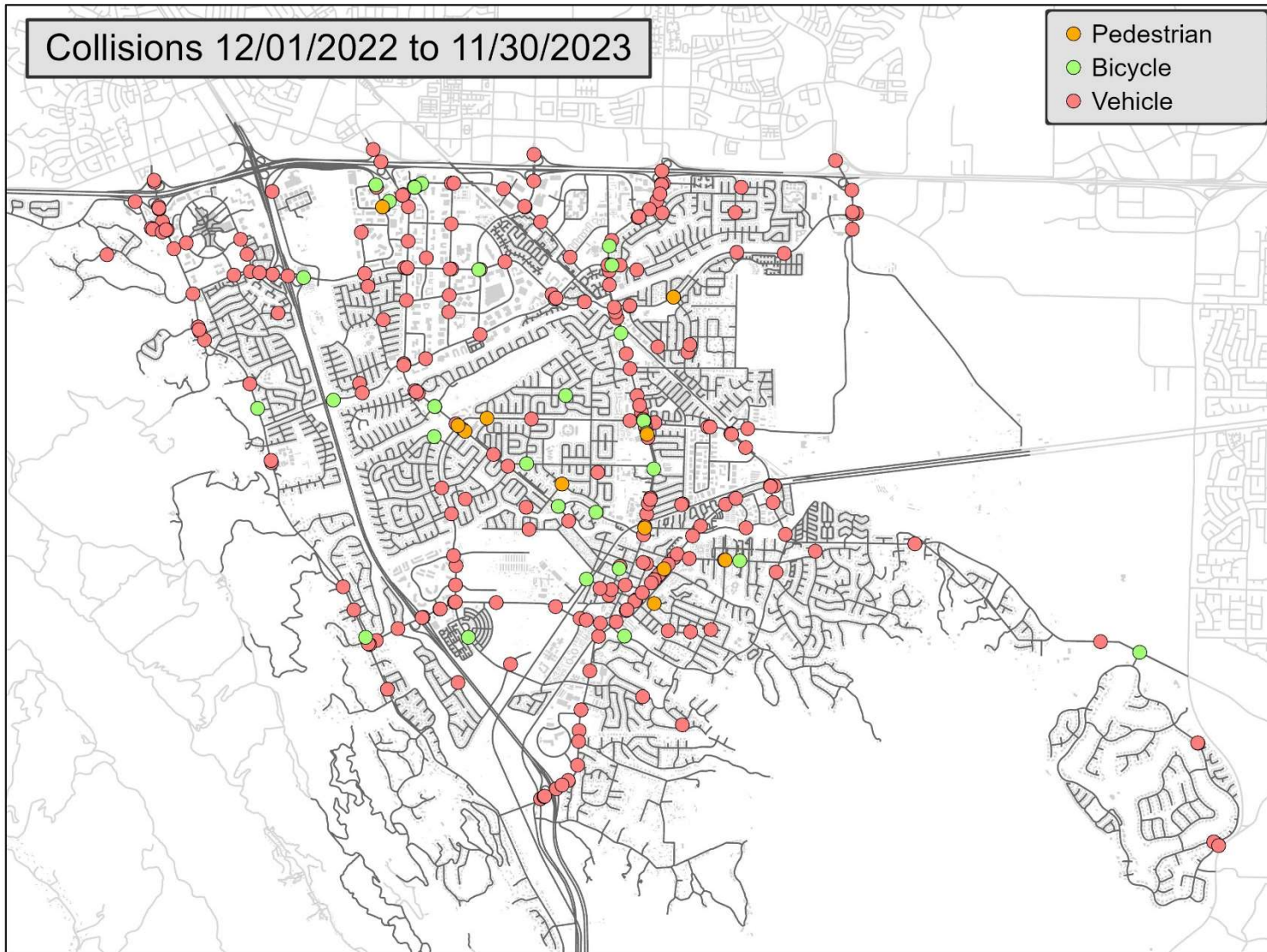
Submitted by:

Matthew Nelson
Associate Traffic Engineer

Attachment:

1. Annual Collision Analysis 2024

Annual Collision Analysis 2024



Annual Collision Analysis 2024



Summary

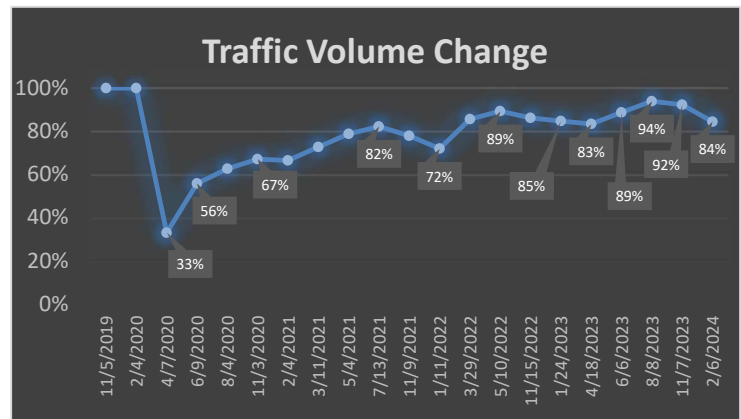
This report summarizes the collisions within the City in 2023 and analyzes trends and patterns to identify changes that can be made to reduce the number of collisions. Reported traffic collisions involving vehicles, bicyclists and pedestrians are reviewed on a weekly basis by Traffic Engineering. The weekly review looks at individual collisions to determine if improvements can be made to improve safety. This annual report takes a comprehensive look at the one-year and three-year trends to identify larger patterns and improvements that can improve safety.

Improvements are countermeasures designed to address a collision pattern. The Federal Highway Administration and CalTrans collaborated to match typical collision patterns with proven countermeasures to improve safety by cataloging them into tables which appear in Section 4.2 of the CalTrans Local Road Safety Manual (LRSM). This report utilizes these tables to identify solutions to the City's collision patterns. The full list of countermeasures is included as an attachment to this report¹.

Unlike other local road safety plans, which may be renewed every few years, staff elected to commission collision analysis and improvements reports yearly to provide the most flexibility identifying collision trends and implementing countermeasures.

Volume Trends

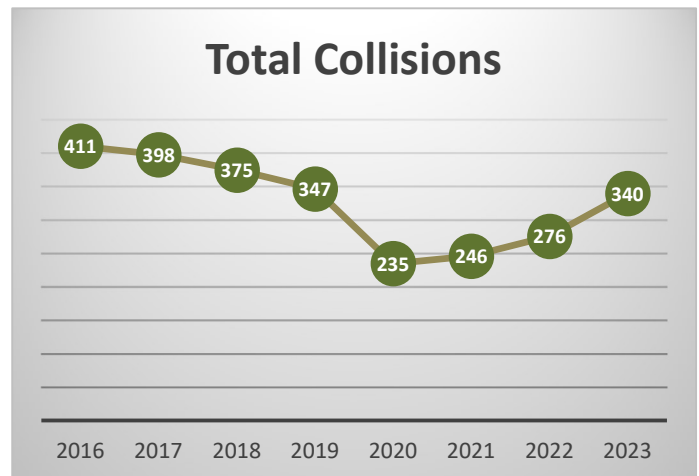
The pandemic caused a significant decrease in vehicle traffic and a corresponding decrease in overall collisions. However, traffic has largely returned to at or near pre-pandemic levels. This trend has been reported by multiple transportation agencies and a sampling of key Pleasanton intersections showed the trend locally.



