



MEMORANDUM

DATE: 1/8/25

TO: Brian Holt, Division Planning Lead and Max Korten, Deputy General Manager

FROM: Rourke Healey

SUBJECT: E-Bike Data Report on 2023 Update to Ordinance 38

PAGES: 14

This memo provides park visitation data and Public Safety data as they relate to electric bicycles (e-bikes) policy changes made by the East Bay Regional Park District (Park District). On September 5, 2023, per Board Resolution 2023-09-196, the Park District Board of Directors authorized an amendment to Ordinance 38 to allow use of Class I electric bicycles on Park District trails that allow use of conventional bicycles (bikes), and use of Class II e-bikes on all District operated paved regional trails. Prior to this Ordinance change, in March 2019 Ordinance 38 was amended to allow the use of Class I e-bikes on only a select list of paved regional trails: Alameda Creek Trail (paved side only), Big Break Trail, Contra Costa Canal Trail, Delta De Anza Trail, George Miller Trail, Iron Horse Trail, Lafayette Moraga Trail, and Marsh Creek Trail.

This memo includes charts derived from Placer AI, STRAVA, Eco-Counter, Park District Public Safety, and a summary of current e-bike policy statewide. These methods were chosen to highlight longitudinal changes in park visitation and document how changes to the Park District policy may have impacted use. The primary observation in the visitation data is that e-bike use has steadily increased over the past five years across the east bay, but that it hasn't led to an overall increase in park visitation and that the change in ordinance has not had a major effect on visitation. While visitation trends vary somewhat by park, in general park visitation increased in some parks during the pandemic in 2020 but has returned to pre-pandemic levels since. According to STRAVA data, e-bike use has been increasing over the last 5 years as a percentage of overall visitation on bikes. The change in ordinance does not seem to have influenced the percentage of e-bikes, as the general trend from before the ordinance change seems to be continuing at a similar rate. Public Safety data illustrates an increase in both bike and e-bike public safety reports over the past year. Accident data shows that bike accidents peaked in 2020 during the pandemic and have since returned to a similar level that was experienced pre-pandemic. As e-bikes have become more popular, the state has taken the lead in developing legislation focused on safety. A Summary of California Laws pertaining to e-bikes provides insight into the ongoing changes that are taking place across California to address e-bikes. The Park District will continue to monitor e-bike legislation, as well as the results of some of the ongoing pilot programs throughout the state and stay up to date on best management practices related to e-bikes.

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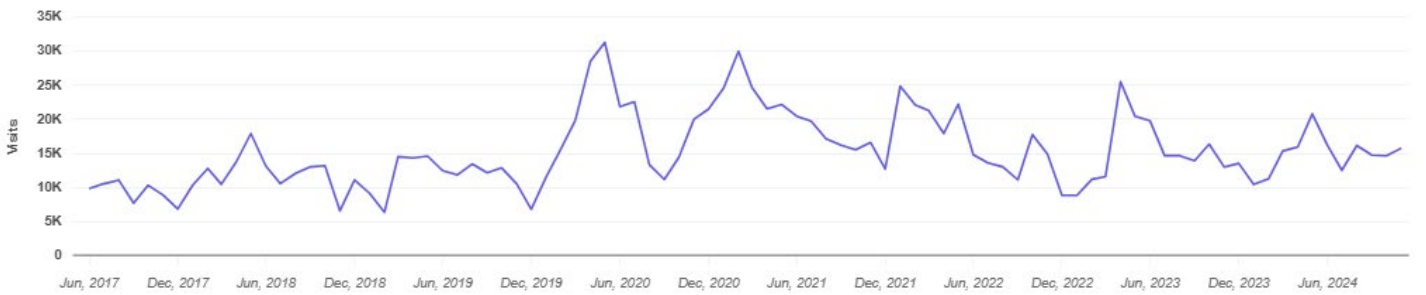
Placer AI

The following charts display visitation at parks that have significant of bike usage in the Park District. Placer AI data is derived from cellphone applications and does not differentiate between bikers, hikers or horse riders. The data show a pattern of increased visitation following the start of the COVID-19 pandemic. The data do not show a significant abnormal increase following the e-bike policy change in 2019 or 2023.

