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INDIAN WELLS
CALIFORNIA

Indian Wells
Safety Action Plan

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ADA Advocate
Pedestrian Advocate
Chambers of Commerce
SunLine Transit
CVAG
Caltrans District 8
Bicycle Advocate
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Executive Summary

The City of Indian Wells Safety Action Plan identifies emphasis areas to inform and guide further safety evaluation of the City's transportation network. The emphasis areas include type of crashes, certain locations, and notable relationships between current efforts and crash history. The plan analyzes crash data on an aggregate basis as well as at specific locations to identify high-crash locations, high-risk locations, as well as city-wide trends and patterns. The analysis of crash history throughout the City's transportation network allows for opportunities to:

1. Identify factors in the transportation network that inhibit safety for all roadway users;
2. Improve safety at specific high-crash locations, and reduce serious injury and fatal collisions; and,
3. Develop safety measures using the four E's of safety: Engineering, Enforcement, Education, and Emergency Response to encourage safer driver behavior and lower severity outcomes.

With this plan, the City continues its safety efforts by identifying areas of emphasis and systemic recommendations to enhance safety.

The City's vision is to enhance the transportation network and reduce traffic fatalities and serious injury-related crashes, and the goals for the City of Indian Wells are in support of the General Plan Goals (IIC1, IIC2, IIC3):

- Provide a safe and efficient street system that links all parts of the area for the movement of people and goods.
- Provide Indian Wells' residents with a choice of travel modes
- Provide a street system that contributes to residents' quality of life and minimizes impacts on the environment

The General Plan Goals (IIC1, IIC2, IIC3) are furthered by this plan through these targeted objectives:

SAFETY ACTION PLAN COMPONENTS	SECTION IN INDIAN WELLS' SAFETY PLAN
Leadership Commitment and Goal Setting	2
Planning Structure	3
Safety Analysis	4 & 5
Engagement and Collaboration	6
Equity	7 & 8
Policy and Process Change	9
Safety and Project Selections	10
Progress and Transparency	11

Objective #1: Identify areas with a high risk for crashes.

Objective #2: Illustrate the value of a comprehensive safety program and the systemic process.

Objective #3: Plan future safety improvements for near-, mid-, and long-term.

Objective #4: Define safety projects for HSIP and other program funding considerations

The plan analyzes the most recent range of crash data (January 1, 2018 through December 31,2022) and roadway characteristics to access historic trends, patterns, and areas of increasing concern. While the COVID-19 pandemic altered traffic conditions and collision patterns in 2020 and 2022, these years were ultimately included to understand recent trends.

Further, the collision history was analyzed to identify locations with elevated risk of collisions either through collision histories or their similarities to other locations with more active collision patterns. Using a network screening process, locations were identified within the City that will most likely benefit from safety enhancements. Additionally, collision risk factors for the entire network were derived. The outcomes informed the identification and prioritization of engineering and non-infrastructure safety measures to address certain roadway characteristics and related behaviors that contribute to motor vehicles collisions with active transportation users.

Emphasis areas were developed by revisiting the visions and goals developed at the onset of the planning process and comparing them with the trends and patterns identified in the crash analysis.



The following seven (7) project locations were selected as priority projects based on an evaluation of crash data, stakeholder input, public input, and equity considerations, that were chosen to be representative of the corridor and intersection configurations throughout the city:

1. Intersection: Fred Waring Drive & Eldorado Drive
2. Mini Corridor: Highway 111: Village Center Drive to Province Way
3. Intersection: Fairway Drive & Rancho Palmera Drive
4. Intersection: Fairway Drive & Eldorado Drive
5. Intersection: Highway 111 & Indian Wells Lane
6. Corridor: Highway 111: Miles Avenue to Mountain Cove
7. Intersection: Washington Street & Miles Avenue

These locations were identified through the analysis process based on their crash histories, public engagement, and input, the observed crash patterns, and their different characteristics to provide the most insight into potential systemic safety countermeasures that the City can employ to achieve the most cost-effective safety benefits. Countermeasures are subjected to a benefit/cost assessment and scored according to their potential return on investment. The potential benefit of these countermeasures at locations with similar design characteristics can then be extrapolated regardless of crash history, allowing for proactive safety enhancements that can prevent future safety challenges from developing. Additionally, this information can be used to help the City apply for grants and other funding opportunities to implement these safety improvements. These grants and funding opportunities include the Highway Safety Improvement Program (HSIP), administrated by Caltrans, the Safe Streets for All (SS4A) program, administrated by the federal government, and the Active Transportation Program (ATP) funds, which are administrated by the federal government, and the Active Transportation Program (ATP) funds, which are administrated by the State of California. There are also regional funding sources, administrated by the Coachella Valley Association of Governments (CVAG). The completion of a Safety Action Plan is required for some of these programs and will allow the City of Indian Wells to be eligible for these funds.

- Near-term action items were identified to accelerate the City's achievement of the goals and vision of a Safety Action Plan (SAP). The City can:
- Actively seek other funding opportunities to improve safety for all modal users,
- Collaborate with established safety partners & neighboring municipalities as improvements are made to create a cohesive transportation network, and

Iteratively evaluate existing and proposed transportation safety programs and capital improvements to design a safer transportation network in Indian Wells

These recommendations provide Indian Wells with a look-ahead for safety improvements that can be applied systemically. Additionally, this information can be used to help the City apply for grants and other funding opportunities to implement these safety improvements.

Establish a goal of zero traffic fatalities by the year 2050 consistent with the statewide goals set by Caltrans.

An evaluation and implementation plan were created that identifies actionable items that will help the City achieve the goals and vision set out in this report. This section will lay out next steps for the City to continue to capitalize on the analysis and information provided in this report. It is recommended that the City Council formally adopt this plan.

1. Introduction

The Safety Action Plan (SAP) identifies emphasis areas to inform and guide further safety evaluation of the City's transportation network. The emphasis areas include the type of crash, focused locations, and notable relationships between current efforts and crash history. The SAP analyzes crash data on an aggregate basis as well as at specific locations to identify high-crash locations, high-risk locations, and city-wide trends and patterns. The analysis of crash history throughout the City's transportation network allows for the following opportunities:

- Identify factors in the transportation network that inhibit safety for all roadway users,
- Improve safety at specific high-crash locations, and
- Develop safety measures using the four E's of safety (Engineering, Enforcement, Education, and Emergency Response) to encourage safer driver behavior and better severity outcomes.

The City of Indian Wells has taken steps to enhance all modal safety throughout the City and with this SAP, Indian Wells is continuing to prioritize safety in its planning process. The California Office of Traffic Safety most recently ranked Indian Wells rank 67 of 76 peer cities for total fatal and injured crashes after normalizing for population and Vehicle Miles Travelled (VMT) in 2021. With number one in the OTS crash rankings considered the highest, or "worst," this indicates that Indian Wells is better performing than its peer cities in the state for limiting injuries on City roadways.

Based on the University of California Berkeley's Transportation Injury Mapping System (TIMS) and the California Department of Transportation (Caltrans) Vehicles Operation Cost Parameters, Indian Well's economic losses due to traffic injuries amounted to approximately $48 million from 2018 through 2022. This report identifies factors associated with the most vehicle crashes particular to the City and proposes matching countermeasures to reduce or eliminate those crashes.

The intent of the Safety Action Plan is to:



2. Leadership Commitment and Goal Setting

The Indian Wells' Safety Action Plan (SAP) evaluates the transportation network as well as non-infrastructure programs and policies within the city. Mitigation measures are evaluated using criteria to analyze the safety of road users (drivers, bicyclists, and pedestrians), the interaction of modes the influences on the roadway network from adjacent municipalities, and the potential benefits of safety countermeasures. Through analysis of historical data and trends, community outreach and input, and proactive identification, safety opportunities can be identified and implemented without relying solely on a reaction and response to crashes as they occur.

As cities across the county have implemented SAP and systemically addressed the conditions leading to serious injuries and fatal crashes. SAP provide a locally developed and customized approach to directly address the most significant safety risks in the given jurisdiction. This plan's vision, goals, and objective have been established to reflect discussions with Indian Wells' staff, various stakeholders identified by City staff, input from community members, and a review of existing plans/ policies in the area. This plan also supports the goal of zero fatalities from traffic collisions by 2050, which is consistent with Caltrans and SCAG's Vision Zero goals.

GOAL

To enhance the transportation network for all users to move towards a goal of zero traffic fatalities and serious injuries.

Goal #1: Identify areas with a high risk for crashes

Objectives:

- Evaluate the City's roadway network for crash activity
- Idenitfy intersections and segments in need of mitigation
- Identify areas of interest with respects to safety concerns for pedestrians and bicycles

Goal #2: Illustrate the value of a safety action plan and the systemic process

Objectives:

- Demonstrate the systemic process' ability to identify locations with higher risk for crashes based on present characteristics closely associated with severe crashes.
- Demonstrate, through the systemic process, the gap and data collection activities that can be improved upon.
- Demonstrate a safety toolbox and strategies to better align with current best practices, and where there are opportunities for new initiatives that would likely support safer roads and better driving behaviors.

Objectives:

- Identify safety countermeasures for specific locations (selected project locations)
- Identify safety countermeasures that can be applied city-wide

Goal #3: Define safety improvements for the near-, mid- and long-term, including projects for HSIP, SS4A and other program funding consideration

Objectives:

- Create the outline for a prioritization process that can be used in this and forth-coming cycles
- Use the systemic process to create Project Case Study sheets
- Use Project Case Study sheets to apply for upcoming HSIP funding consideration
- Demonstrate the correlation between the proposed safety countermeasures with the Vision Zero Initiative and the California State Highway Safety Plan.

Goal #4: Identify emphasis areas to prioritize countermeasure application

Objectives:

- Use systemic crash analysis to identify emphasis areas.
- Prioritize emphasis areas for countermeasure development.
- Align emphasis areas with City goals & objectives.
- Align emphasis areas with current City areas of concern.

Goal #5: Proposed List of Targeted Safety Investigation for Implementation of Countermeasures

Objectives:

- Identify targeted safety investigation for implementation.
- Identify systemic issues where countermeasures can be implemented
- Prioritize these countermeasures for implementation based on cost, effort, and timeline

3. Planning Structure

Stakeholder and public workshops

Through the development and implementation of this Safety Action Plan, the City will continue its collaboration with safety partners to identify and discuss safety issues within the community.