Collision Trends

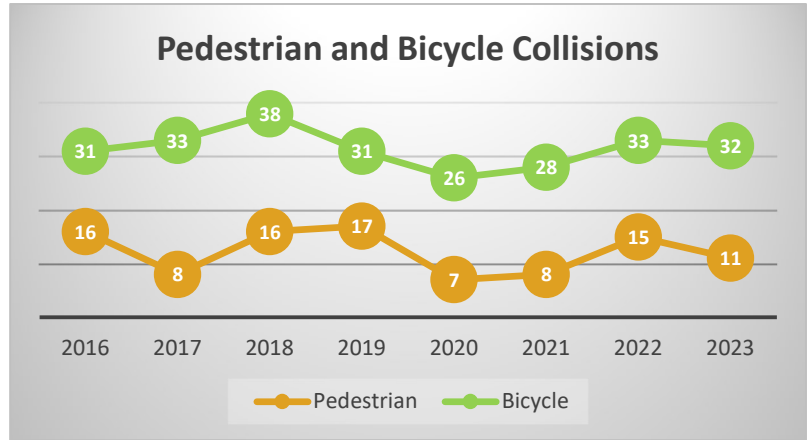
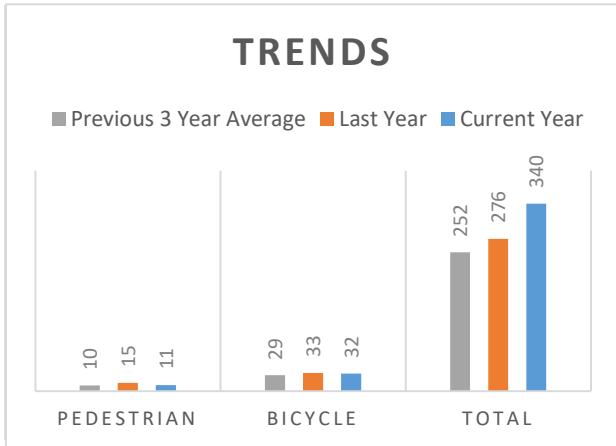
The total number of collisions for the current year was approximately 23% more than the prior year's number of collisions (340 compared to 275) and 35% more than the previous three-year average of 252. The total collisions more closely match 2019, a pre-pandemic year.

There was one less bicyclist collision this year (32 compared to 33 last year and 29 for the three-year average). Pedestrian collisions decreased by four,

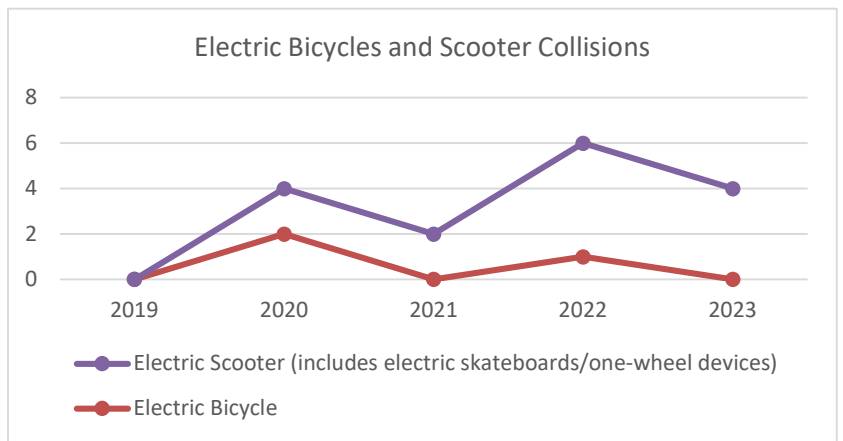


¹ The full countermeasures list is included as Attachment "A" to this report

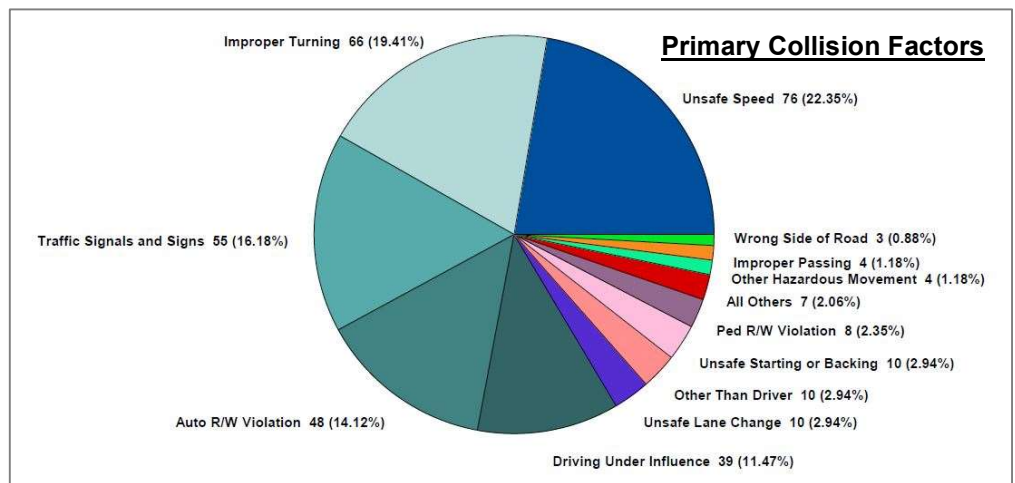
with eleven compared to fifteen last year and ten for the three-year average. Looking back further, the current bicycle numbers are also similar to the pre-pandemic rates.



Electric scooter² and electric bicycle collisions have been tracked since 2019. The collision report that is used for the state does not have a field for electric bike or electric scooter and they are normally shown as “bike”. There were four electric scooter collisions and no electric bicycle collision included in the current 32 bicycle collisions. The overall trend shown in the chart to the right continues to show an increase in electric scooter collisions while electric bicycle collisions seem to be staying below one a year on average.



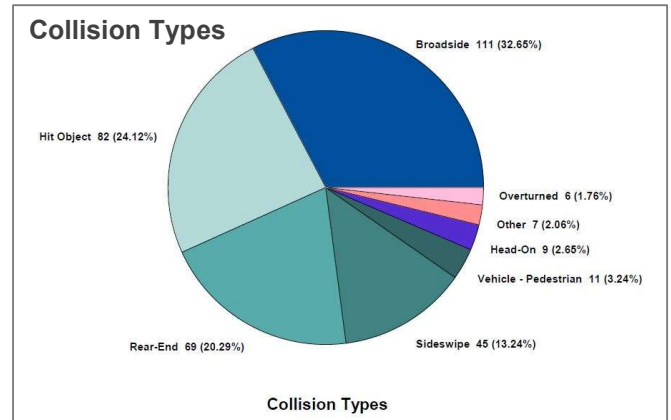
Primary collision factors (by percentage) remained relatively consistent compared to previous years. Unsafe speed and improper turning are the most common reasons for collisions. The two combine to account for 42% of all collisions.



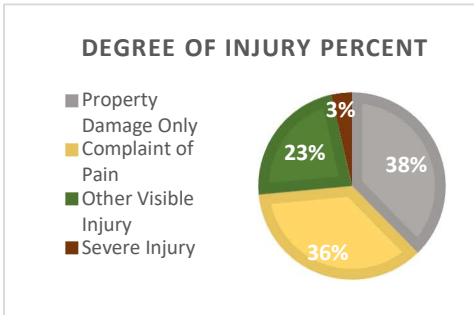
² Electric scooter includes electric skateboards/one-wheel devices

For primary collision type, broadside collisions continue to be the number one collisions type. Run off the road crashes (almost all of the hit object collisions involve a vehicle leaving the roadway) are the second most common. Run off the road collisions (Hit-object) were the number one collision type in both 2020 and 2021. Typically broadside collisions are greater in number.

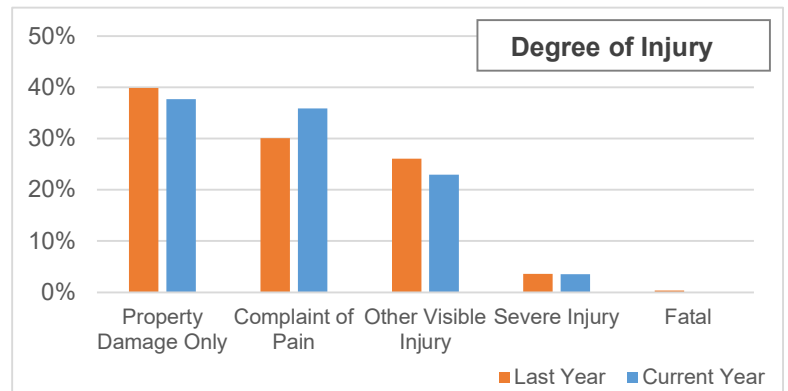
Out of the 340 collisions in the City, approximately 56% involve a second moving vehicle. Vehicles hitting an object or parked car represents 31% of collisions, and about 10% of the collisions have a vehicle involved with a bicycle or pedestrian (down from 14% last year).



The highest degree of injury reported in each collision is categorized by five levels (fatal, severe, other visible injury, complaint of pain and property damage only). The percentage of collisions with property damage and other visible injury decreased while complaint of pain increased when compared to last year.