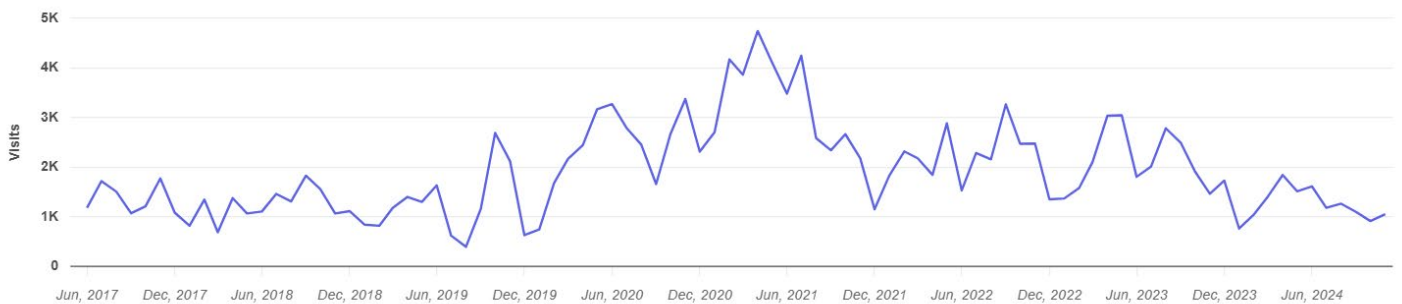
Anthony Chabot Visitation 2017 – 2024



Briones Visitation 2017 – 2024



Crockett Hills Visitation 2017 – 2024



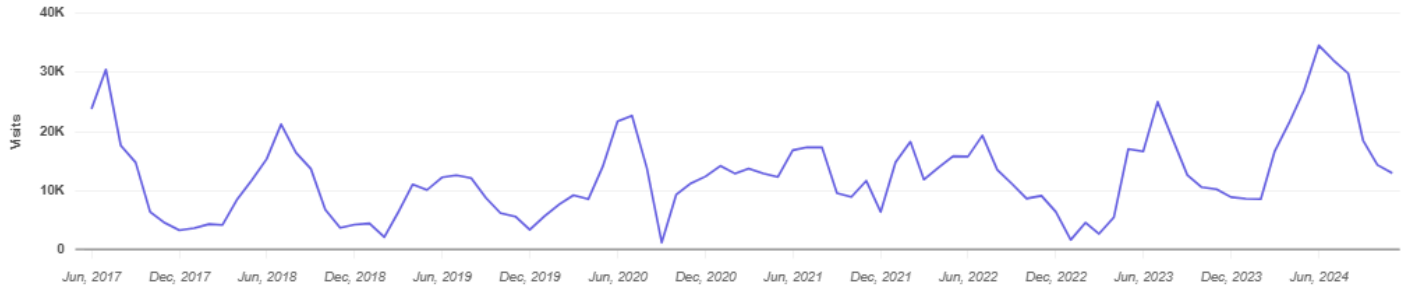
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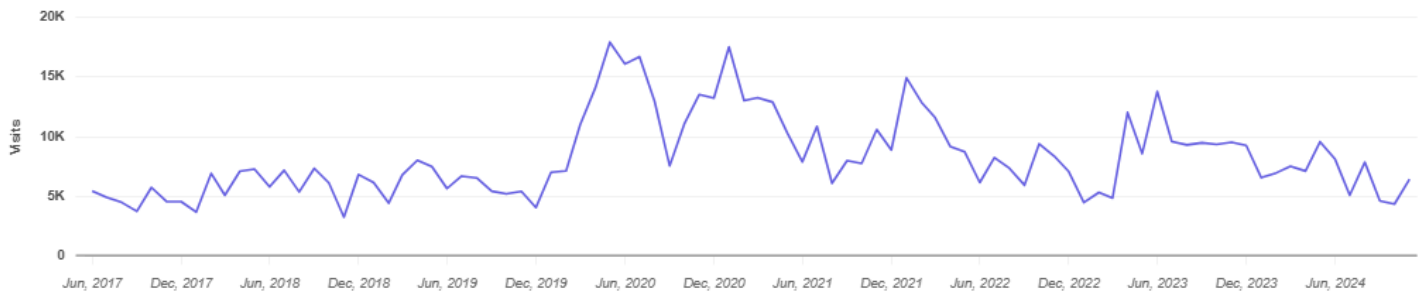


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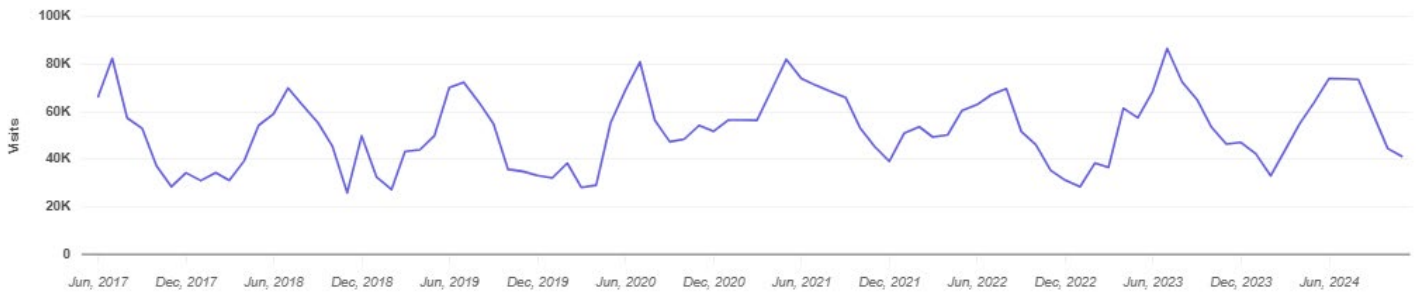
Del Valle Visitation 2017 – 2024



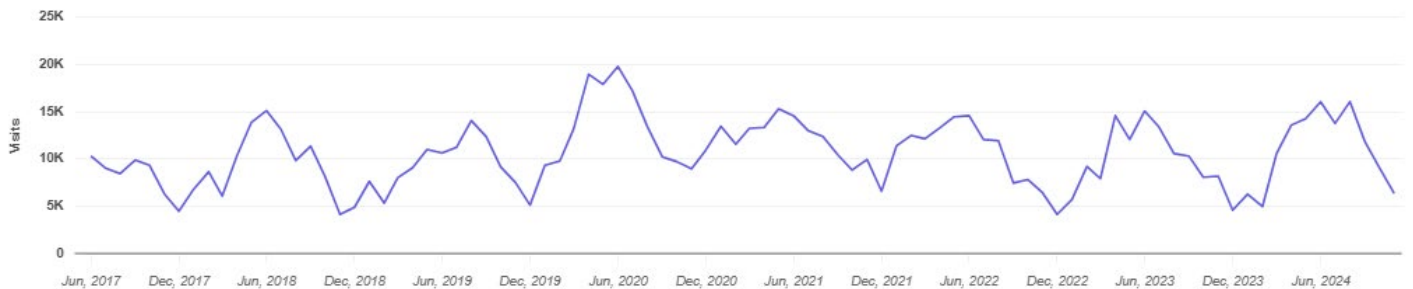
Pleasanton Visitation 2017 – 2024



Tilden Visitation 2017 – 2024



Wildcat Visitation 2017 – 2024



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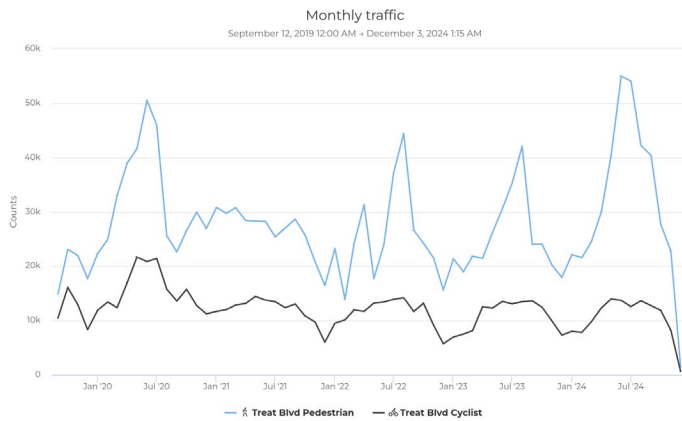


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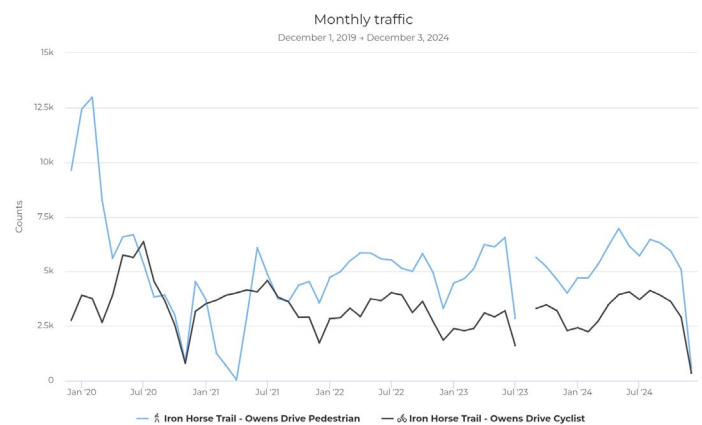
Eco Counter

The following charts display trail counts from Eco-Counter devices on the Iron Horse Trail from 2020-2024. The blue line represents pedestrians. The black line represents cyclists. e-bikes are included in the cyclist data. Spikes or gaps in data are due to counter battery issues, sensor blockages or other technical issues. The data do not show a significant abnormal increase in use following the e-bike policy change in 2019 or 2023. A map of the counter locations is provided on the following page.