Guidance on the Safety Action Plan process is provided at both the national (FHWA) and state (Caltrans) level, and both agencies have developed a general framework of data and recommendations for a Safety Plan.

FHWA encourages the following:

- The establishment of a working group (stakeholders/public) to participate in developing a Safety Action Plan;
- A review of crash, traffic, and roadway data to identify areas of concerns; and,
- The identification of goals, priorities, and countermeasures to recommend improvements at spot locations, systemically, and comprehensively.

Caltrans guidance follows a similar outline with the following steps:

- Establish leadership
- Analyze the safety data;
- Determine emphasis areas;
- Identify strategies;
- Prioritize and incorporate strategies; and,
- Evaluate and update the Safety Plan.

3.1 Guiding Manuals

This section describes the analysis process undertaken to evaluate safety within Indian Wells at a systemic level. This report identifies specific locations within the City that will benefit from safety enhancements and services crash risk factors based on historic crash data using a network screening process. The outcome will inform the identification and prioritization of engineering and non-infrastructure safety measures by addressing certain roadway characteristics and related driving behaviors contributing to crashes. This process uses the latest national and state best practices for statistical roadway analysis described.

3.1.1 Local Roadway Safety Manual

The Local Roadway Safety Manual: A Manual for California's Local Road Owners (Version 1.6, April 2022) encourages local agencies to pursue a proactive approach when identifying and analyzing safety issues and preparing to compete for project funding opportunities. A proactive approach is the analyzation of safety in an entire roadway network through either a one-time network wide analysis or a routine analysis of the roadway network.[1]

According to the Local Roadway Safety Manual (LRSM), "the California Department of Transportation (Caltrans) – Division of Local Assistance is responsible for administering California's federal safety funding intended for local safety improvements."

To provide the most beneficial and competitive funding approach, the analysis leading to countermeasure selection should focus on both intersections and roadway segments and maintain consideration of roadway characteristics and traffic volumes. The result should reflect a list of locations that are most likely to benefit from cost-effective countermeasures, preferably prioritized by benefit/cost ratio. The manual suggests using a mixture of quantitative and qualitative measures to identify and rank locations using both crash frequency and crash rates. These findings should then be screened for crash type and severity patterns to determine the cause of crashes and the potential effective countermeasures. Qualitative analysis should include field visits and a review of existing roadway characteristics and devices. The specific roadway context can then be used to assess conditions that may decrease safety at the site and at systematic levels.

[1] Local Roadway Safety Manual (Version 1.6) 2022. Page 5.

Countermeasure selection should be supported using Crash Modification Factors (CMFs). These factors are a peer reviewed product of research quantifying the expected rate of crash reduction expected from a given countermeasure. If more than one countermeasure is under consideration, the LRSM provides guidance on appropriate application of CMFs.

3.1.2 Safe System Approach

The SS4A grant is guided by the Safe System Approach, which involves another perspective on infrastructure, human behavior, responsible oversight of the vehicle and transportation industry, and emergency response shifting from a conventional safety approach to focus on both human mistakes and human vulnerability. A Safe System Approach incorporates the following principles:

- Death and Serious Injuries are Unacceptable
- Humans Make Mistakes
- Humans are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial



Source: Federal Highway Safety Administration

3.1.3 Highway Safety Manual

The American Association of State Highway and Transportation Officials (AASHTO) Highway Safety Manual (HSM), published in 2010, presents a variety of methods for quantitatively estimating crash frequency or severity at a variety of locations. [2] This four-part manual is divided into the following parts: A) Introduction, Human Factors, and Fundamentals,B) Roadway Safety Management Process, C) Predictive Method, D) Crash Modification Factors.

In Chapter 4 of Part B in the HSM, the "Network Screening Process" is a tool for an agency to analyze the entire network and identify/rank locations that are most likely or least likely to realize a reduction in the frequency of crashes.

The HSM identifies five steps in this process: [3]

1. Establish Focus: Identify the purpose or intended outcome of the network screening analysis. This decision will influence data needs, the selection of performance measures and the screening method that can be applied.
2. Identify Network and Establish Reference Populations: Specify the types of sites or facilities being screened (i.e., segments, intersections, geometrics) and identify groupings of similar sites or facilities.
3. Select Performance Measures: There are a variety of performance measures available to evaluate the potential to reduce crash frequency at a site. In this step, the performance measure is selected as a function of the screening focus and the data and analytical tools available.
4. Select Screening Method: There are three principal screening methods described in this chapter (i.e., ranking, sliding window, peak searching). Each method has advantages and disadvantages; the most appropriate method for a given situation should be selected.
5. Screen and Evaluate Results: The final step in the process is to conduct the screening and analysis and evaluate the results.

The HSM provides several statistical methods for screening roadway networks and identifying high risk locations based on overall crash histories. The HSM identifies five steps in this process.

1 Local Roadway Safety Manual (Version 1.5) 2020. Page 5
2 AASHTO, Highway Safety Manual, 2010, Washington D.C., http://www.highwaysafetymanual.org/Pages/About.aspx.
3 AASHTO. Highway Safety Manual. 2010. Washington, DC. Page 4-2.

3.2 Analysis Techniques

3.2.1 Crash and Network Screening Analysis

Intersections and roadways were analyzed using four collision metrics:

- Number of Collisions
- Critical Crash Rate (HSM Ch. 4)
- Probability of Specific Crash Types Exceeding Threshold Proportion (HSM Ch. 4)
- Equivalent Property Damage Only (HSM Ch. 4)

The initial steps of the crash analysis established sub-populations of roadway segments and intersections that have similar characteristics. For this study, intersections were grouped by their control type (Signalized, or Unsignalized) and segments by their roadway category (Other Principal Arterial, Minor Arterial, Collector, or Local Streets). Individual crash rates were calculated for each sub-population. The population level crash rates were then used to assess whether a specific location has more or fewer crashes than expected. These sub-populations were also used to determine typical crash patterns to help identify locations where unusual numbers of specific crash types are seen

The network screening process ranks intersections and roadway segments by the number of crashes that occurred at each one over the analysis period, and then identifies areas that had more of a given type of crash than would be expected for that type of location. These crash type factors were 1) crash injury (fatal, serious injury, other visible injury, complaint of pain, property damage only), 2) crash type (broadside, rear-end, sideswipe, head-on, hit object, overturned, bicycle, pedestrian, other), 3) environmental factors (lighting, wet roads), 4) driver behavior (aggressive), and 5) driver impairment. With these additional factors, the locations were further analyzed and assigned a new rank.

From the results of the network screening analyses, a short-list of locations was chosen based on crash activity, crash severity, crash patterns, location type, and area of the City of Indian Wells to provide the greatest variety of locations covering the widest range of safety opportunities for safety toolbox development. The intent is to populate the safety toolbox with mitigation measures that will be applicable to most of the crash activity in the city. As a result, seven locations have been selected for mitigation analysis.

3.2.2 Statistical Performance Measures

Critical Crash Rate (CCR)

Analyzing the number of collisions at a location is a method used to understand the cost to society incurred at the local level; however, it does not give a complete indication of the level of risk for those who use that intersection or roadway segment daily. The HSM describes the Critical Crash Rate method, which provides a statistical review of locations to determine where risk is higher than that experienced by other similar locations. It is also the first step in analyzing patterns that may suggest systemic issues that can be addressed at that location, and proactively at others to prevent new safety challenges from emerging.

The CCR compares the observed crash rate to the expected crash rate at a location based on facility type and volume using a locally calculated average crash rate for the specific type of intersection or roadway segment being analyzed. Based on traffic volumes and a weighted citywide crash rate for each facility type, a critical crash rate threshold is established at the 95% confidence level to determine locations with higher crash rates that are unlikely to be random. The threshold is calculated for each location individually based on traffic volume and the crash profile of similar facilities.

[3] Local Roadway Safety Manual (Version 1.6) 2020. Page 5

Figure 1: Critical Crash Rate Formula

$$R_{c,i} = R_a + \left[P \times \sqrt{\frac{R_a}{MEV_i}}\right] + \left[\frac{1}{(2 \times (MEV_i))}\right]$$

Where,

Rc,i = Critical crash rate for intersection i

R_a=Weighted average crash rate for reference population

P = P-value for corresponding confidence level

MEV_i = Million entering vehicles for intersection i

Source: Highway Safety Manual

Data Needs

CCR can be calculated using:

- Daily entering volume for intersections or ADT for roadway segments;
- Intersection control types to separate them into like populations;
- Roadway functional classification to separate them into like populations; and,
- Collision records in Geographic Information System (GIS) or tabular form including coordinates or linear measures.

Strengths

- Reduces low volume exaggeration;
- Considers variance; and,
- Establishes comparison threshold.

CCR Methodology

The process of analyzing the CCR and comparing locations (separately by intersections and segments) is a multi-step process. The following is a high-level description of the process undertaken to develop the initial analysis.

The first step in the process was to establish a city-wide crash rate for each facility population. These populations are broken into two categories with sub-categories:

- Intersection:
  - Signalized
  - Non-signalized
- Roadway Classification:
  - Other Principal Arterial
  - Collector
  - Minor Arterial
  - Local

The individual crash rate for each location was then calculated based on the associated traffic volume. This volume was either collected through data count resources or calculated based on the roadway classification. The next step was to establish a Significance Threshold. This Threshold was used to determine what level of exceedance (how much the crash rate exceeded the critical crash rate) a location must have based on traffic volume to provide a high level of confidence that the collision occurring at the location is not random. For this study, a confidence level of 95% was used. The local crash rates were then compared to the Significance Threshold to see if each location exceeded the expected CCR and if so, by how much. After this analysis was completed, the locations were analyzed by their categories according to that level of exceedance.

Equivalent Property Damage Only (EPDO)

The equivalent property damage only (EPDO) method is described in the Highway Safety Manual. This method assigns weighting factors to crashes based on injury level (severe, injury, property damage only) to develop a property damage only score. In this analysis, the injury crash costs were calculated for each location (based on the latest Caltrans injury costs). This figure is then divided by the injury cost for a property damage only crash. The resulting number is the equivalent number of property damage only crashes at each site. This figure allows all locations to be compared based on injury crash costs. (Highway Safety Manual, Chapter 4).