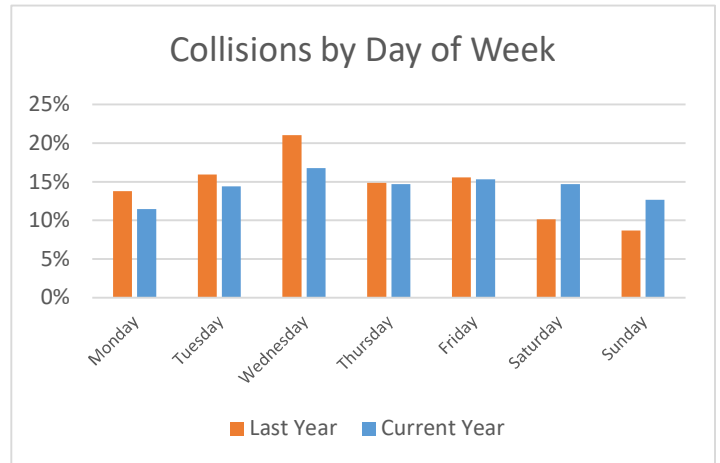
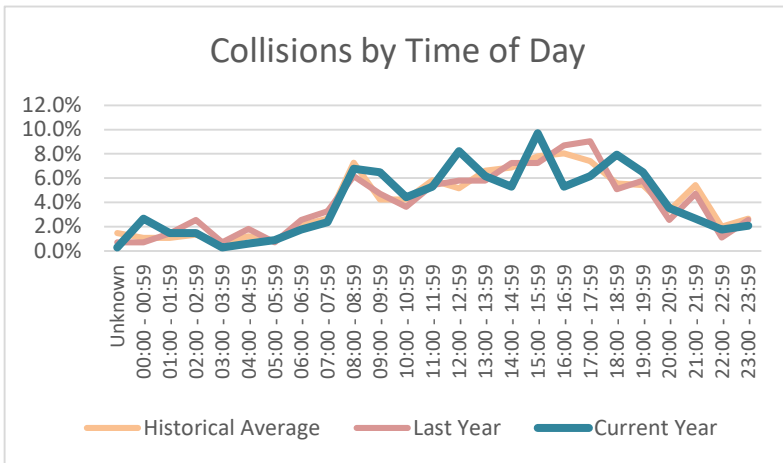


There were no fatal collisions this year and one fatal collision last year (Hopyard Road at Clorox Way – northbound driver fell asleep, hit another northbound vehicle at high speed and that vehicle went into signal pole). Over the past 20 years there have been 22 fatalities which averages approximately one fatality per year.

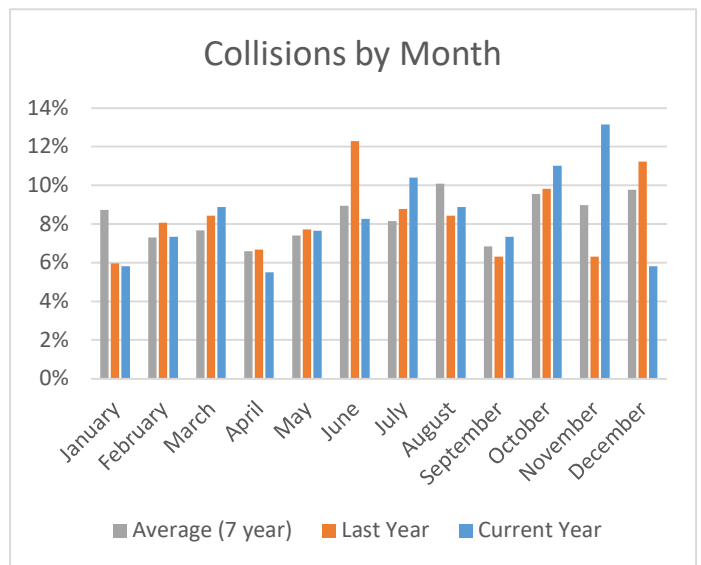
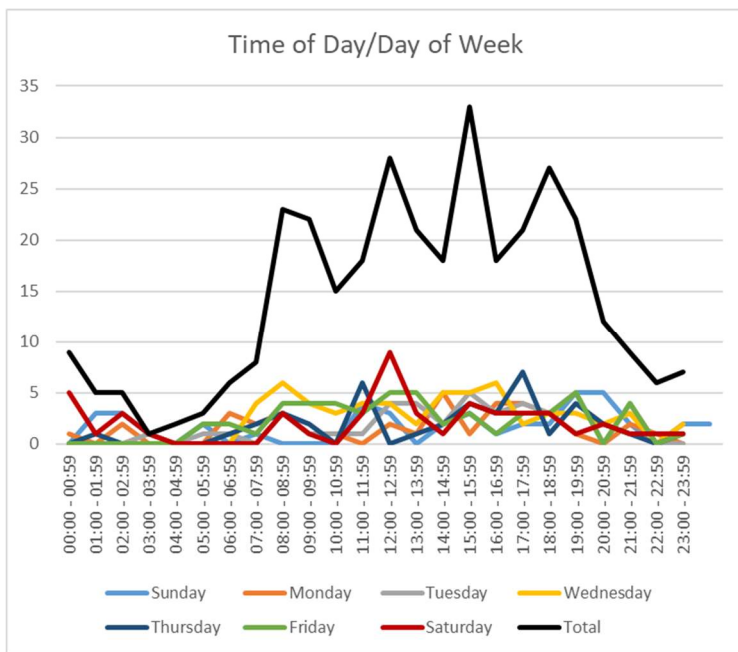


The percentage of vehicle collisions occurring at night versus day trended to more daytime collisions (30 percent of all collisions occurring at night and 70 percent during the day). These figures are very close to the historical average (nighttime collisions at 31 percent and daytime collisions at 68 percent).

Time of day analysis shows the majority of the collisions in the morning, school pick-up, and afternoon commute periods. This is not surprising as there is an increase in vehicle trips during these times. In looking at the different days of week Wednesday continues to have the most collisions and the hour of



the day with the most collisions is 3:00 – 4:00 PM. Collisions by month analysis showed April with the lowest percentage of collisions. November showed the most collisions with 13% of the year’s collisions. Historically August has the most collisions.



California Office of Traffic Safety (OTS) Rankings

The OTS Rankings were developed so that individual cities could compare their city's traffic safety statistics to those of other cities with similar-sized populations in California. Pleasanton is part of the “midsize” city category.

In the most current year’s OTS data (2021) Pleasanton’s composite rank was 91 out of 105 (meaning our overall traffic safety was rated better than 90 other similar sized cities). The composite ranking is meant to be an indication of overall traffic safety.

Current Year Analysis

Intersection

The intersections with the most collisions (vehicle, bicyclist and pedestrian combined) were identified for the current year and compared to both last year and the previous three-year period. There are often year-to-year fluctuations in collision locations, which is why the three-year trend is included in the analysis.

Current Year (12/1/22 - 11/30/23)			Last Year (12/1/21 - 11/30/22)			Previous 3 Years (12/1/19 - 11/30/22)		
Rank	Intersection	Collisions	Rank	Intersection	Collisions	Rank	Intersection	Collisions
1	Stanley Bl at Valley Av/Bernal	8	1	Santa Rita Rd at Valley Av	10	1	Santa Rita Rd at Valley Av	20
2	Hopyard Rd at Parkside Dr	7	2	Foothill Rd at Dublin Canyon Rd	6	2	Foothill Rd at Dublin Canyon Rd	18
3	Foothill Rd at Dublin Canyon Rd	6	3	First St at Angela St	5	3	Hopyard Rd at Owens Dr	13
4	Hopyard Rd at West Las Positas	6	4	Dougherty Rd at WB I580 Off Ramp	5	4	Hopyard Rd at Stoneridge Dr	13
5	Sunol Bl at NB I-680 On Ramp	6	5	Owens Dr at Hacienda Dr	5	5	Sunol Bl at NB I-680 On Ramp	11
6	Santa Rita Rd at Valley Av	6	6	Hopyard Rd at Stoneridge Dr	5	6	Stanley Bl at Valley/Bernal Av	11
7	Hopyard Rd at Owens Dr	5	7	Santa Rita Rd at Rosewood Dr	4	7	Owens Dr at Hacienda Dr	9
8	Owens Dr at Chabot Dr	5	8	Santa Rita Rd at Stoneridge Dr	4	8	Santa Rita Rd at Stoneridge Dr	9
9	Stoneridge Dr at Hacienda Dr	5	9	Owens Dr at Willow Rd/Bart East	4			
10	Hopyard Rd at Stoneridge Dr	5						

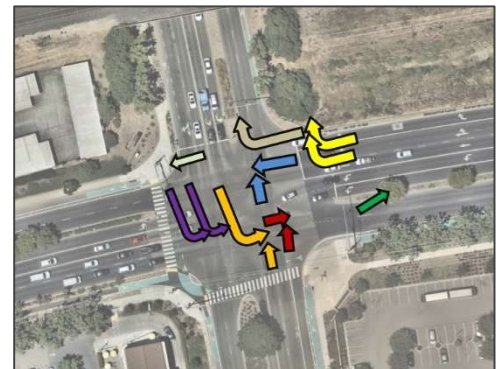
Traffic engineering staff analyzed each intersection in detail to identify correctable patterns using countermeasure mitigations.