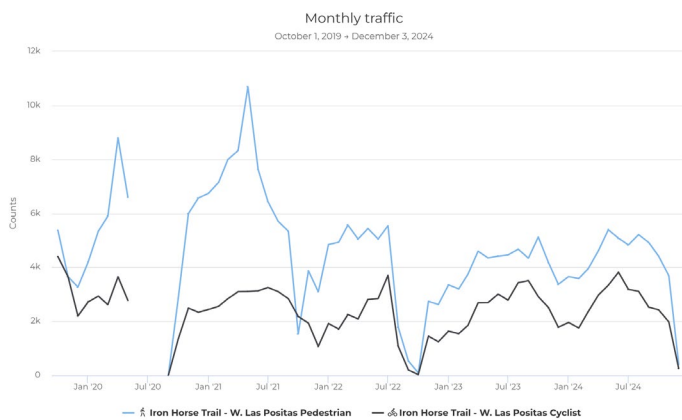
Treat Blvd Ped & Bike Visitation 2020 – 2024



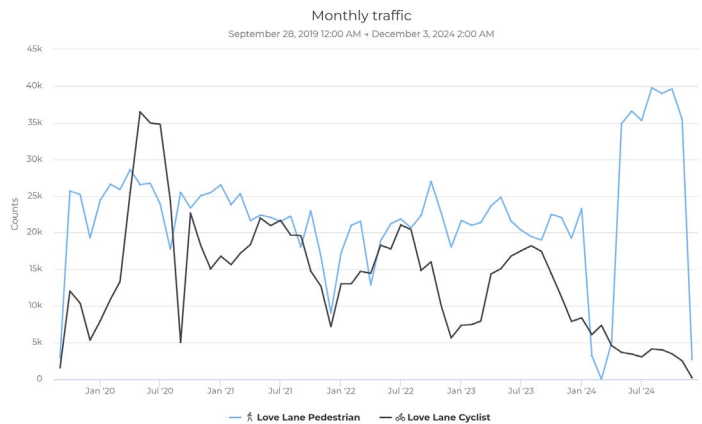
Owens Drive Ped & Bike Visitation 2020 – 2024



W. Las Positas Blvd Ped & Bike Visitation 2020 – 2024



Love Lane Ped & Bike Visitation 2020 – 2024



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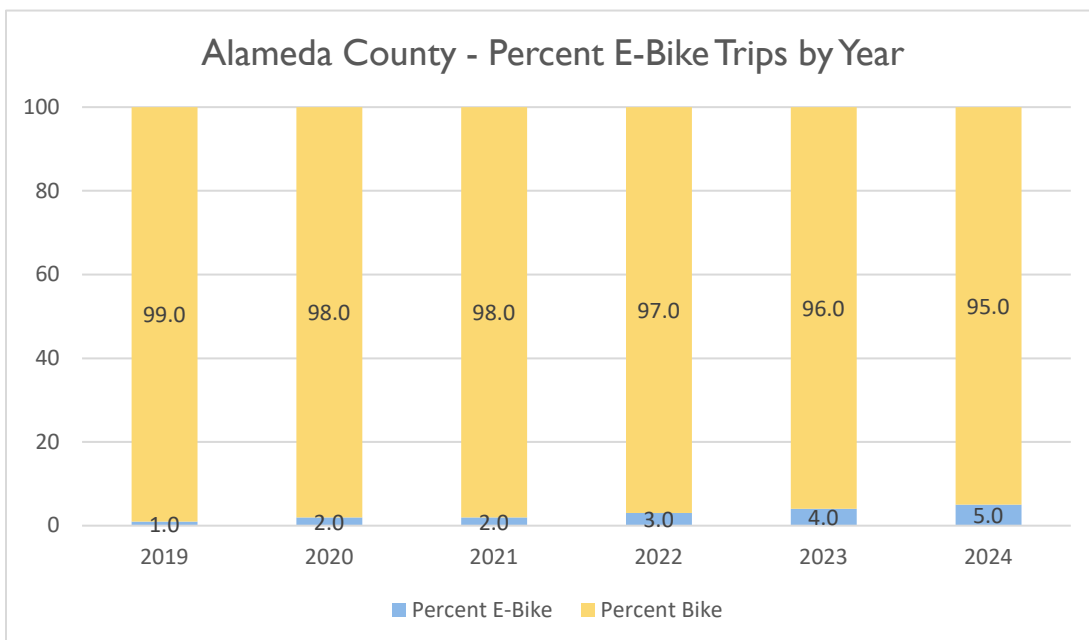
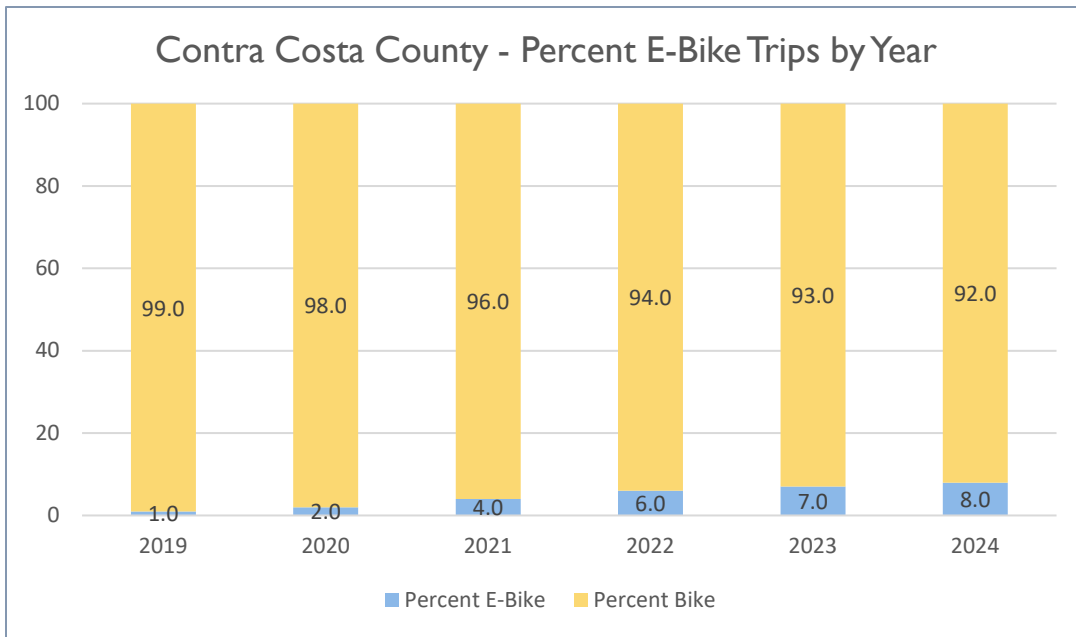
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STRAVA