Probability

The Highway Safety Manual describes the methodology for determining the probability that crash type is greater than an identified threshold proportion. This helps to identify locations where a crash type is more likely to occur.

Data Needs

The probability of a specific crash type can be determined using crashes records with location data, and classifications of the locations (intersections or segments) studied.

Strengths

- Can be used as a diagnostic tool.
- Considers variance in data.
- Not affected by selection bias.

The HSM methodology first determines the frequency of a specific crash type at an individual location, then determines the observed proportion of that crash type relative to all crash types at that location. A threshold proportion is then determined for the specific crash type; HSM suggests utilizing the proportion of the crash type observed in the entire reference population (e.g. throughout the entire City of Indian Wells).

These proportions are then utilized to determine the probability that the proportion of a specific crash type is greater than the long-term expected proportion of that crash type.

Figure 2: Probability of Specific Crash types Exceeding Threshold Proportion

$$P\left(p_i > \overline{p^*_i} \,/\, N_{observed,i}, N_{observed,i(TOTAL)}\right) = 1 - betadist\left(\overline{p^*_i}, \alpha + N_{observed,i}, \beta + N_{observed,i(TOTAL)} - N_{observed,i}\right)$$

Where:

$\overline{p^*_i}$ = Threshold proportion

p_i = Observed proportion

$N_{observed,i}$ = Observed target crashes for a site i

$N_{observed,i(TOTAL)}$ = Total number of crashes for a site i

Source: Highway Safety Manual

4. Safety Analysis

4.1 Roadway Network

The City's roadway database was used to build the base roadway network used for this analysis, and functional classifications were taken from the City's General Plan. Traffic volumes and signal locations were provided by the city and were included in the analysis network. Intersections and roadway segments were divided into control and classification categories so that each set could have its own crash rates and be evaluated against similar facilities. **Figure 3** illustrates Indian Wells' roadway network and intersections as classified for this study.

4.2 Intersections

The crash analysis requires each intersection be classified by type: Signalized or Unsignalized. The safety analysis compares intersection safety performance to locations with similar control types. This information is also displayed in **Figure 3.**

4.3 Count Data

Vehicular count data is used as part of the analysis process to evaluate the impact of traffic and understand the natural hierarchy of the roadway network. Count data utilized for this project was pulled from the 2022 Engineering & Traffic Survey. For locations without volume or count data, reasonable assumptions were made based on classification types. The traffic volume information allowed the team to assess locations for risk to a given roadway user as well as reviewing locations with the highest number of crashes.

4.4 Crash Data

Crash data was collected from Crossroads Software for the period from January 1, 2018 through December 31, 2022. Five years of data are utilized instead of the standard three years to provide more history to evaluate trends or patterns. Provisional data from 2023 was also collected and analyzed qualitatively as part of the analysis. Analysis of the raw crash data is the first step in understanding the specific and systemic challenges faced throughout the City. Analyzing the five years of data provided insight on the following crash trends and patterns. All crashes analyzed in the study period are shown **Figure 4.** The locations of fatal and severe injury crashes are displayed in **Figure 5.**

Figure 3: Functional Classification & Signalized Intersection

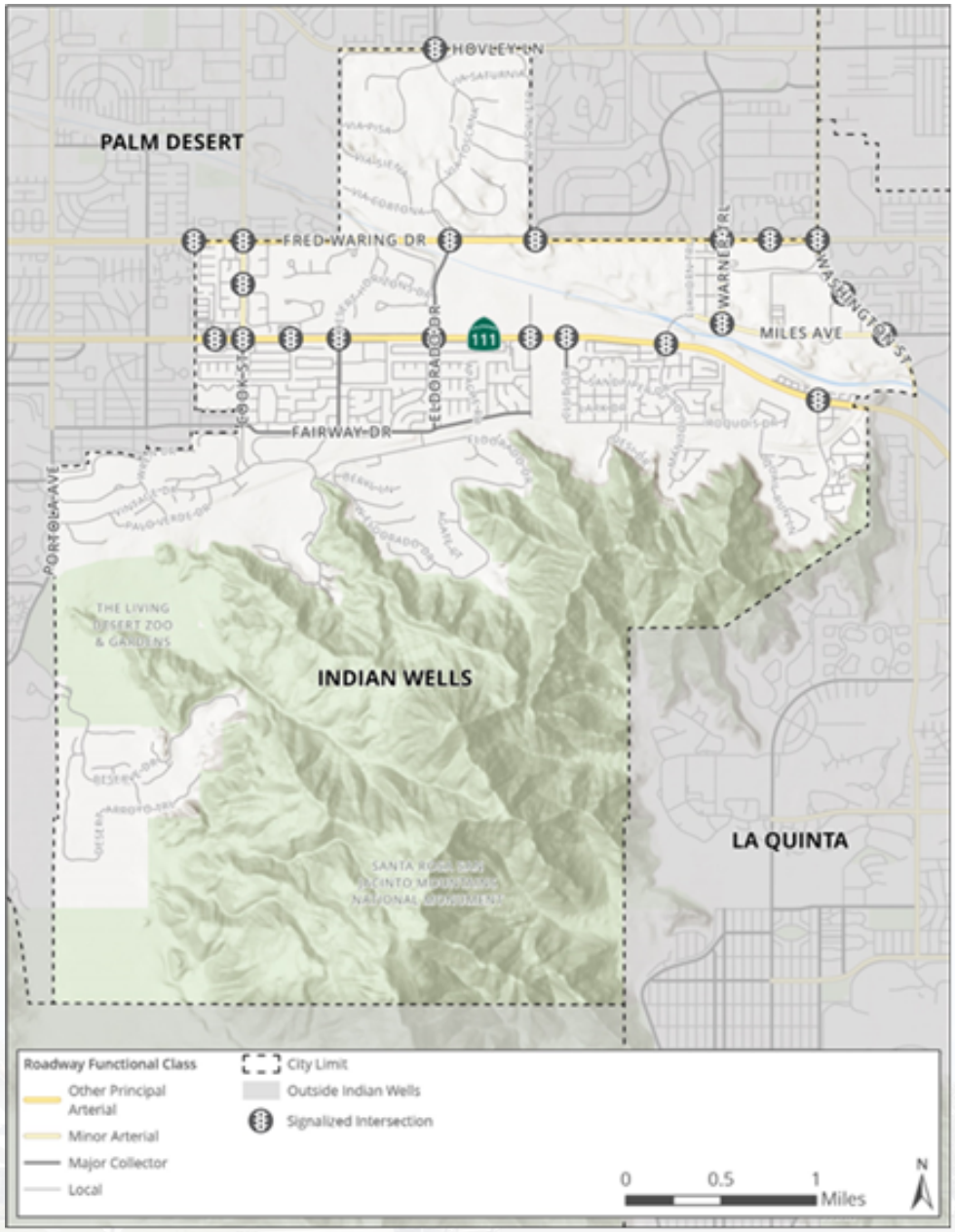


Figure 4: All Crashes (2018-2022)