The top three intersections are described below as well as any intersections where staff identified patterns/improvements.

Stanley Boulevard at Valley Avenue/Bernal Avenue

Three of the eight collisions were hit object, all different objects, and all for different reasons (speed, weather, DUI). Three collisions involved a party running a red light (one westbound through and two northbound through). Investigation into the collision details determined a correctable pattern did not exist

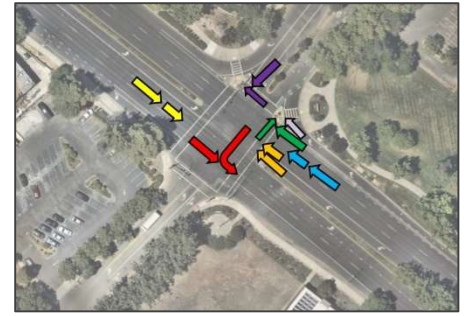
No further patterns were identified and no changes are recommended at this time.



Hopyard Road at Parkside Drive

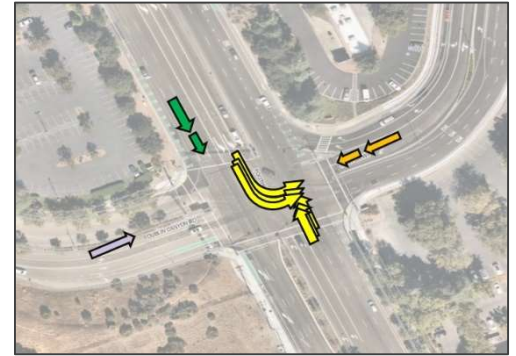
Three of the seven collisions involved a bicyclist (two in crosswalks and one in the roadway). These three collisions are looked at in greater detail in the bicycle section of this report.

No further patterns were identified.



Foothill Road at Dublin Canyon Road / Canyon Way

Last year's analysis showed five of the ten collisions were broadside collisions caused by red-light violations (four northbound red-light violations and one southbound left turn red-light violation). All five of the red-light violation crashes involved the northbound through and the southbound left turn. Staff evaluated the visibility of the northbound traffic signal head and while adequate, an additional signal head was installed (Countermeasure S02). Two broadside collisions have occurred after the signal head installation. However, in both of those collisions the southbound left turning vehicle ran the red light.

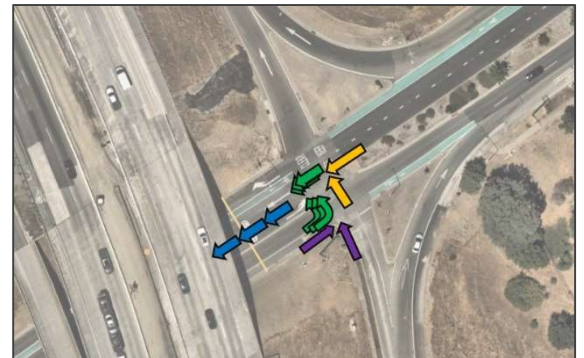


No further patterns were identified, and no changes are recommended to this intersection at this time.

Sunol Boulevard at I-680 northbound ramps

Five of the six collisions involved drivers trying to enter the northbound I-680 on ramp being involved in a collision with either eastbound or westbound Sunol Boulevard vehicles. The majority of collisions at this location occurred outside of the peak travel periods.

This pattern of broadside/head-on collisions has been noted through this corridor in the past and this intersection will be signalized as part of the Sunol Boulevard I-680 Interchange Modernization project (Caltrans countermeasure NS03).



No correctable patterns were identified at the remaining intersections.

Midblock

High Incidence Midblock Collisions were analyzed over a three-year period. A three-year time frame is used as a one-year analysis does not typically have enough collisions to identify patterns. A midblock collision is defined as a collision that occurred greater than 200 feet from an intersection (or 250 feet if it is a rear-end collision). There were six segments that had four or more midblock collisions (the four-collision threshold was chosen to analyze locations that may have more than one collision per year over the three-year period). Each of the segments was reviewed in detail to identify correctable patterns and found the following:

Dublin Canyon Road from Foothill Road to Laurel Creek Drive

We have identified this section of roadway in previous year's reports. In past years there was a pattern of collisions at the westernmost curve. Additional and larger signs were installed on this curve in 2016. Only one collision appears at that location on this report. Driver speed was 65-100 MPH, well above the posted 35 MPH speed limit and the posted 25 MPH curve advisory speed.

This year four of the seven collisions the vehicle left the roadway and struck an object (all different objects). When looking at the cause of those four collisions there were no patterns (DUI, fell asleep, excessive speed, swerving to avoid slowing vehicle).



Action to take:

Pavement striping was evaluated last year and found to be adequate. This roadway is due to be resurfaced later this year. We will look for opportunities to put in new striping to add extra notification of curves in roadway (Caltrans countermeasures R22).

Sunol Boulevard from Sonoma Drive to Applied Biosystems/Sycamore Road

Two of the five collisions involved a southbound left turning vehicle into the cemetery. No other patterns were identified.

Action to take:

Evaluate sight distance of left turn pocket (Caltrans countermeasure NS11)



Santa Rita Road from Sutter Gate Avenue to Stoneridge Drive

Two of the four collisions were northbound rear-end collisions into stopped vehicles at the red light at Stoneridge Drive. Both of these collisions occurred midday on a weekday.

Action to take:

Evaluate midday traffic signal timing to see if more green time can be given to this direction (Caltrans countermeasures S03).



No correctable patterns were identified at the remaining roadway segments.

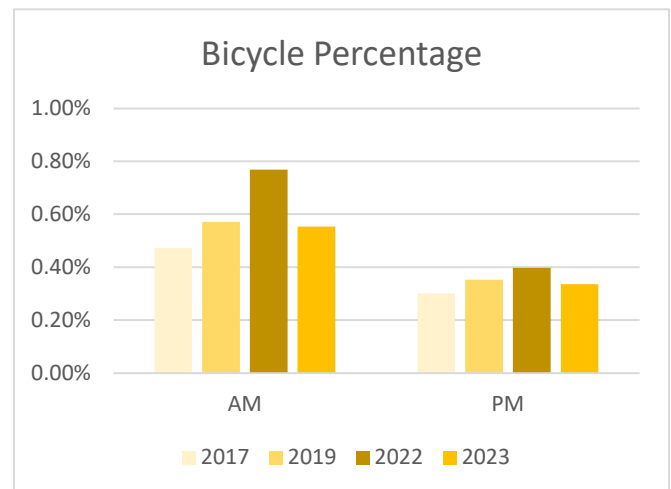
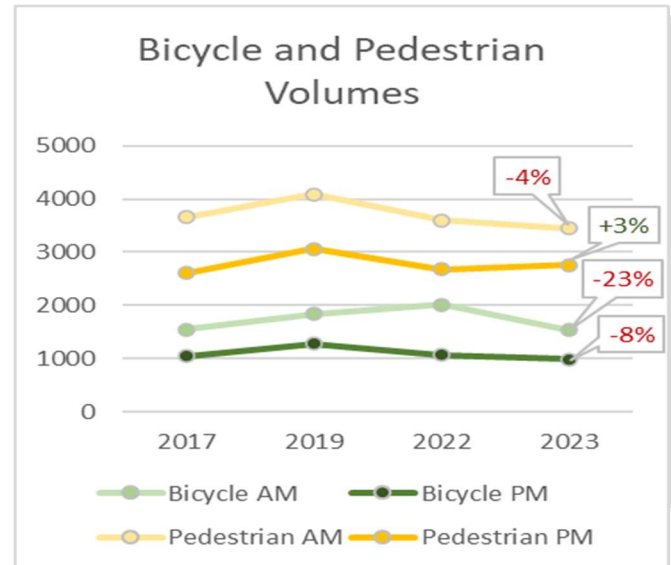
Pedestrian & Bicycle Trends

Collisions involving pedestrians and bicyclists are examined separately from vehicle collisions as these are the most vulnerable users of the transportation network. Due to the low number of pedestrians and bicycle collisions, the collision analysis spans a three-year period³. Pedestrian collisions increased by four and bicycle collisions increased by six this period. There were 34 collisions involving pedestrians and 93 bicycle collisions over the three-year period (there were 30 pedestrian and 87 bicycle collisions in the previous three-year period⁴).