STRAVA is a phone application that allows users to self-report their exercise routine, including method of transportation. The graphs below display the change over time of the percentage of bikers using conventional bikes and e-bikes, with the latter seeing an increase in recent years. County data extends through 2024, while park and trail specific data extend through 2023.



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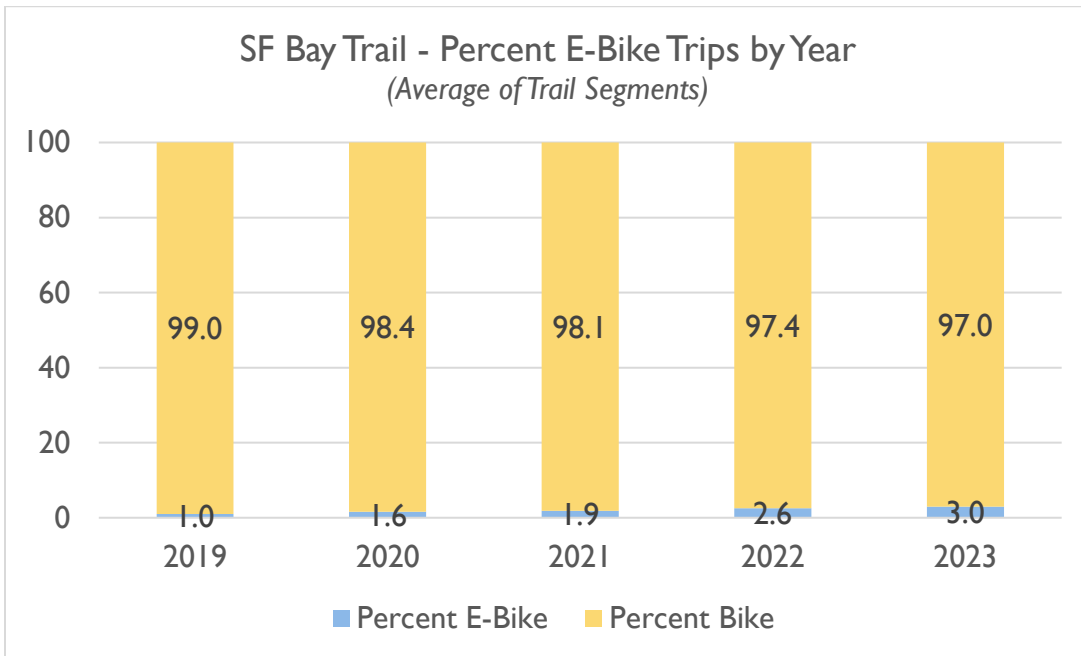
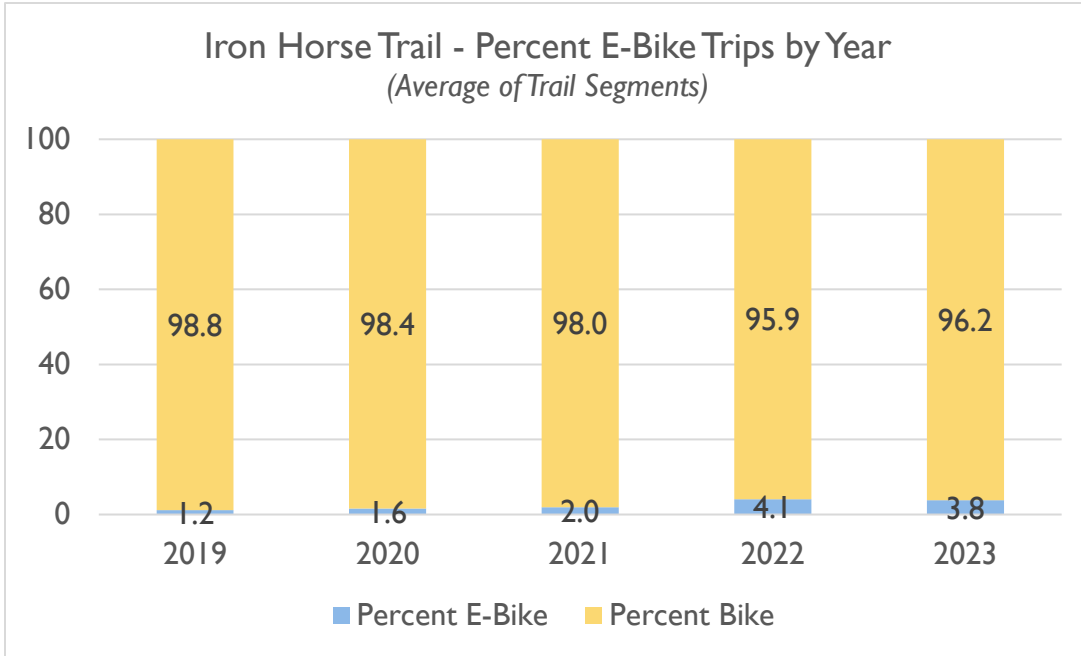
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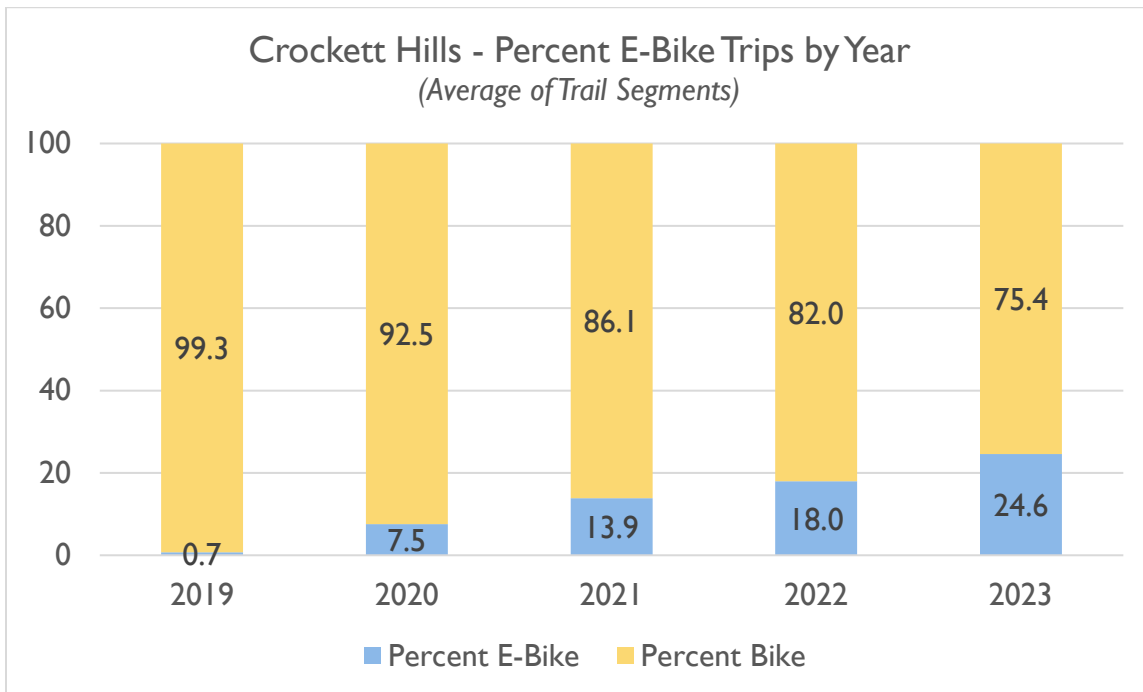