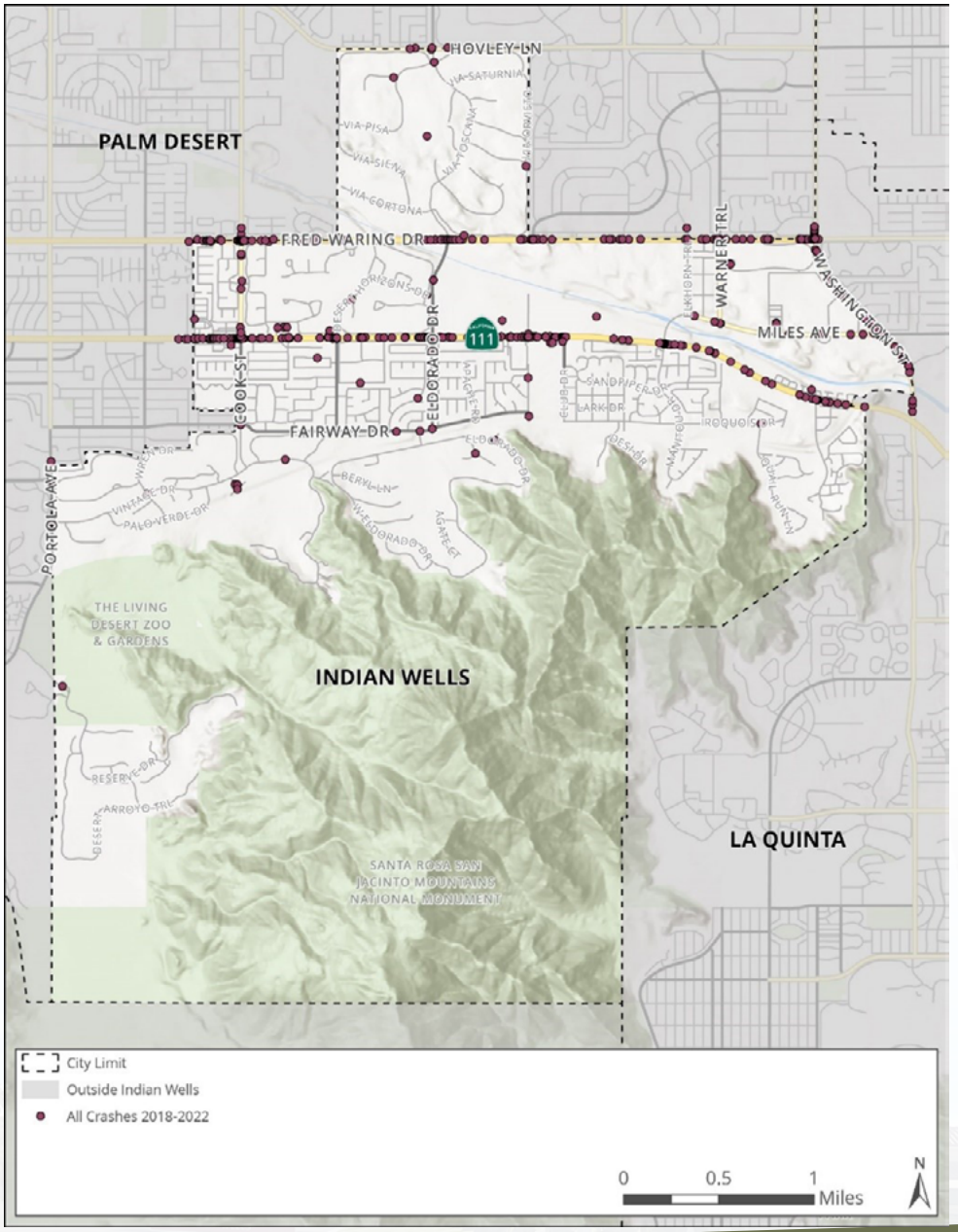
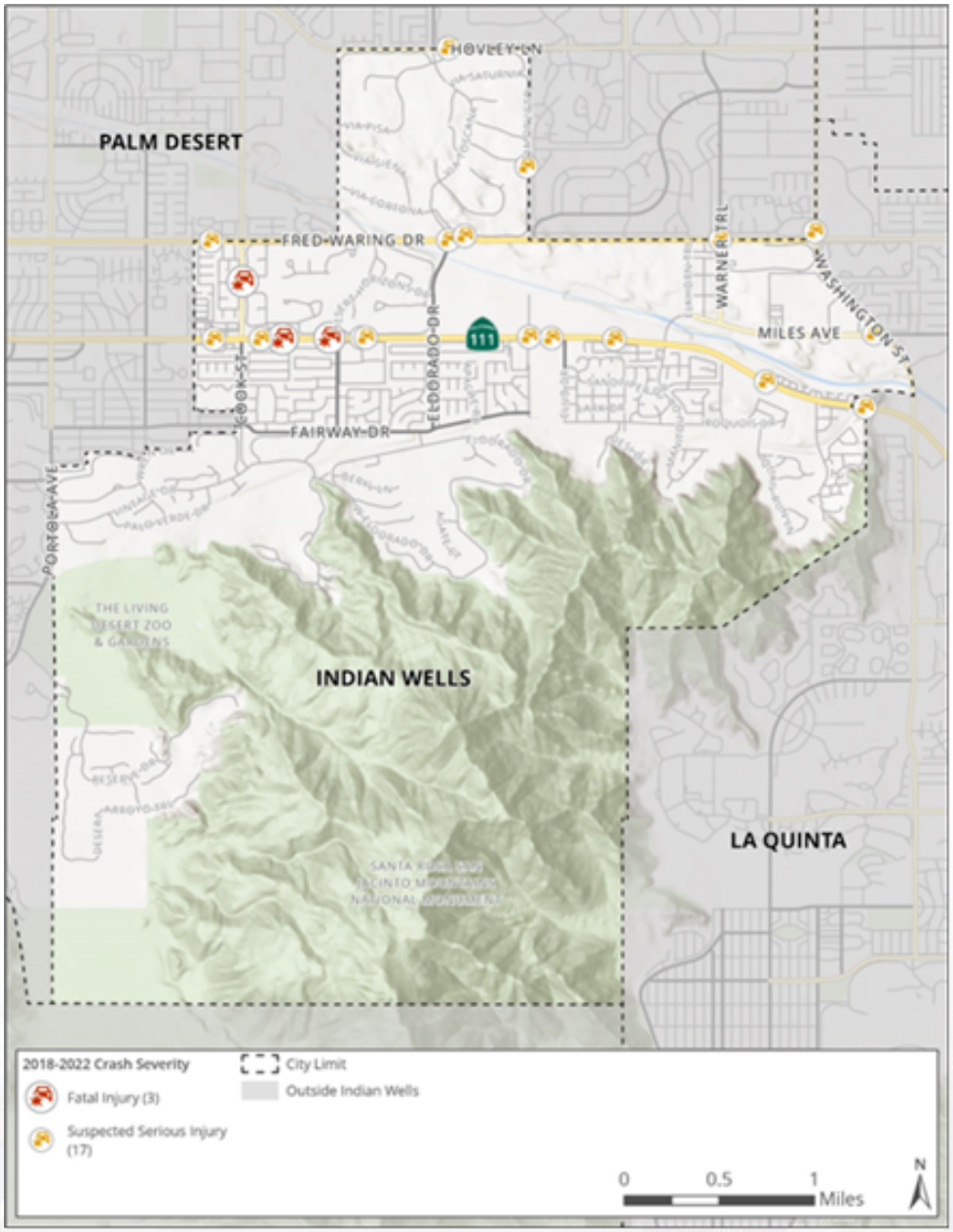


Figure 5: Fatal & Severe Injury Crashes (2018-2022)



5. Crash Safety Trends

The following section breaks down the crash data by a variety of input factors and user types. This information will be used to highlight areas of concern for the City.

5.1 All Crashes

This report utilized crash data for a five-year period to provide a better understanding of trends and to reflect the patterns in crashes that have occurred on City streets. Data used for this report were extracted from Crossroads Software analytics on October 27, 2023 and was current as of that date. Crash data from January 1, 2018, through December 31, 2022, as reported to Crossroads from the local enforcement, indicated that during this time there were **466** crashes recorded within Indian Wells. In addition, 95 crashes have occurred in Indian Wells from January 1st, 2023 to October 27th, 2023.

During the study period, the most common occurring crash types were Rear-Ends (51%) and Hit Object (16%). The total number of crashes gradually increased in the first half of the study period before decreasing in the second half. **Figure 6** shows the crash types by year. Thus far in 2023, the top crash types have been Rear-Ends (44%) and Sideswipes (23%).

Figure 7 shows the injury crashes over the study period, during which injury crashes mirrored the decrease from 2018-2020 and increase from 2020 to 2022 present in **Figure 6.**

Figure 6: Crashes Type by Year (2018-2022)

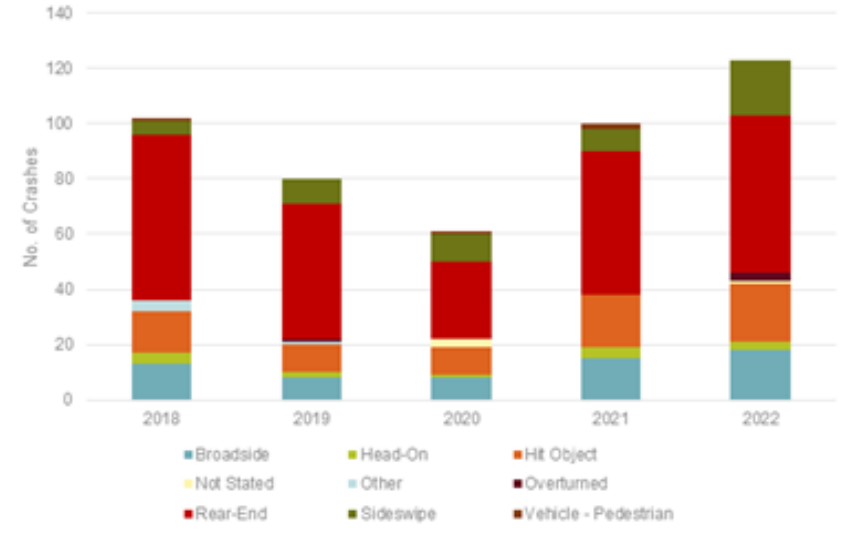
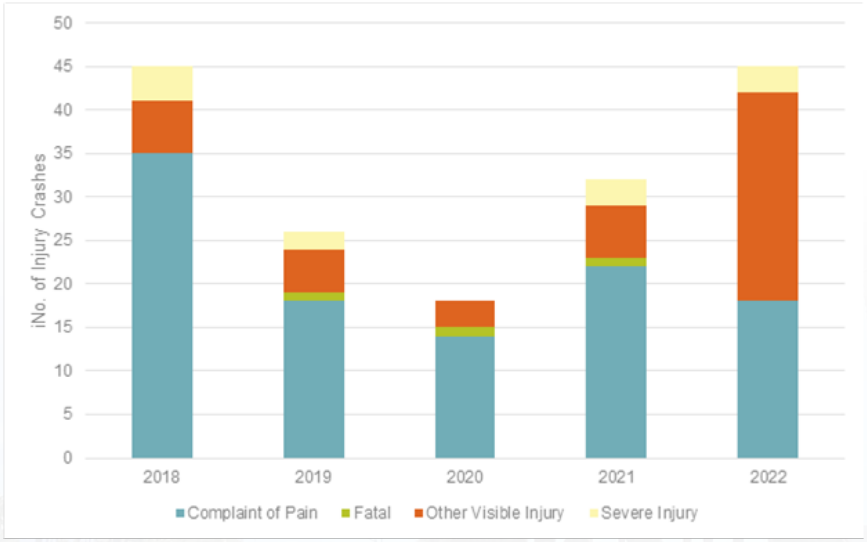


Figure 7: Injury Crashes (2018-2022)



5.2 Fatalities & Severe Injuries

During the study period, 3 fatal crashes and 12 severe injury crashes occurred as seen in **Figure 8. Table 1** outlines the fatal and severe injury crashes categorized by modes involved. In 2023, there have been one severe injury and no fatalities.