Twenty-eight of the 93 bicycle collisions were “solo” bicycle collisions (a bicyclist crashing without another party involved)⁵. The percentage of “solo” bike collisions continues to be 30% of all bicycle crashes.

Citywide traffic counts were conducted at 153 intersections in both 2022 and 2023. Vehicle, bicycle, and pedestrian volumes were recorded during the morning and evening peak travel times. This data was used to calculate changes in bicycle use (23% decrease in the morning and 8% decrease in the evening) and changes in pedestrian activity (4% decrease in the morning and 3% increase in the evening) and changes in pedestrian activity (4% decrease in the morning and 3% increase in the evening). Pedestrian and bicycle volumes are trending closer to the 2017 counts.

The percentage of bicyclists and pedestrians compared to overall traffic volume was calculated and both the bicycle and pedestrian percentages decreased from 2022 to 2023⁶. This is the first decrease since we started tracking this statistic in 2017. This reduction is a combination of an increase in vehicles on the road and fewer trips taken by bicycle and pedestrian modes.



³ The current three-year period is 12/1/2020 to 11/30/2023

⁴ The previous three-year period is 12/1/2019 to 11/30/2022

⁵ “Solo” bicycles collisions are the result of a bicyclist falling off the bicycle for various reasons (medical, not paying attention, hitting an object, roadway conditions, etc.)

⁶ Total bicyclists and total pedestrians were divided by total of vehicles for 153 intersections to calculate bicycle and pedestrian usage percentages

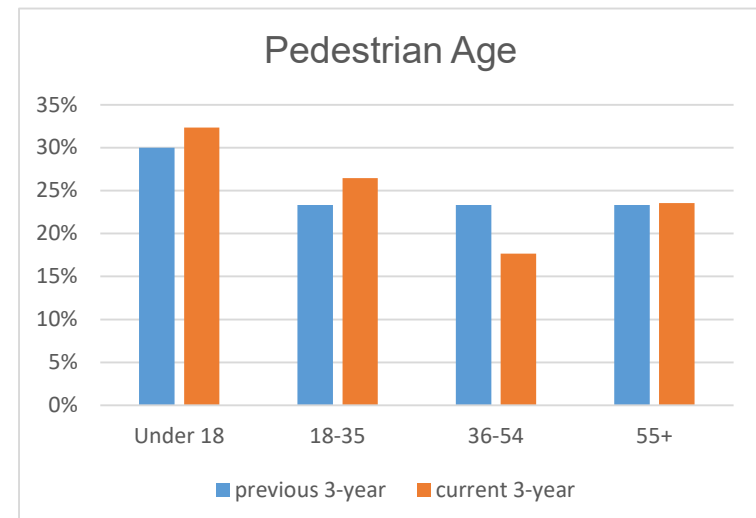
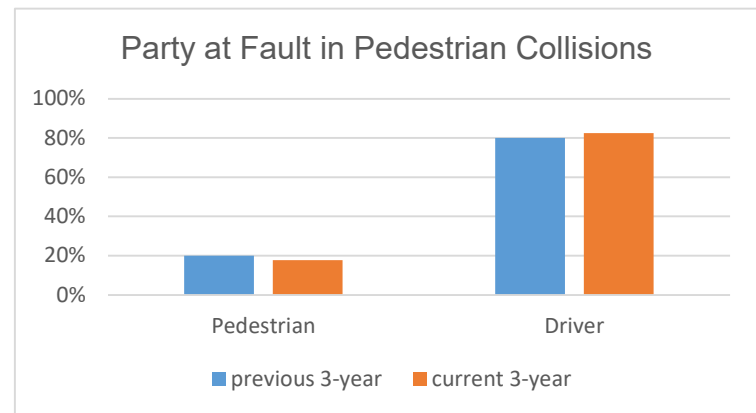
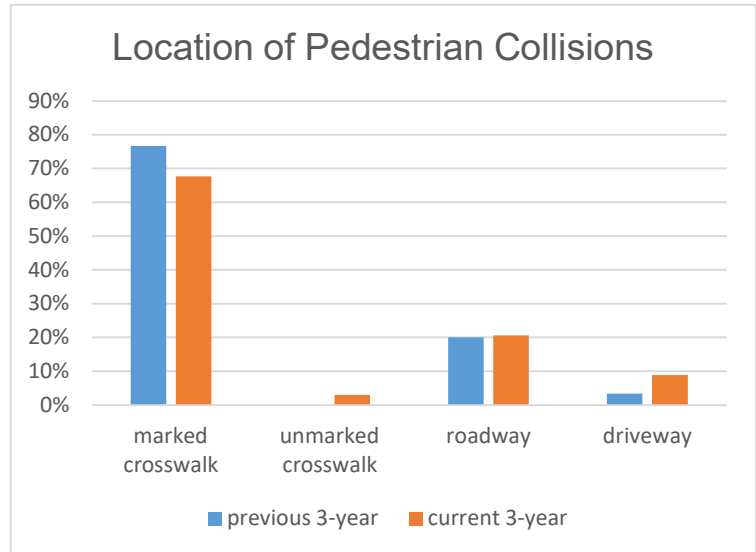
Pedestrian Collision Statistics

Numerous data points are collected regarding collision details for pedestrians. The pedestrian's location, party at fault and age are shown to provide better understanding of where and who are involved in collisions.

The chart to the right illustrates the percentage of collisions that occurred in marked and unmarked crosswalks, in the roadway (outside of a marked or unmarked crosswalk), or at a driveway. While the number of collisions at marked crosswalks is greater than the other location types, this does not necessarily equate to reduced relative safety as there are more pedestrians crossing at marked crosswalks than the other location types. The volume of pedestrians crossing at the different location types is difficult to quantify given the number of locations/intersections within the City.

The Party at Fault chart shows vehicles are found at fault around 80% of the time. This year shows the highest percentage with 82% of the collisions having the driver at fault. This is the highest percentage of drivers found at fault since we started tracking this number in 2014.

The Pedestrian Age chart shows the age distribution. The highest category is the under 18, with 32% of the collisions (11 of the 34 collisions). This data does not necessarily suggest that pedestrians under the age of 18 are more likely to be involved in a collision, as we don't collect the total number of pedestrians walking by age.