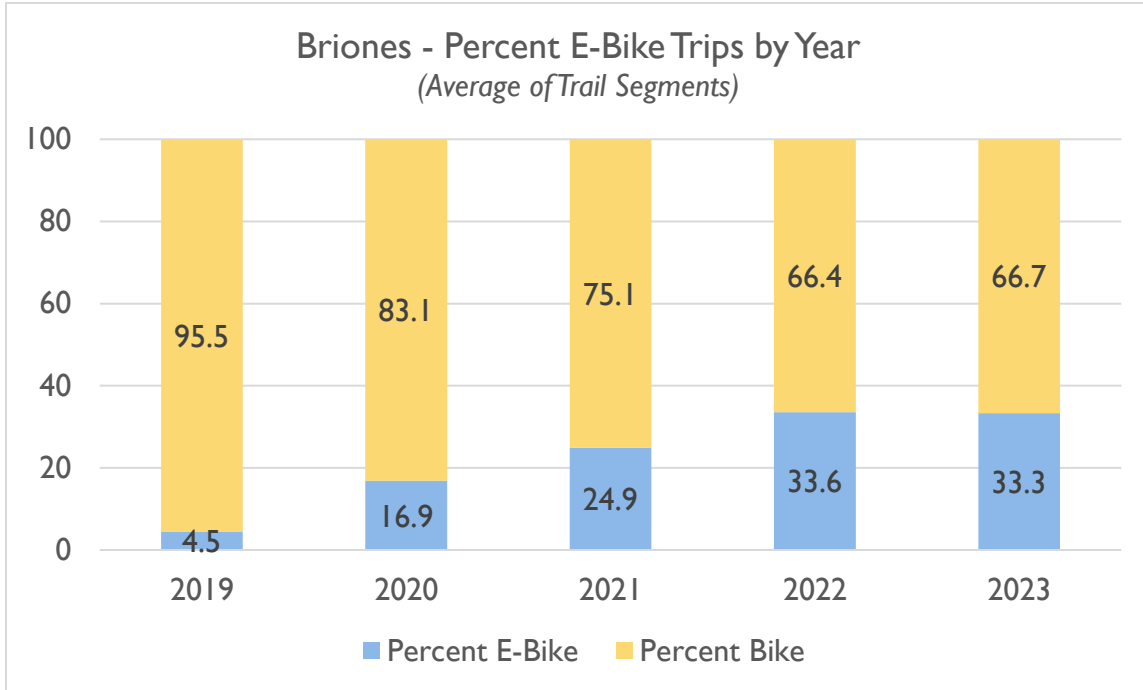
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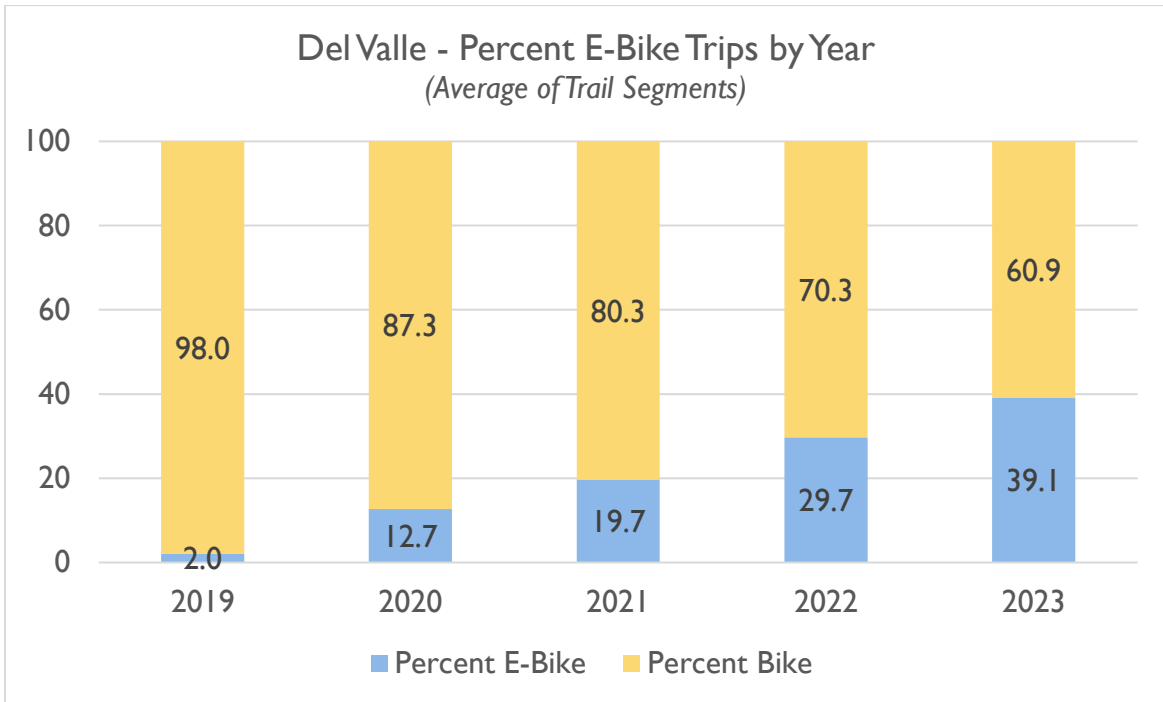
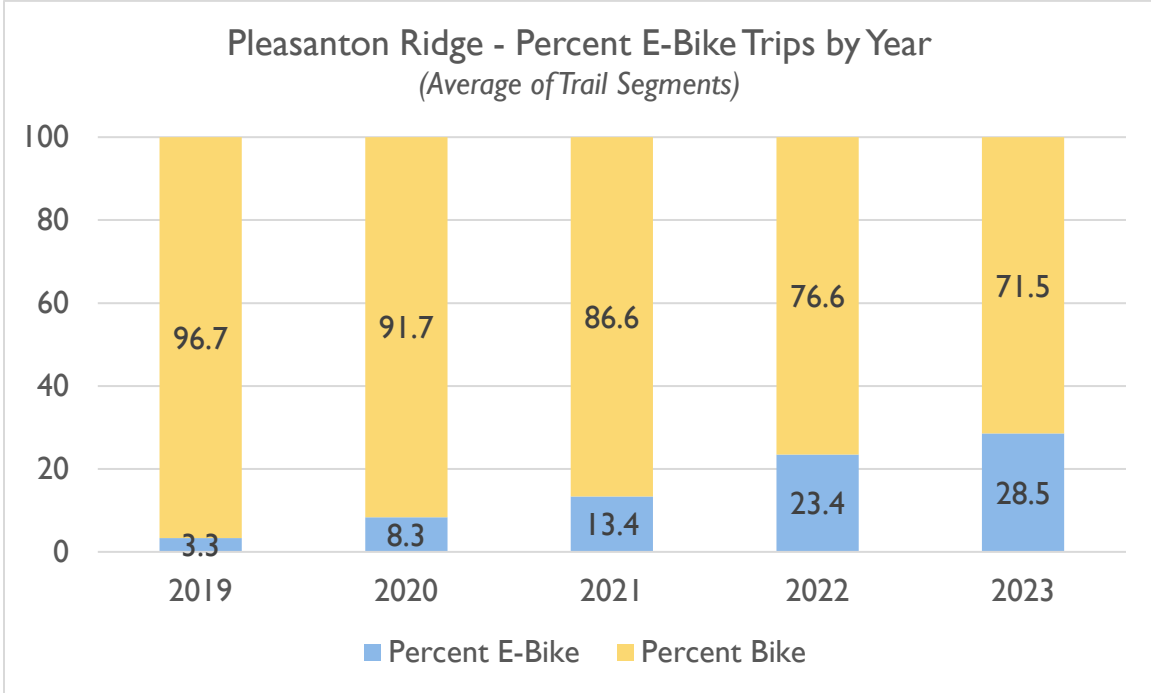
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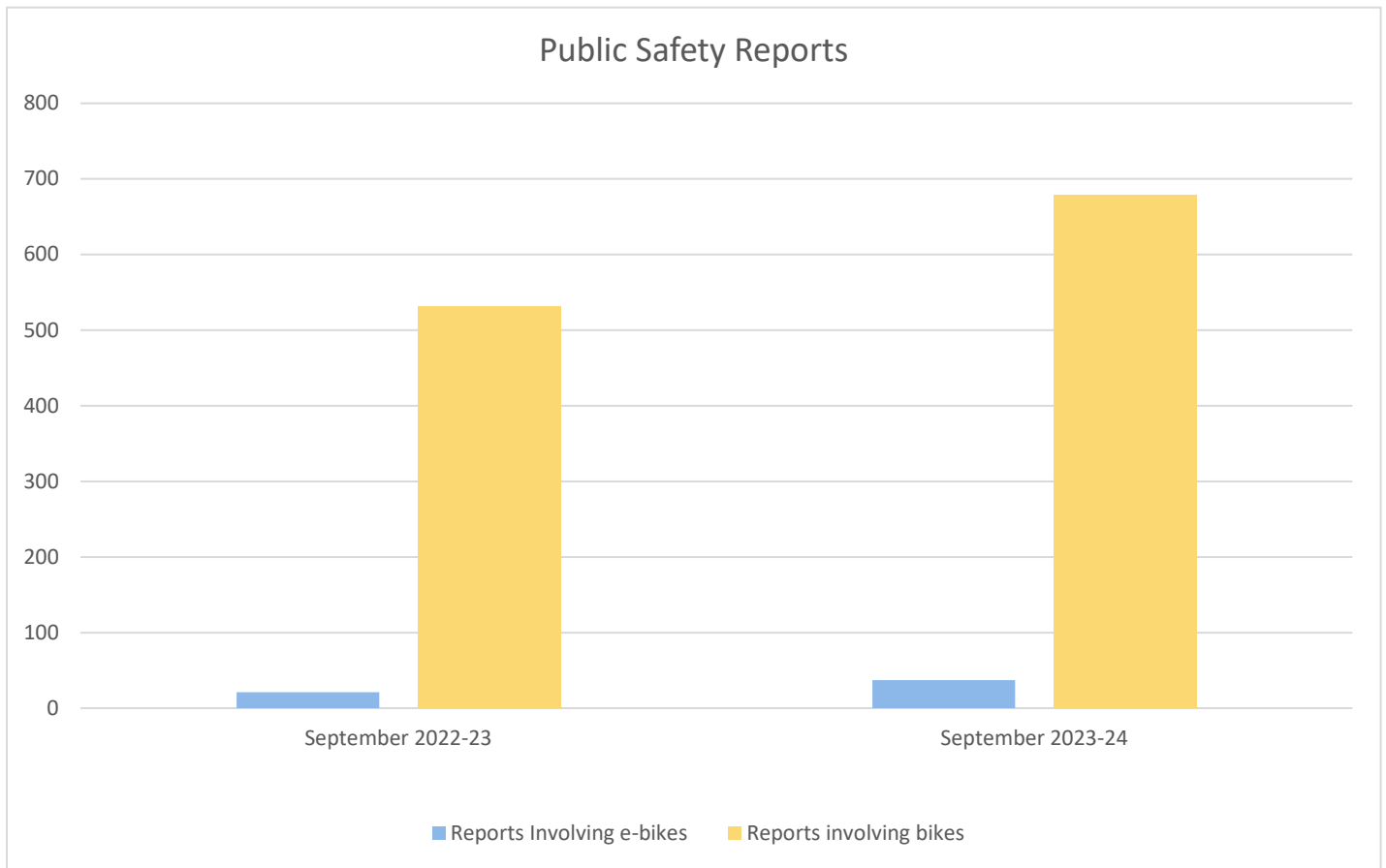