Figure 8: Fatal and Severe Injury Crashes (2018-2022)

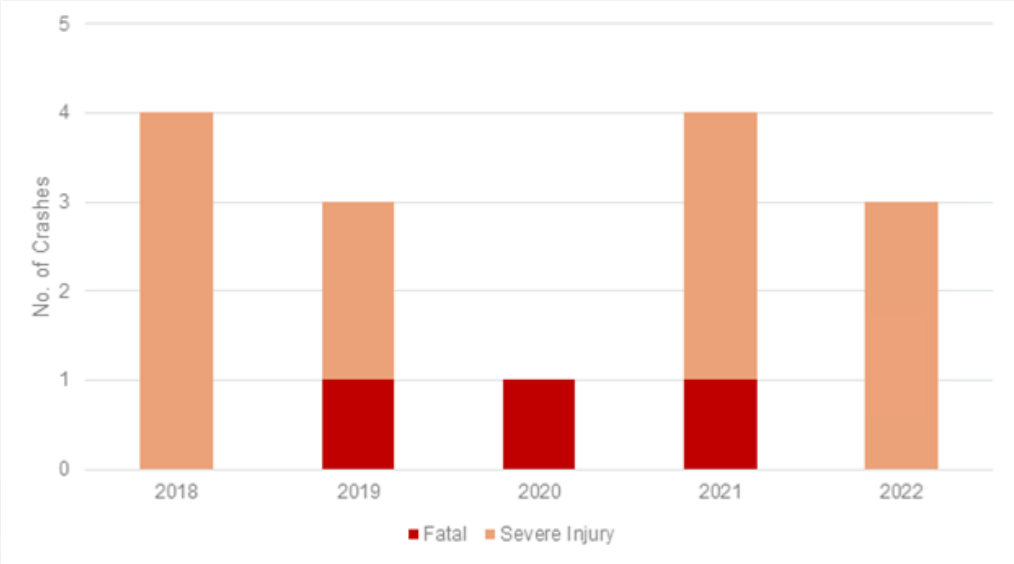


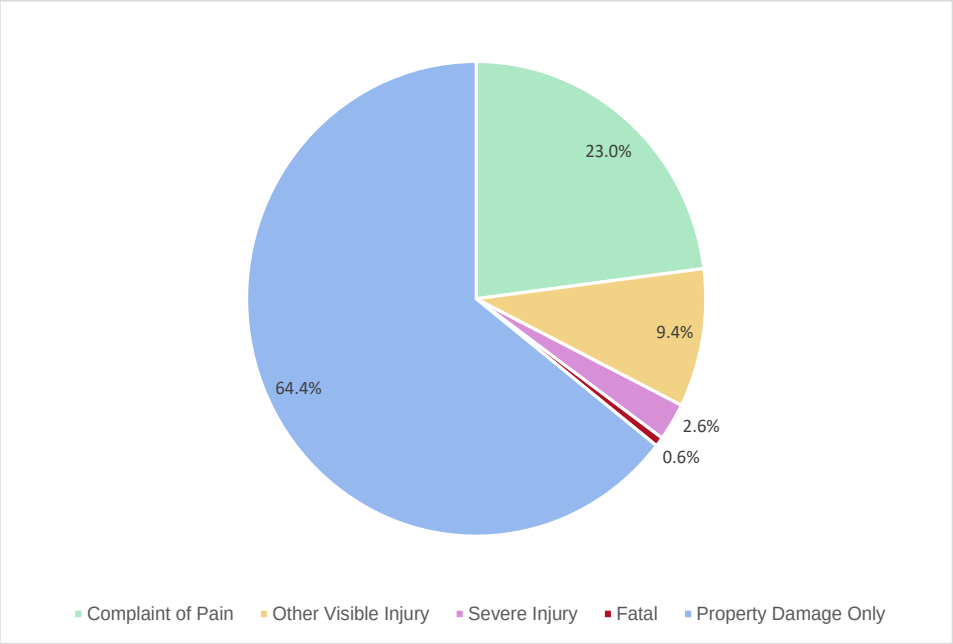
Table 1: Fatal Crashes Categorized by Modes Involved (2018-2022)

Involved with	# of Severe Injury Crashes	# of Fatal Crashes
Bicycle	1	0
Fixed Object	4	0
Other Motor Vehicle	3	0
Pedestrian	2	2
Other Object	1	0
Parked Motor Vehicle	1	1
Total	**12**	**3**

5.3 Injury Levels

64.4% of the crashes reported during the time-period resulted in property damage only. Fatalities and severe injuries totaled 3.2% of all crashes. Injuries of all types made up 35.6% of crashes.

Figure 9: Crashes by Injury Levels (2018-2022)



5.4 Cause of Crashes

The highest recorded cause of crashes in Indian Wells during this time period is Unsafe Speed at 41.6%, followed by Unsafe Lane Change at 8.8%% and Driving Under Influence at 8.6%. Thus far in 2023, the primary collision factors have been Unsafe Speed (26%) and Improper turning (12%).

Table 2: Crashes of Crashes (2018-2022)

Primary Crash Factor	No. of Crashes	%
Unsafe Speed	**231**	**41.55%**
Unsafe Lane Change	49	8.81%
Driving Under the Influence	48	8.63%
Improper Turning	47	8.45%
Traffic Signals and Signs	41	7.37%
Other Improper Driving	33	5.94%
Auto R/W Violation	23	4.14%
Unsafe Starting or Backing	19	3.42%
Not Stated	15	2.70%
Following Too Closely	11	1.98%
Other Hazardous Movement	11	1.98%
Unknown	10	1.80%
Other Than Driver	8	1.44%
Improper Passing	3	0.54%
Pedestrian Violation	3	0.54%
Wrong Side of Road	2	0.36%
Impeding Traffic	1	0.18%
Other Equipment	1	0.18%
Grand Total	556	100.00%

5.5 Vulnerable Users

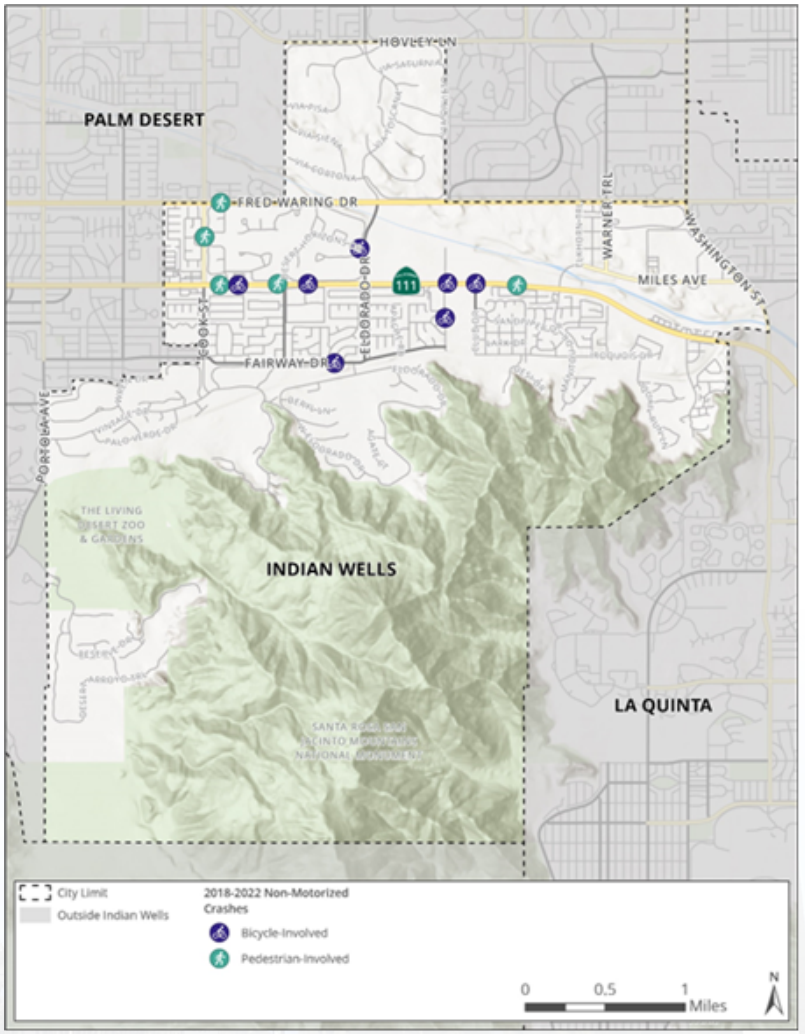
5.5.1 Pedestrians

4 pedestrian involved crashes occurred during the study period, resulting in 2 fatal crashes, 2 severe injuries, and no crashes with some form of reported injury or pain or property damage only. **Figure 10** shows the locations of pedestrian crashes during the study period. No pedestrian crashes have occurred in 2023.

5.5.2 Bicycle

During the study period, 4 crashes involving bicycles were reported. Of these, none were fatal, 1 resulted in severe injuries, 3 resulted in some form of reported injury or pain, and no crashes resulted in Property Damage Only. **Figure 10** shows the location of bicycle crashes during the study period. No bicycle crashes have occurred in 2023.

Figure 10: Crashes of Crashes (2018-2022)



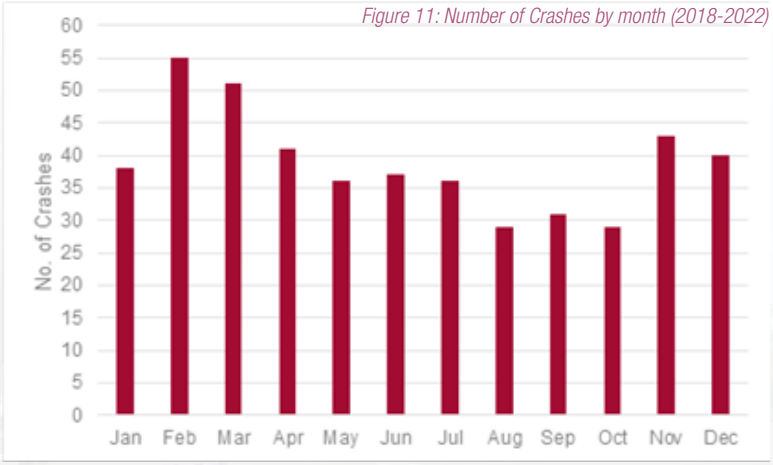
5.6 Time of Day

Crashes in Indian Wells occurred more in the PM hours versus the AM hours, with 62.7% of crashes occurred in the PM hours, and 37.3% occurred in the AM hours. There is peak period of crash activity was from 8am to 5pm. A significant number of crashes also occurred in the nighttime hours. 34.6% of crashes occurred at night or during the dusk/ dawn hours. 4.5% of crashes occurred at night where there were no streetlights.

5.7 Time of Year

The total number of crashes vary by month of year shown in **Figure 11**. The most common month for crashes was February, with 55 crashes between 2018 and 2022. Crashes generally trended downward from February to August. The months with the fewest number of crashes were August and October, both with 29 total crashes between 2018 and 2022.

Figure 11: Number of Crashes by month (2018-2022)



5.8 Driving Behaviors

Aggressive driving and impaired driving are two important behavioral factors that often significantly contribute to crash patterns. These areas are studied in the analysis. Caltrans defines aggressive driving as behaviors that include speeding, tailgating, and running stop signs or red lights. These behaviors contributed to 60.5% of the crashes in Indian Wells during the study period (2018-2022). These behaviors contributed to 48% of crashes that occurred in 2023 thus far.