Bicycle Collision Statistics

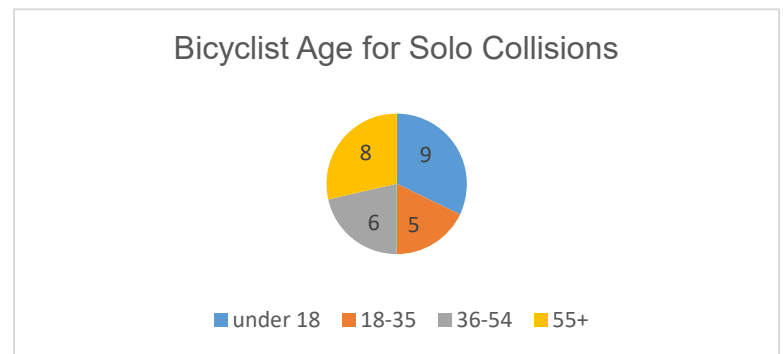
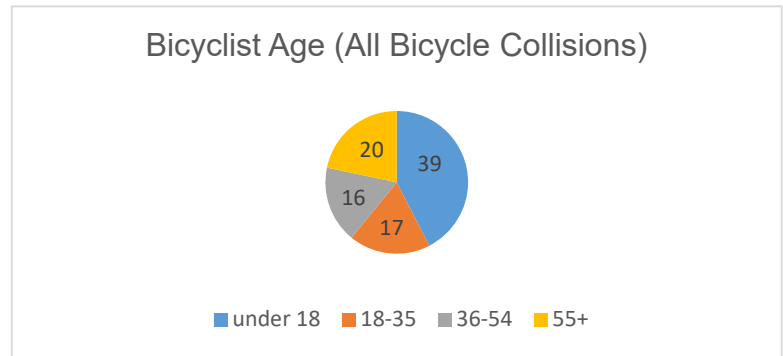
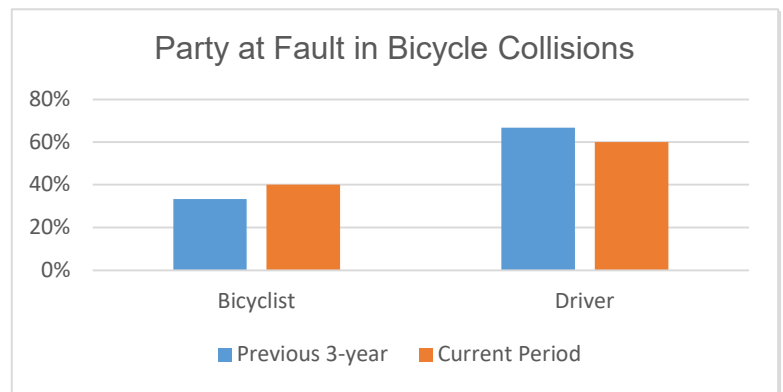
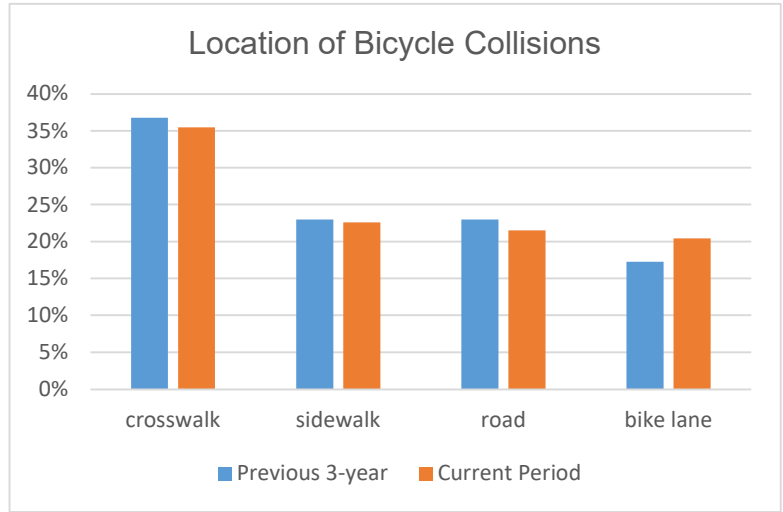
Similar to the pedestrian collision section, the location, fault and age statistics are shown to better understand who, where, and when bicycle collisions occur. The percentages of bike collisions that occurred in a crosswalk, on a sidewalk, in a bike lane, or simply on the “road” (outside of a bike lane or crosswalk) are shown on the bar graph to the right. Similar to pedestrian collisions, the greater number of collisions within a crosswalk does not necessarily indicate reduced safety.

Party at fault (bicyclist, driver or unknown) is shown on the bar graph to the right⁷. Bicyclists were found at fault in 40% of the collisions (excluding the solo bicycle collisions). This is a seven percent increase from the last period.

The Bicyclist Age chart shows the differences between age categories. The under 18 category has the largest share of bicycle collisions, 42% (39 of the 92)⁸. However, this does not mean that bicyclists under 18 are more likely to be involved in a collision as we do not collect the total number of bicyclists by age.

As noted previously in the report 28 of the 93 bicycle crashes were solo crashes (crashes that do not involve another vehicle).

The 55+ age group included 20 crashes with 40% of those solo. This is similar to the 36 – 54 age group where 37% were solo. This data doesn’t necessarily imply that older cyclists fall more often. It could be they fall at the same rate but are hurt more often.



⁷ Collisions where the bicyclist was at fault include collisions where one bicyclist hits another bicyclist.

⁸ There are 92 collisions in the current period where age of the bicyclist was determined (there were 93 total bicyclist collisions)

Pedestrian Analysis

Intersection and Midblock

Intersections and midblock segments with more than one pedestrian collision are analyzed. There was only one intersection location during the current three-year period. There were no midblock locations that had more than one collision. While the lack of locations with more than one collision is great from a traffic safety perspective, it makes it very difficult to identify location specific patterns.

First Street at Spring Street/Kottinger Drive

Both collisions involved a westbound right turning vehicle hitting a pedestrian in a crosswalk (one in the east crosswalk and one in the north crosswalk). One of the collisions was a right turn on red and the other was a right turn on green. Right turning vehicles have good sight distance of this crosswalk, as long as they are looking in that direction.

Both of these collisions were reviewed last year, with no new collisions at this intersection. We will conduct a 10-year collision review to determine if LPI (leading pedestrian interval) or prohibiting the right turn on red are needed. Countermeasures S21-PB and PLS-RTOR.



Bicycle Analysis

Intersection (Bicycle)

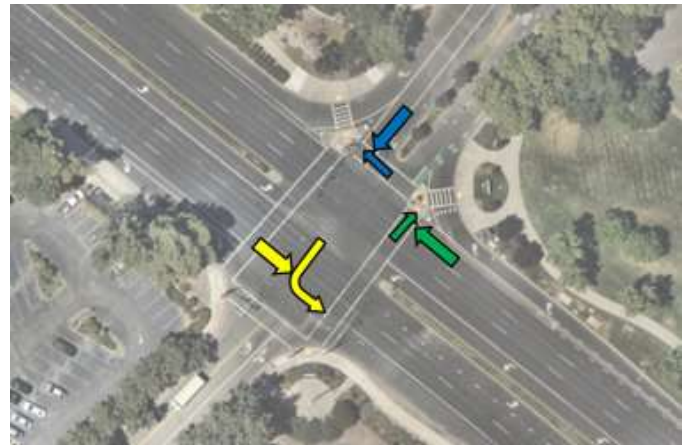
Intersections and midblock segments with more than one bicycle collision are analyzed. Eleven intersections had two or more collisions in the current three-year period. Patterns or actions to take were identified at the following intersections:

Hopyard Road at Parkside Drive/Valley Trails (south)

Two of the bicyclists were hit in a crosswalk. In the first collision the bicyclist was using the south crosswalk but did not use the pedestrian button. The second collision the northbound bicyclist was in the east crosswalk entered against a red pedestrian signal. The third collision was a westbound bicyclist that had not cleared the intersection before the southbound direction was given a green light.

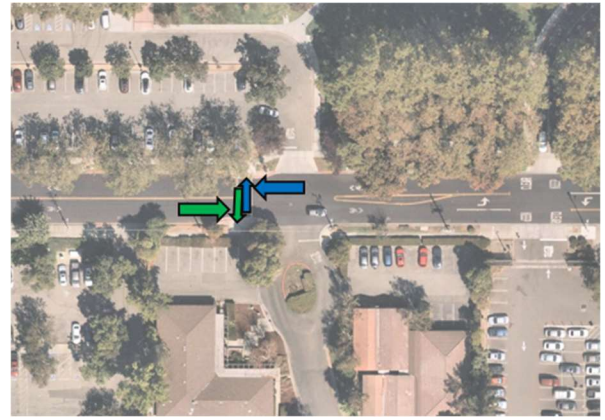
No further patterns were identified. Staff will upgrade detection to extend the all-red period (time the signal shows red to all directions between signal phases)

when a bicycle is detected in the intersection. Countermeasure PLS-BSMOD. Staff will also work with schools to get message to school aged bicyclists on the importance of using pedestrian push buttons at signalized intersections. Countermeasure PLS-EDMSG.



Black Avenue at Cedarwood Lane

Both collisions occurred in the same marked crosswalk, found the bicyclist at fault and involved a juvenile traveling to or from school. In the first collision the bicyclist thought the vehicle was slowing to let him cross. In the second collisions neither the bicyclist nor the driver saw each other prior to the collision.