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Public Safety Data

The following charts show public safety records from September 2022-23 and September 2023-24, to provide a ‘before’ and ‘after’ of how bike and e-bike reports related to the e-bike Ordinance 38 change.

The data reveal that there has been a small increase in reports involving e-bikes and a larger increase in reports involving bikes generally since 2022. The difference between reports regarding e-bikes and bikes is roughly consistent with the patterns shown in the Strava data for e-bike and bike counts in 2024 county-wide.



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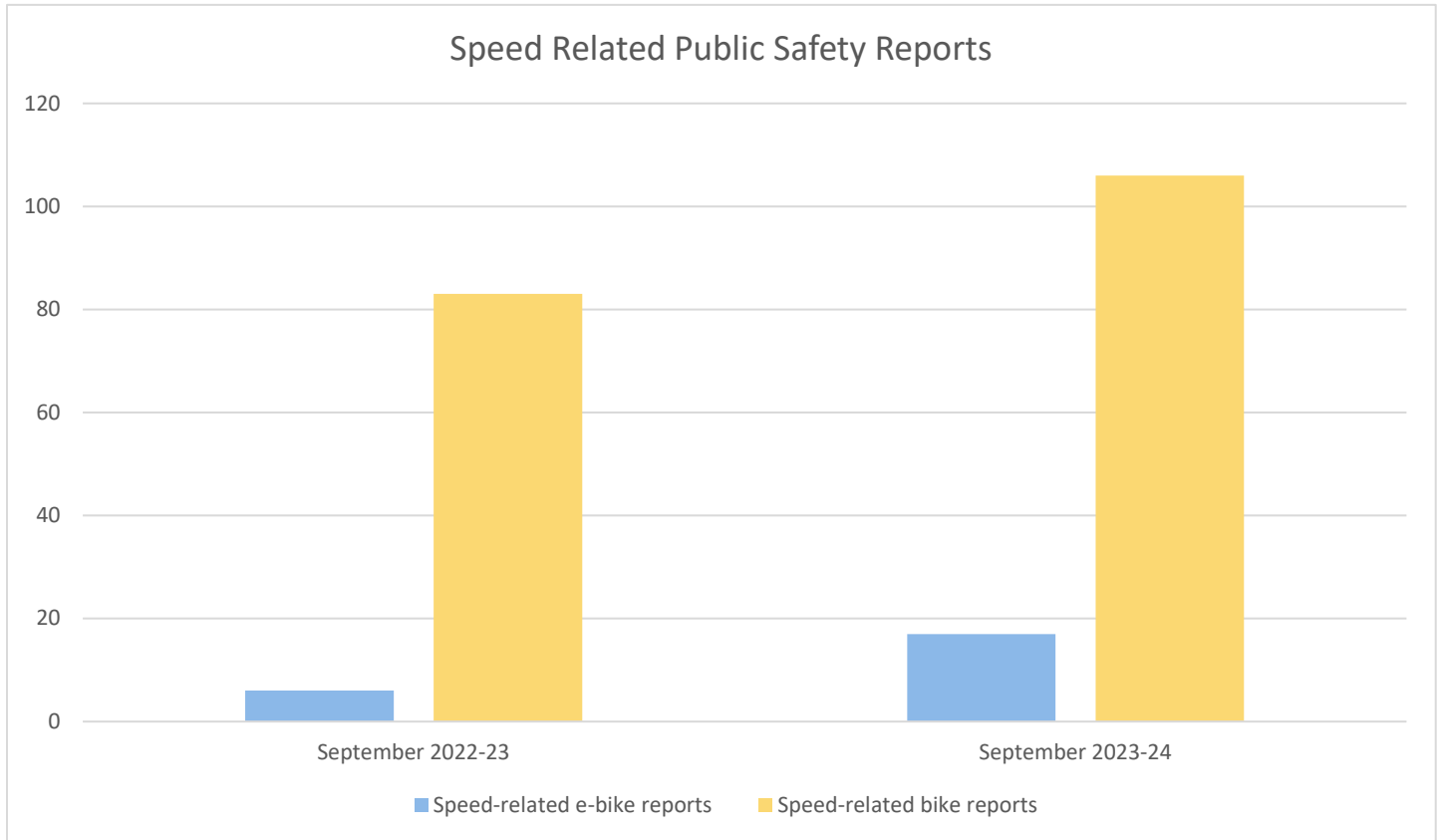
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Speed is the most frequently raised concern regarding e-bikes. Speed related reports are provided in the chart below. The data reveal that reports involving speeding increased across both e-bikes and bikes. There is approximately 10 times as many reports of conventional bikes speeding compared to those pertaining to e-bikes.