Impaired driving is defined by Caltrans as any instance where a driver, pedestrian, bicyclists, or motorcyclist is under the influence of alcohol, illicit drugs, or prescribed or over-the-counter medication. 12% of the crashes in Indian Wells during the study period (2018-2022) occurred where the driver had been drinking. 8% of the crashes in Indian Wells during the study period were directly related to impairment. Thus far in 2023, 9% of crashes were directly related to impairment.

5.9 Driver Age

Two groups of drivers typically have a higher impact on the number of crashes. Aging Drivers (age 65 and up) and Young Drivers (ages 16-25) are more often found at fault for crashes they are involved in. The crash data for 2018-2022 period indicated that 18% of the crashes within Indian Wells involved Seasoned/Mature Drivers and 26% involved Young Drivers. These percentages are like those seen statewide.

5.10 Statewide Comparison

A comparison of fatal & severe injury crash data to the State averages were conducted for data from 2018-2022 (the most recent statewide data available). These numbers may vary slightly from those mentioned previously, due to the differences in the years of the study period. The following are areas where Indian Wells' crash rates are higher or lower than those of the State. These numbers specifically compare the proportion of fatal and serious injury crashes that have the characteristics listed in **Table 3.**

Table 3: Comparison of Statewide and Indian Wells Fatal (F) & Severe Injury (SI) Crashes (2010-2019)

Challenge Areas	Statewide	Indian Wells	% Point Difference
	% of F+SI Crashes (2010-2019)	% of F+SI Crashes (2010-2019)	
Bicyclists	49	8.81%	19.0%
Aggressive Driving	48	8.63%	16.9%
Impaired Driving	47	8.45%	15.6%
Distracted Driving	41	7.37%	4.1%
Motorcyclists	33	5.94%	1.7%
Occupant Protection	23	4.14%	-0.6%
Work Zones	19	3.42%	-1.4%
Commercial Vehicles	15	2.70%	-1.8%
Aging Drivers	11	1.98%	-3.3%
Young Drivers	11	1.98%	-4.0%
Lane Departure	10	1.80%	-6.9%
Intersections	8	1.44%	-10.0%
Pedestrians	3	0.54%	-10.1%

5.11 Crash Network Screening Analysis Results

Figure 12 below shows the results of the crash network screening analysis, with the number of crashes at both intersection and mid-block roadway segments. A crash network screening analysis was conducted to identify locations where concentration of serious crashes and fatal crashes occur.

Figure 12: Crash Network Screening Analysis Results (2018-2022)

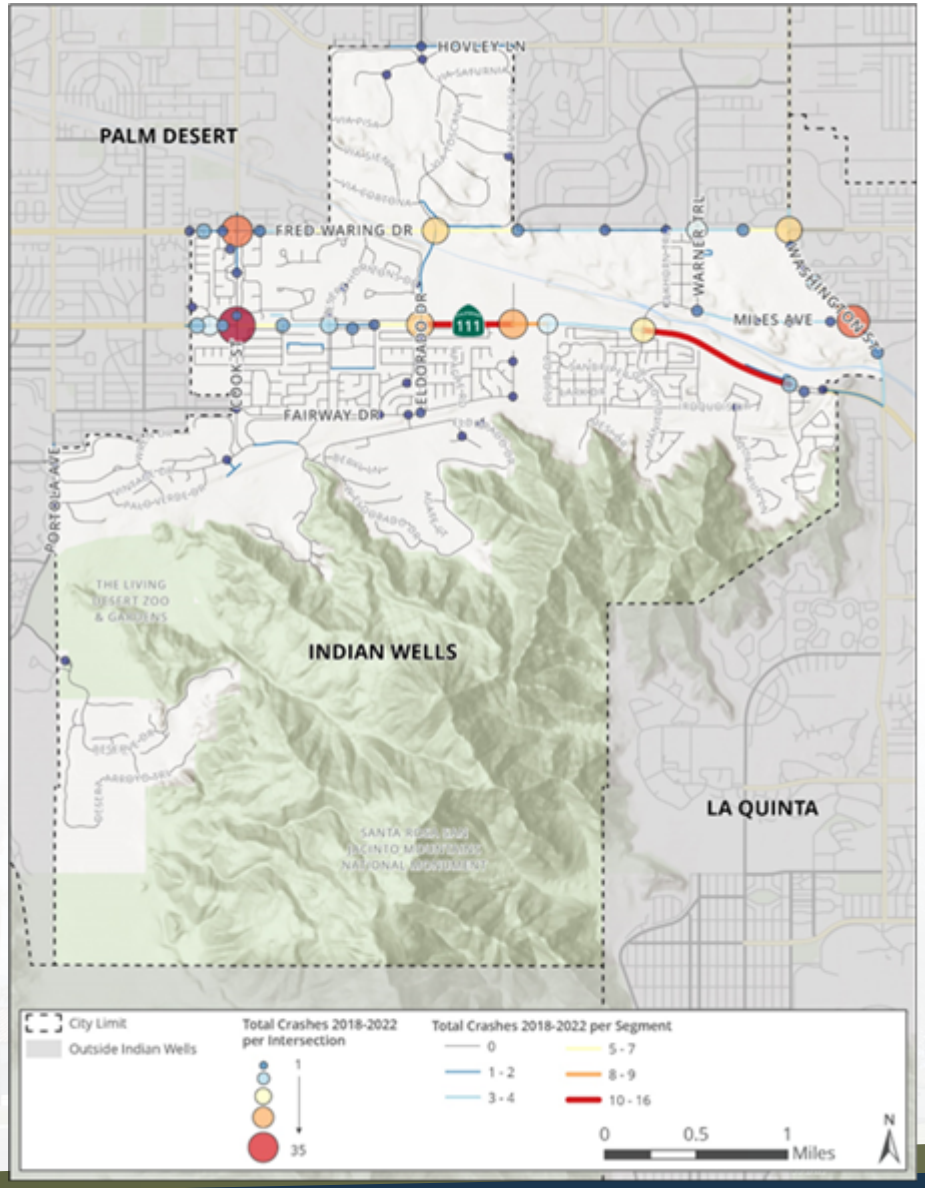


Table 4 and **Table 5** show the number of crashes occurring at locations in Indian Wells by crash type for the locations that will be studied further in the Report, and highlights locations in which the probability of those crash types exceeding the threshold proportion is greater than 33%.

The tables are ordered by the number of crashes that occurred at that segment or intersection. In order to be statistically significant, only locations where more than two crashes occurred are represented. At locations with two or less crashes, random chance can account for crash history as much or more than specific roadway characteristics.

The tables are separated into sub-sections visible by the yellow gradient. The first two columns, Crashes and CCR, represent the level of crash activity in absolute terms, and as relative to other similar locations, respectively.

Per guidance from the Local Roadway Safety Manual (LRSM) each sub-population of locations was ranked according to the number of crashes. The second column shows the CCR, which highlights whether or not the crash activity was higher or lower than the average for the sub-population based on the individual segment or intersection volume. This volume was either collected through data count resources or calculated based on the roadway classification. All averages used in the CCR calculation were established based on City of Indian Wells crash data to determine what locations might be best to prioritize at the local level. This process highlights locations of crashes that are unusual for the City to determine Indian Wells' challenge areas, and not problems faced by peer cities that do not apply in Indian Wells. The remaining columns total crashes by type, to evaluate each sub-population and understand what proportion of crashes in the City are of a particular type. The citywide proportion was compared with the local intersection or segment specific proportion to determine which locations have more of a given crash type than would be expected when considering the City average. A confidence level of 95% was used for the CCR Calculations. For this study, two categories of ranges were highlighted:

- Light Gray: >50% probability that this crash type is over-represented on this segment/intersection as compared to other characteristically similar locations within the City of Indian Wells. Although these locations have a slightly higher probability of this crash type than their counterparts, they are not necessarily highly significant.
- Dark Gray: >75% probability that this crash type is over-represented on this segment/intersection as compared to other characteristically similar locations within the City of Indian Wells. These locations are highly significant in regard to the number of crashes occurring here and should be further investigated.

After this analysis was completed, the locations were ranked against other similar locations within the City by their categories according to the expected proportion of that crash type within Indian Wells. Locations with higher than expected crashes of that type were identified by the probability that random chance would not account for exceedances.

Additionally, it should be noted that the columns for Crash Severity, Type, Involved With, and Behavior are additional characteristics of the crashes and should not be counted as a separate crash.

Table 4: Crash Analysis Results– Intersections

Unsafe Speed	Crashes	Local CCR Differential[1]	EPDO[2]	Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overturned	Other	Pedestrian	Bicycle	Aggressive	Distracted	Impaired	Dark	Wet
Signalized Intersections																						
Highway 111 & Cook St	35	0.1	119	0	0	5	7	23	4	3	22	2	1	0	2	0	0	24	3	5	0	0
Washington St & Miles Ave	29	0.1	252	0	1	3	6	19	5	4	18	0	2	0	0	0	0	24	2	0	1	0
Fred Waring Dr & Cook St	28	0.0	128	0	0	3	14	11	10	4	13	0	0	0	0	0	0	22	0	0	0	0
Highway 111 & Indian Wells Ln	25	0.1	259	0	1	1	12	11	4	0	17	1	2	0	1	0	1	22	0	1	0	1
Highway 111 & Eldorado Dr	23	-0.1	92	0	0	5	4	14	2	3	14	2	2	0	0	0	0	17	1	2	0	1
Fred Waring Dr & Washington Dr	22	-0.1	251	0	1	1	11	9	5	1	13	1	2	0	0	0	0	17	1	3	0	0
Fred Waring Dr & Eldorado Dr	22	-0.1	235	0	1	3	4	14	6	2	11	1	1	1	0	0	0	15	1	2	1	1
Highway 111 & Miles Ave	20	0.0	69	0	0	3	4	13	5	1	12	1	1	0	0	0	0	17	0	1	0	0
Fred Waring Dr & Warner Trail	15	-0.1	229	0	1	0	10	4	3	2	10	0	0	0	0	0	0	13	1	1	0	0
Highway 111 & Village Center Dr	14	-0.1	198	0	1	0	4	9	1	1	11	0	1	0	0	0	0	12	0	1	0	0
Highway 111 & Club Dr	14	-0.1	44	0	0	2	2	10	1	1	9	0	3	0	0	0	1	9	1	2	1	0
Highway 111 & Rancho Palmeras Dr	11	-0.2	204	1	0	2	2	6	0	0	8	1	1	0	0	1	0	8	1	1	0	1
Highway 111 & Mountain Cove Dr	9	-0.2	29	0	0	0	4	5	1	0	8	0	0	0	0	0	0	9	0	0	0	0
Washington St & Via Sevilla	9	-0.2	44	0	0	1	5	3	1	1	6	1	0	0	0	0	0	7	1	0	0	1
Highway 111 & Province Way	7	-0.2	191	1	0	1	2	3	2	0	5	0	0	0	0	0	0	6	0	1	0	0
Fred Waring Dr & California Dr	5	-0.3	20	0	0	0	3	2	0	0	3	0	2	0	0	0	0	3	1	0	0	0