It should be noted this crosswalk is bulbed out to increase visibility of those pedestrians/bicyclists choosing to cross there. This section of Black Avenue is level and straight with parking prohibited near the intersection to allow for good visibility. Pedestrian crossing signs are located both in advance of the intersection and at the intersection to identify this as a crossing location.

Both collisions were in 2022 and an RRFB was added to this locations as a countermeasure. (Caltrans countermeasure R37PB)

Black Avenue at Crestline Road

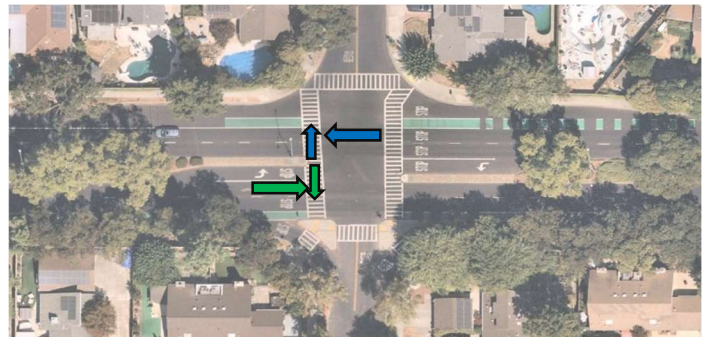
Both bicycle collisions involved a juvenile bicyclist being hit by a southbound right turning vehicle where the driver did not see the bicyclist. In both instances the bicyclist did not make eye-contact with driver before starting into the crosswalk.



Action to take: Work with the adjacent school on opportunities for students to be offered bicycle safety education (Countermeasure PLS-EDMSG). Remove parking on Crestline Road as you approach the intersection to increase sight distance. Countermeasure NS11

Valley Avenue at Blackbird Drive

Both of these collisions were on the last report. Both collisions occurred in the west crosswalk during the evening commute time period.

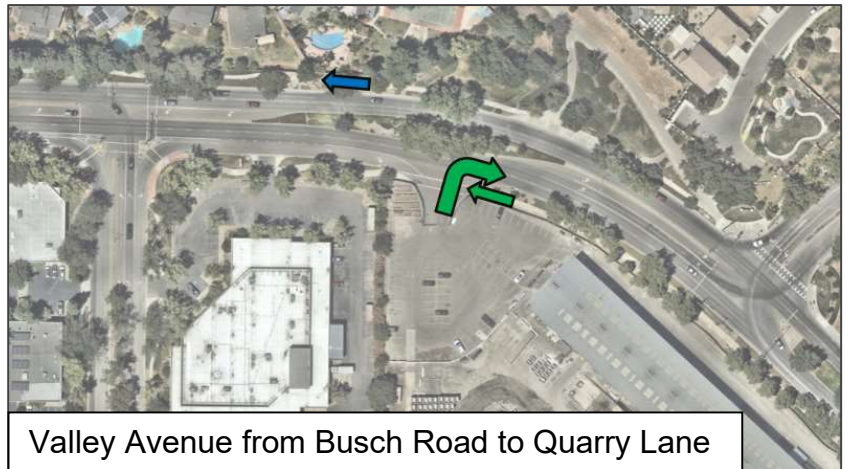


Action to take: We previously recommend considering a project to improve pedestrian visibility and reduce pedestrian exposure by eliminating right turn lanes and extending corners of the intersection. Countermeasure PLS-INTNAR. We plan to evaluate this intersection in the upcoming Safe System Approach project.

Midblock (Bicycle)

Two midblock segments were identified with more than one bicycle collision during the three-year period (Bernal Avenue from Puerto Vallarta to First Street and Valley Avenue from Busch Road to Quarry Lane). The first segment had three collisions (two of them being solo bicycle collisions) and the second had two collisions (one of them being a solo bicycle collision). No correctable patterns were identified in either segment.

Bernal Avenue from Puerto Vallarta to First Street



Valley Avenue from Busch Road to Quarry Lane

Table 1. Countermeasures for Signalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
S01	Lighting	Add intersection lighting (S.I.)	Night	40%	20	100%	Medium
S02	Signal Mod.	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	All	15%	10	100%	Very High
S03	Signal Mod.	Improve signal timing (coordination, phases, red, yellow, or operation)	All	15%	10	50%	Very High
S04	Signal Mod.	Provide Advanced Dilemma Zone Detection for high speed approaches	All	40%	10	100%	High
S05	Signal Mod.	Install emergency vehicle pre-emption systems	Emergency Vehicle	70%	10	100%	High
S06	Signal Mod.	Install left-turn lane and add turn phase (signal has no left-turn lane or phase before)	All	55%	20	90%	Low
S07	Signal Mod.	Provide protected left turn phase (left turn lane already exists)	All	30%	20	100%	High
S08	Signal Mod.	Convert signal to mast arm (from pedestal-mounted)	All	30%	20	100%	Medium
S09	Operation/ Warning	Install raised pavement markers and striping (Through Intersection)	All	10%	10	100%	Very High
S10	Operation/ Warning	Install flashing beacons as advance warning (S.I.)	All	30%	10	100%	Medium
S11	Operation/ Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	100%	Medium
S12	Geometric Mod.	Install raised median on approaches (S.I.)	All	25%	20	90%	Medium
S13PB	Geometric Mod.	Install pedestrian median fencing on approaches	P & B	35%	20	90%	Low
S14	Geometric Mod.	Create directional median openings to allow (and restrict) left-turns and u-turns (S.I.)	All	50%	20	90%	Medium
S15	Geometric Mod.	Reduced Left-Turn Conflict Intersections (S.I.)	All	50%	20	90%	Medium
S16	Geometric Mod.	Convert intersection to roundabout (from signal)	All	Varies	20	100%	Low
S17PB	Ped and Bike	Install pedestrian countdown signal heads	P & B	25%	20	100%	Very High
S18PB	Ped and Bike	Install pedestrian crossing (S.I.)	P & B	25%	20	100%	High
S19PB	Ped and Bike	Pedestrian Scramble	P & B	40%	20	100%	High
S20PB	Ped and Bike	Install advance stop bar before crosswalk (Bicycle Box)	P & B	15%	10	100%	Very High
S21PB	Ped and Bike	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	P & B	60%	10	100%	Very High

Table 2. Countermeasures for Non-Signalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
NS01	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	100%	Medium
NS02	Control	Convert to all-way STOP control (from 2-way or Yield control)	All	50%	10	100%	High
NS03	Control	Install signals	All	30%	20	100%	Low
NS04	Control	Convert intersection to roundabout (from all way stop)	All	Varies	20	100%	Low
NS05	Control	Convert intersection to roundabout (from stop or yield control on minor road)	All	Varies	20	100%	Low
NS06	Operation/ Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	100%	Very High
NS07	Operation/ Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	100%	Very High
NS08	Operation/ Warning	Install Flashing Beacons at Stop-Controlled Intersections	All	15%	10	100%	High
NS09	Operation/ Warning	Install flashing beacons as advance warning (NS.I.)	All	30%	10	100%	High
NS10	Operation/ Warning	Install transverse rumble strips on approaches	All	20%	10	90%	High
NS11	Operation/ Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High
NS12	Operation/ Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	100%	Medium
NS13	Geometric Mod.	Install splitter-islands on the minor road approaches	All	40%	20	90%	Medium
NS14	Geometric Mod.	Install raised median on approaches (NS.I.)	All	25%	20	90%	Medium
NS15	Geometric Mod.	Create directional median openings to allow (and restrict) left-turns and u-turns (NS.I.)	All	50%	20	90%	Medium
NS16	Geometric Mod.	Reduced Left-Turn Conflict Intersections (NS.I.)	All	50%	20	90%	Medium
NS17	Geometric Mod.	Install right-turn lane (NS.I.)	All	20%	20	90%	Low
NS18	Geometric Mod.	Install left-turn lane (where no left-turn lane exists)	All	35%	20	90%	Low
NS19PB	Ped and Bike	Install raised medians / refuge islands (NS.I.)	Ped and Bike	45%	20	90%	Medium
NS20PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	Ped and Bike	25%	10	100%	High
NS21PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	Ped and Bike	35%	20	100%	Medium
NS22PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	Ped and Bike	35%	20	100%	Medium
NS23PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	Ped and Bike	55%	20	100%	Low