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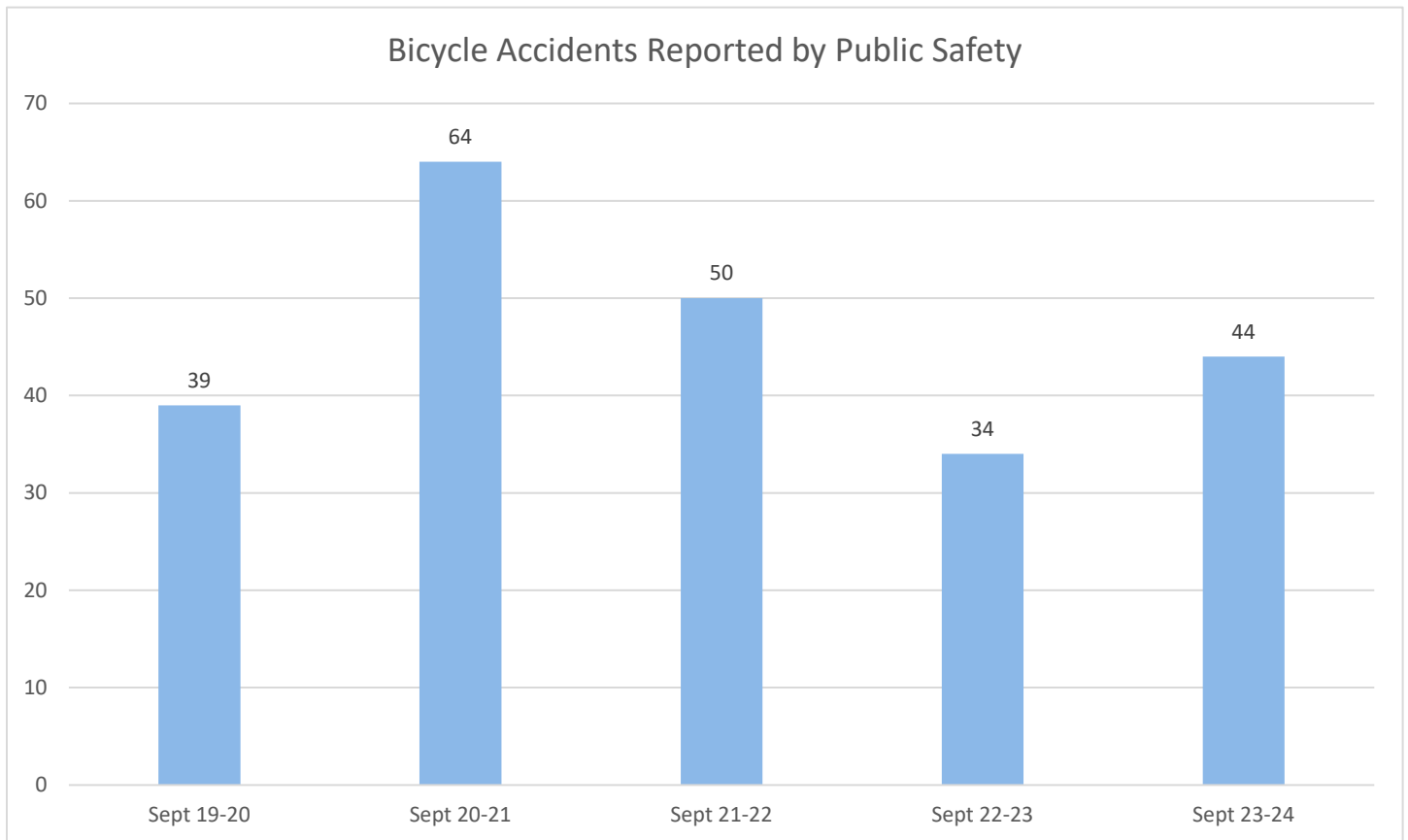
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Below is a chart of district-wide bike accidents reported by Public Safety. E-bike accidents are not specified in the Public Safety data. Accidents over the last five years have not revealed a clear pattern, but have trended towards pre-pandemic levels since the spike that occurred in 2020.



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Summary of California Laws Pertaining to E-Bikes

Responding to the growth in popularity of Electric Bicycles (e-bikes), the California Legislature has been active in the regulation of e-bikes over the past ten years. Beginning in 2015, with the adoption of AB 1069, California reclassified e-bikes into three separate classes. E-Bikes are no longer considered motor vehicles, but rather bicycles provided they have an electric motor of less than 750 watts and fall within one of the three statutory classes of e-bikes. The three classes are as follows:

- **Class 1 e-bike:** Has a pedal-assisted motor that provides power only when pedaling and quits assisting when the bike reaches 20 mph.
- **Class 2 e-bike:** Has a motor that can provide power with or without pedaling (by using a handlebar-mounted throttle), but stops assisting when the bike reaches 20 mph.
- **Class 3 e-bike:** Has a pedal-assisted boost up to 28 mph before it stops assisting.

Note that electric motorcycles are not e-bikes. If the e-bike does not have pedals, it is not an e-bike. AB 1096, which became effective in 2016, allowed Class 1 & 2 e-bike use on Bicycle Paths, Bike Ways, and Bicycle Lanes, unless restricted by a local jurisdiction. In contrast, Class 3 e-bikes are prohibited on Bicycle Paths, Bike Ways, and Bicycle Lanes, unless specifically allowed by a local jurisdiction.

Subsequently, in 2022, the California Vehicle Code was amended to explicitly state that an electric bicycle (as defined by AB 1096) is a bicycle and subject to all regulatory requirements of a bicycle, with a few exceptions. For example, there are some additional restrictions on Class 3 e-bikes, such that you must be age 16 or older to operate a Class 3 e-bike, wear a helmet regardless of age, and may not transport passengers.

California has continued to be active with regards to e-bike use and safety, and this legislative session resulted in four bills being signed into law by Governor Newsom.

E-Bike Battery Safety (SB 1271, Min)

This bill requires all electric bikes sold in California to meet certain minimum safety standards and be certified by an accredited testing laboratory. Battery safety is critical for e-bikes since people often park their bikes inside homes or garages and bring the batteries inside to charge. Poorly manufactured lithium-ion batteries can overheat during charging and start fires. This bill also clarifies the existing e-bike classification definitions and prohibit specified vehicles from being advertised, sold, offered for sale, or labeled as electric bicycles.

E-Bike Modification (AB 1774, Dixon)

This bill makes it illegal to tamper with an e-bike in order to make it give an electric boost faster than 28 mph, which is the top boosted e-bike speed allowed in California. If someone modifies an e-bike so it operates as a different class, the label must be changed to reflect the new classification. This bill is aimed at some vehicles sold as e-bikes in California that can be modified to get around speed limiters on the motor or have “off-road” modes that go faster than 28 mph.

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Marin Pilot Program (AB 1778, Connolly)

This bill establishes the Marin Electric Bicycle Safety Pilot Program, which would allow local jurisdictions within Marin County to adopt an ordinance to extend the restrictions that currently apply to Class 3 e-bikes to Class 2 e-bikes, which include prohibiting people under age 16 from riding a Class 2 e-bike and require helmets for all Class 2 e-bike users. The pilot would continue through 2029 with a reporting requirement to assess its effect on safety.

San Diego Pilot Program (AB 2234, Boerner)

This bill establishes the San Diego Electric Bicycle Safety Pilot Program, which will allow local jurisdictions within San Diego County to prohibit people under 12 from operating Class 1 or Class 2 e-bikes. The pilot would continue through 2029 with a reporting requirement to assess its effect on safety.

Except for the e-bike Battery Safety Bill (SB 1271), which will become effective on January 1, 2026, the other three bills become effective on January 1, 2025.

Additionally, a bill that would have banned e-bikes on boardwalks (AB 1773, Dixon) was introduced, but never made it out of committee. The Park District will continue to monitor e-bike legislation, as well as the results of some of the ongoing pilot programs throughout the state.

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