Unsafe Speed	Crashes	Local CCR Differential[1]	EPDO[2]	Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overturned	Other	Pedestrian	Bicycle	Aggressive	Distracted	Impaired	Dark	Wet
Fred Waring Dr & Ent Las Brisas	5	-0.3	25	0	0	0	4	1	3	0	2	0	0	0	0	0	0	3	0	0	0	0
Warner Trail & Miles Ave	4	-0.1	4	0	0	0	0	4	1	1	0	0	1	0	0	0	0	2	0	0	0	0
Unsignalized Intersections																						
Highway 111 & Village Plaza Entrance/Exit (Private)	9	0.1	49	0	0	1	6	2	7	0	2	0	0	0	0	0	0	2	0	0	0	1
Washington St & Seeley Dr	8	0.1	192	0	1	0	4	3	1	1	5	0	1	0	0	0	0	6	0	1	0	0
Calle del Norte & Avenida Paloma	5	0.1	337	0	2	0	1	2	0	0	3	1	1	0	0	0	1	4	0	0	0	0
Washington St & Seeley Dr	5	0.1	25	0	0	0	4	1	0	2	1	0	2	0	0	0	0	1	0	1	0	0
Highway 111 & Indian Wells Village Entrance/Exit (Private)	5	0.1	20	0	0	1	1	3	0	0	5	0	0	0	0	0	0	3	0	0	0	0
Fred Waring Dr & Via del Christo	4	0.1	24	0	0	1	2	1	0	0	1	0	2	0	0	1	0	1	0	0	1	0
Fred Waring Dr & San Ysidro Cir	3	0.1	13	0	0	0	2	1	0	0	3	0	0	0	0	0	0	3	1	0	0	0
Fred Waring Dr & Yellow Sage Dr	3	0.1	27	0	0	2	1	0	1	0	1	0	1	0	0	0	0	2	0	0	0	0
Highway 111 & Camino Dorado	3	0.1	3	0	0	0	0	3	1	0	2	0	0	0	0	0	0	2	0	0	0	0
Fred Waring Dr & Tennessee Ave	3	0.1	13	0	0	0	2	1	0	0	1	0	2	0	0	0	0	3	0	0	1	0
Vista del Sol & Vista Santa Rosa	3	0.1	13	0	0	0	2	1	0	1	1	0	1	0	0	0	0	2	0	0	1	0
Fred Waring Dr & Substation Access Road (Private)	3	0.07	3	0	0	0	0	3	0	0	0	1	2	0	0	0	0	1	0	0	1	0
Washington St & Southwest Church East Entrance Road (Private)	3	0.07	8	0	0	0	1	2	0	1	1	0	1	0	0	0	0	3	0	0	0	1

1. Local Critical Crash Rate Differential

2. Equivalent Property Damage Only Crashes

Table 5: Crash Analysis Results– Segments

Facility	Limits	Crashes	Local CCR Differential[1]	EPDO[2]	Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overturned	Other	Pedestrian	Bicycle	Aggressive	Distracted	Impaired	Dark	Wet
Pricipal Arterial																							
Hwy 111	Miles Ave to Mt. Cove	16	0.0	194	0	1	1	1	13	0	1	3	1	11	0	0	0	0	9	2	4	3	0
Hwy 111	Eldorado Dr to Indian Wells Ln	15	0.1	35	0	0	1	2	12	0	0	11	0	4	0	0	0	0	12	1	1	0	0
Hwy 111	Indian Wells Ln to Club Dr	9	0.2	188	0	1	0	3	5	0	0	7	0	2	0	0	0	0	6	2	2	1	0
Fred Waring Dr	Eldorado Dr to California Ave	7	-0.1	31	0	0	2	1	4	0	1	4	0	2	0	0	0	0	6	0	1	0	0
Fred Waring Dr	Yellow Sage Dr to Eldorado Dr	6	-0.2	26	0	0	1	2	3	0	2	4	0	0	0	0	0	0	4	1	0	2	1
Hwy 111	Camino Dorado to Eldorado Dr	6	-0.1	16	0	0	1	0	5	0	1	2	1	2	0	0	0	0	4	1	1	0	0
Fred Waring Dr	(PVT) Entrada las Brisas to Washington St	6	0.0	36	0	0	2	2	2	0	1	5	0	0	0	0	0	0	4	0	1	0	0
Hwy 111	Cook St to Province Way	5	-0.2	193	0	1	2	1	1	0	2	2	0	0	0	0	1	0	4	0	0	1	1
Fred Waring Dr	Alaska Ave to Tennessee Ave	4	-0.2	19	0	0	0	3	1	1	0	2	0	1	0	0	0	0	3	0	0	0	0
Hwy 111	Club Dr to Miles Ave	3	-0.3	167	0	1	0	0	2	0	0	1	0	1	0	0	1	0	1	0	0	2	0
Hwy 111	Province Way to Rancho Palmeras Dr	3	-0.3	13	0	0	1	0	2	0	0	2	0	1	0	0	0	0	3	0	0	0	0

Facility	Limits	Crashes	Local CCR Differential[1]	EPDO[2]	Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overturned	Other	Pedestrian	Bicycle	Aggressive	Distracted	Impaired	Dark	Wet
Fred Waring Dr	Via del Christo (Private) to Yellow Sage Dr	3	-0.3	18	0	0	0	3	0	0	1	2	0	0	0	0	0	0	3	0	0	0	0
Fred Waring Dr	Warner Trl to Entrada las Brisas (Private)	3	-0.3	13	0	0	0	2	1	0	0	1	1	1	0	0	0	0	2	0	0	0	0
Fred Waring Dr	Elkhorn Trl to Warner Trl	3	-0.2	8	0	0	0	1	2	0	1	2	0	0	0	0	0	0	3	0	0	0	0
Minor Arterial																							
Washington St	Seeley Dr to Hwy 111	3	-0.2	23	0	0	1	2	0	0	1	1	0	1	0	0	0	0	2	0	0	0	0
Miles Ave	Warner Trl to Washington St	3	-0.1	167	0	1	0	0	2	1	0	2	0	0	0	0	0	0	2	0	0	1	0
Washington St	(PVT) Calle Las Brisas to Fred Waring Dr	3	-0.1	27	0	0	2	1	0	0	2	1	0	0	0	0	0	0	2	0	0	0	0
Local																							
Sands Hotel Parking Lot (Private)	Main Parking Lot	3	-	3	0	0	0	0	3	0	0	2	0	1	0	0	0	0	0	0	1	0	0

1. Local Critical Crash Rate Differential

2. Equivalent Property Damage Only Crashes

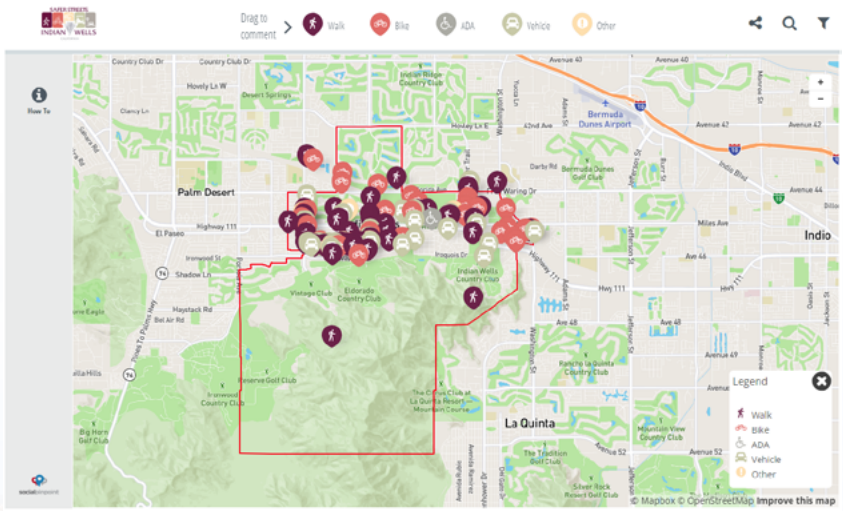
6. Engagement and Collaboration

Members of the public and local agency partners were included in the development of this report to ensure the local perspective was maintained at the forefront of planning efforts. A public agency working group of City Public Works staff and external representatives from the Law enforcement/Police Department, education, public health/ fire department, ADA advocates, Chambers of Commerce, Transit, CVAG, Caltrans District 8, Bicycle advocate, pedestrian advocate, City of Palm Desert, and City of La Quinta.

The members of the public agency partners were called together to offer insight on the safety issues present in the City's transportation network. After the initial network screening and safety analysis, the results were presented to the public in a series of workshops. These workshops helped the project team gain insight into ongoing roadway safety issues in the City and potential solutions. City Public Works, the agency partners, and consultant staff met to discuss potential countermeasures and challenge areas through meetings in the field and in-person. Following these meetings, potential improvements were developed and presented to the public for comment, feedback, and discussion. The public engagement and agency coordination activities are discussed below.