Table 3. Countermeasures for Roadways

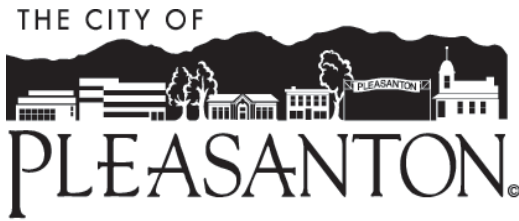
No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R01	Lighting	Add segment lighting	Night	35%	20	100%	Medium
R02	Remove/ Shield Obstacles	Remove or relocate fixed objects outside of Clear Recovery Zone	All	35%	20	90%	High
R03	Remove/ Shield Obstacles	Install Median Barrier	All	25%	20	100%	Medium
R04	Remove/ Shield Obstacles	Install Guardrail	All	25%	20	100%	High
R05	Remove/ Shield Obstacles	Install impact attenuators	All	25%	10	100%	High
R06	Remove/ Shield Obstacles	Flatten side slopes	All	30%	20	90%	Medium
R07	Remove/ Shield Obstacles	Flatten side slopes and remove guardrail	All	40%	20	90%	Medium
R08	Geometric Mod.	Install raised median	All	25%	20	90%	Medium
R09	Geometric Mod.	Install median (flush)	All	15%	20	90%	Medium
R10PB	Geometric Mod.	Install pedestrian median fencing on approaches	P & B	35%	20	90%	Low
R11	Geometric Mod.	Install acceleration/ deceleration lanes	All	25%	20	90%	Low
R12	Geometric Mod.	Widen lane (initially less than 10 ft)	All	25%	20	90%	Medium
R13	Geometric Mod.	Add two-way left-turn lane (without reducing travel lanes)	All	30%	20	90%	Medium
R14	Geometric Mod.	Road Diet (Reduce travel lanes from 4 to 3 and add a two way left-turn and bike lanes)	All	30%	20	90%	Medium
R15	Geometric Mod.	Widen shoulder	All	30%	20	90%	Medium
R16	Geometric Mod.	Curve Shoulder widening (Outside Only)	All	45%	20	90%	Medium
R17	Geometric Mod.	Improve horizontal alignment (flatten curves)	All	50%	20	90%	Low
R18	Geometric Mod.	Flatten crest vertical curve	All	25%	20	90%	Low
R19	Geometric Mod.	Improve curve superelevation	All	45%	20	90%	Medium
R20	Geometric Mod.	Convert from two-way to one-way traffic	All	35%	20	90%	Medium
R21	Geometric Mod.	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	100%	High

Table 3. Countermeasures for Roadways (Continued)

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R22	Operation/ Warning	Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)	All	15%	10	100%	Very High
R23	Operation/ Warning	Install chevron signs on horizontal curves	All	40%	10	100%	Very High
R24	Operation/ Warning	Install curve advance warning signs	All	25%	10	100%	Very High
R25	Operation/ Warning	Install curve advance warning signs (flashing beacon)	All	30%	10	100%	High
R26	Operation/ Warning	Install dynamic/variable speed warning signs	All	30%	10	100%	High
R27	Operation/ Warning	Install delineators, reflectors and/or object markers	All	15%	10	100%	Very High
R28	Operation/ Warning	Install edge-lines and centerlines	All	25%	10	100%	Very High
R29	Operation/ Warning	Install no-passing line	All	45%	10	100%	Very High
R30	Operation/ Warning	Install centerline rumble strips/stripes	All	20%	10	100%	High
R31	Operation/ Warning	Install edgeline rumble strips/stripes	All	15%	10	100%	High
R32PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High
R33PB	Ped and Bike	Install Separated Bike Lanes	P & B	45%	20	90%	High
R34PB	Ped and Bike	Install sidewalk/pathway (to avoid walking along roadway)	P & B	80%	20	90%	Medium
R35PB	Ped & Bike	Install/upgrade pedestrian crossing (with enhanced safety features)	P & B	35%	20	90%	Medium
R36PB	Ped and Bike	Install raised pedestrian crossing	P & B	35%	20	90%	Medium
R37PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	100%	Medium
R38	Animal	Install animal fencing	Animal	80%	20	90%	Medium

Table 4. City of Pleasanton Specific Countermeasures

PLS-INTNAR	Ped and Bike	Intersection narrowing to improve visibility and reduce pedestrian/bicyclist exposure by reducing intersection crossing distances
PLS-LOS	Geometric Mod	Modify intersection through physical changes and/or signal timing to improve capacity and reduce intersection delay
PLS-RMOD	Ped and Bike	Investigate/modify bridge railing
PLS-BSMOD	Ped and Bike	Upgrade detection to extend the all-red period when a bicycle is detected in the intersection.
PLS-RTOR	Ped and Bike	Prohibit right turn on red
PLS-SASMSG	Ped and Bike	Work with schools to get message to school aged bicyclists on the importance of using pedestrian push buttons at signalized intersections.



Bicycle, Pedestrian & Trails Committee Meeting Agenda Report

August 26, 2024

Item 5

SUBJECT: PURCHASE OF MINI SWEEPER WITH TRANSPORTATION DEVELOPMENT ACT (TDA) ARTICLE 3 FUNDS

SUMMARY

As the City installs more protected bicycle facilities, routine maintenance of these facilities will become more challenging. The City is evaluating the purchase of a mini sweeper that will fit into and allow routine sweeping of the protected bicycle lanes (and our off street trail network). The Metropolitan Transportation Commission allows the use of TDA Article 3 funds to purchase a mini sweeper, and staff proposes the use of existing TDA Article 3 funds for this purpose. The existing TDA grant funds are allocated to the I-580 overcrossing bicycle and pedestrian improvement project. This project is paused due to the high project design and construction cost.

BACKGROUND

On March 27, 2023, the BPTC provided the recommendation that City Council approve the application to the Metropolitan Transportation Commission (MTC) for \$493,513 of Transportation Development Act (TDA) Article 3 funds to be used for the bicycle and/or pedestrian improvements at various locations Capital Improvement Project (CIP #24543). As identified in the TDA application, the CIP list of potential projects included: protected bike lanes on Stoneridge Drive between Santa Rita Road and Trevor Parkway, protected and buffered bike lanes and sidewalk/ramp improvements at I-580 overcrossings, and intersection improvements at the stop sign intersections along Valley Avenue.

In June of 2023, staff was informed that street sweepers fall into an eligible maintenance category for TDA Article 3 grant funds. On June 26, 2023, staff presented this information to the BPTC for review and inclusion as a future item for TDA Article 3 funds.

The salary of a street sweeper operator is not covered by TDA funding. The Operation Services Department was contacted, and they have available staff time to operate a "mini-sweeper" to ensure the bike lanes are kept free of debris, but do not have funding for the purchase of a mini-sweeper. The Operation Services Department received an original mini sweeper purchase cost of \$663,353. Based on the original cost estimate, staff did not pursue the purchase of the mini sweeper due to insufficient funds and continued with the list of submitted projects.

Update to TDA Article 3 projects:

1. Stoneridge Drive Protected Bike Lanes - The protected bike lanes on Stoneridge Drive between Santa Rita Road and Trevor Parkway have been completed using Measure B/BB grant funding.

2. I-580 Overcrossing Improvements - The City's civil engineering firm provided an estimate for the design and encroachment permit process for \$700,000. This is for design only. Given the substantial cost associated with the design and Caltrans review, staff will explore alternatives for this project.
3. Valley Avenue Improvements – Before and after studies were conducted to assess the impact of intersection improvements at three locations along Valley Avenue. Based on the data and feedback received, additional improvements have been temporarily deferred.
4. In April 2024, staff received a revised estimate for a different mini sweeper at a cost of \$312,345.

The purchase of a mini sweeper was not included in our list of potential uses for the TDA Article 3 application. Staff is currently working with the Metropolitan Transportation Commission (MTC), which oversees the TDA Article 3 funding distribution, to reallocate the funds to allow for the purchase of the mini sweeper.

If supported by the BPTC, staff will provide an informational report to City Council to inform them of the change in project for the TDA Article 3 money from I-580 overcrossings to the mini sweeper purchase.

RECOMMENDATION

It is recommended that the Bicycle, Pedestrian and Trails Committee review the addition of a mini sweeper to the use of TDA Article 3 fund project list and provide feedback.

Submitted by:



Matthew Nelson
Associate Traffic Engineer