6.1 Public Engagement

Online Engagement



The City of Indian Wells created a Safety Action Plan page on the City's website, which included information about the project, notification about upcoming workshops and events, a project email address, and an interactive mapping activity and survey. The interactive map allowed members of the public to drop pins with categories (walk, bike, ADA, vehicle, and other) on a map and leave comments and concerns about specific locations. The project website also included a survey that asked residents about concerns and priorities in regards to safety. The interactive map and survey were live from February 15, 2024 through March 15, 2024 and the interactive map received 47 comments and the survey received 491 responses. The most common items shared in the map tool and survey included network expansion (bicycle and pedestrian), speed/ congestion, and vulnerable user facilities improvements. Specific commonly reported areas of concern included Highway 111, Cook Street, Fairway Drive, Eldorado Drive, and Warner Trail. The results of the online engagement helped to inform the emphasis areas, project locations, and potential improvements which are identified later in this report. A summary of the online engagement (survey, interactive map, and email) can be found in **Appendix A** of this report.

Interactive Map Results

Bicycle	38%
Walk	38%
Vehicle	17%
Other	4%
ADA	2%

6.2 Public Workshop/Meetings

Two public workshops/meetings were held to help the project team understand public areas of concern, create public awareness of the plan, and keep members of the public informed about the direction of the plan and the City's response to roadway safety issues from input received from the public. All workshops/meetings were advertised before the event on the city's main page, SAP website, and was e-blasted to all residents.

The first public workshop was held on February 7, 2023, at the Indian Wells Golf Resort Celebrity Room. The goal of this workshop was to introduce the project and present the crash analysis through tables, charts, and maps as well as to discuss resident concerns. The main concerns expressed at this workshop included speeding, cut-through traffic, and vulnerable users (pedestrians and bicyclist) safety issues at specific locations.



The second public workshop was held on April 17, 2023, at the City Hall Council Chamber. The purpose of this workshop was to inform the public of the "toolbox" development identified for the project locations. The feedback of the online tool engagement and the Safety Summit was presented. The intent of the meeting was to present the project locations with its crash data, and then demonstrate the potential improvements for the project locations. The toolbox shown to the public was a list of potential options that the city could adopt in the future for the project locations. The toolbox was not meant to be a recommendation that the project location specifically needs to adopt but more as potential options to enhance the safety at the project locations. Potential options presented must go through standard procedure before any implementation takes place. Comments from the in-person interactive activities can be found in **Appendix A** of this report.



6.2.1 Safety Summit

The City held a Safety Summit event on March 20th, 2024 to meet with community members and hear their feedback regarding safety concerns throughout the City of Indian Wells. The event allowed the community members to learn more about existing conditions, equity, potential improvements, policy and programs. The presentation demonstrated a toolbox to show the public what kind of treatments the city can implement which include various facility classification, traffic calming treatments, intersection improvements, roadway improvements, pedestrian signal enhancements., and crossing enhancements. At the end of the presentation, there was an interactive portion to engage attendees to provide feedback on safety improvements using the toolbox presented of what they want to see







in the City. An open forum and an emphasis area topic stations were used to collect feedback from the residents. Six (6) emphasis area topics were placed at different table stations allowing the residents to meet and discuss with their neighbors and a Kimley-Horn/City team member, where they were encourage to provide input about what improvements would best support their day-to-day experiences getting around Indian Wells.

The draft SAP was posted to the City's SAP website for public viewing and comment. Comment was received by the SAP Team at the project email up until the document was finalized on June 7th, 2024 prior to adoption by the City Council.

6.3 Stakeholder Meetings

Two meetings with the stakeholder were held to gain the perspective and expertise of local subject matter experts and to help guide the plan as it was being developed.

The first stakeholder meeting was held on January 29th, 2024. The group was introduced to the project and concerns about safety in Indian Wells were discussed. The stakeholder group then performed a field visit and walking tour of various locations through the City. The group was also asked to report on the potential project locations based upon incident history and provide feedback. The discussions during the field visits and feedback from the stakeholder's comments helped to inform the project development that will be discussed later in the plan.

The second stakeholder meeting was held March 26th, 2024. The purpose of the meeting was to discuss concerns and issues expressed in the public workshops and to review potential improvements, and online interactive engagement feedback. The presentation for the stakeholders consisted of the online interactive engagement results and the seven (7) project locations. The 7 project locations were shown with its crash data, then shown with its potential improvements where the stakeholders could provide their feedback and was used to establish the toolbox for the project locations.

7. Equity

The following section summarizes the equity assessment conducted for the City of Indian Wells Comprehensive Safety Action Plan (Safety Plan). The Safety Plan aims to enhance roadway safety conditions by proposing potential projects to reduce the risk of collisions.

The purpose of this memo is to report on the equity analysis to identify programs, and infrastructure investments for the City of Indian Wells to support transportation and safety policies. The memo first provides the equity framework used to guide the analysis followed by a summary of the methodology. The memo then provides an equity analysis of demographics and collisions, followed by general takeaways related to the equity and safety data. The analysis seeks to inform policy and program recommendations for the City to equitably improve safety in accordance with state and federal equity goals.

7.1 Equity Framework

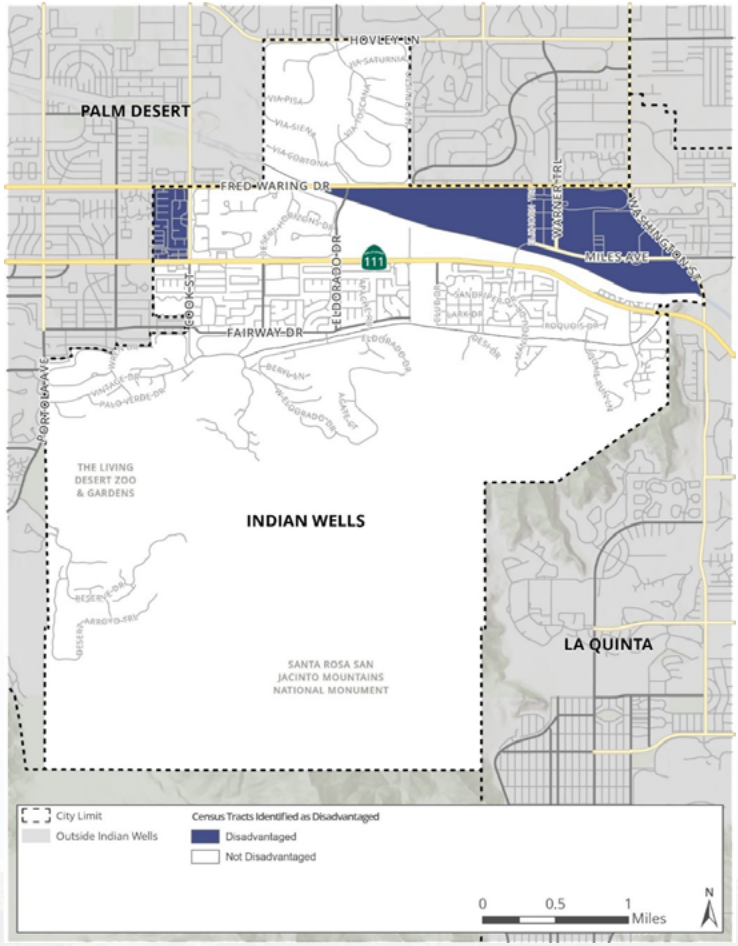
This memo applies an equity approach to the safety analysis for the City of Indian Wells Safety Plan. The equity analysis supplements technical collision data analysis by identifying any correlations between equity and safety data, in accordance with federal and state regulations. A comparative analysis between demographic and collision data provides insights on equity that can be addressed through safety improvements and infrastructure. This ensures that vulnerable and disadvantaged populations can benefit from additional safety considerations. Meeting the needs of equity populations is a critical step in equitable distribution of resources and outcomes. As such, the equity analysis aims to summarize key safety and equity findings.

7.1.1 Federal Policies

Equity analysis in transportation planning became solidified by two key federal policies: Title VI of the Civil Rights Act of 1964 and Executive Order (EO) 12898 in 1994. Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. Executive Order (EO) 12898 directs all federal agencies to develop an Environmental Justice strategy that, "identifies and addresses the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Both policies mandate transportation agencies to identify, address and serve disadvantaged communities through their work.

More recently in 2021, Executive Order 12008 was signed establishing Justice 40 with the goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. Justice 40 Tract Maps and tools were utilized in the equity analysis. The Justice 40 Tract Map, shown in Figure 13, identifies tracts in the northwest and northeast corners of City that are considered disadvantaged communities.

Figure 13: Justice 40 Tracts Map



7.1.2 State Policies

California SB 535 (2012) directs investments of cap-and-trade funds towards "Disadvantaged Communities" (DACs). The SB 535 Disadvantaged Communities map (2022) was established to identify DACs throughout the state of California.

The equity analysis conducted as part of the memo initiated with an analysis of the 2022 California Environmental Protection Agency (CalEPA) SB 535 Disadvantaged Communities Map and 2022 Justice 40 Tracts Map to determine if any tracts within the city were considered disadvantaged communities. The SB 535 Disadvantaged Communities Map did not identify any tracts within the City of Indian Wells designated as a disadvantaged.

7.2 Methodology

For the purpose of this memo, equity demographics and collision data were analyzed. The equity analysis builds on the crash data memorandum drafted by Kimley-Horn as part of the Comprehensive Traffic Safety Action Plan (CTSAP) development process. This analysis forms the basis for equity policy and program recommendations provided in this memo.

Demographic data for the city's population was collected from the United States Census American Community Survey (US ACS) 5-year estimates for 2022 for total population by race/ethnicity, age, and income to identify equity communities within the city. Age was included in the demographic data to capture the city's aging population as it has a high percentage of 55-65 and 64+ age residents.

While the City of Indian Wells has a low non-white population, commuting data for employees traveling to the City were also collected from the Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) database for 2021. Employee travel data for those traveling to the City from surrounding census tracts within Riverside County was gathered, as well as minority data from the same census tracts. The correlation of these two data sets was used to characterize demographic characteristics of commuters to the City who may utilize transportation infrastructure reflected in City collision data.

Lastly, collision data from 2018 – 2022 was sourced from Statewide Integrated Traffic Records System (SWITRS). The data includes bicycle, pedestrian, and automobile collision counts for the City of Indian Wells. Collision data was filtered by race/ethnicity, age, and income to complete a comparative analysis of existing safety conditions. The collision data informed key findings for each demographic category.

In addition to analyzing demographic, employee, and collision data, the team cross referenced the California Environmental Protection Agency (CalEPA) SB 535 Disadvantaged Communities and United States Department of Transportation's (USDOT) Disadvantaged Communities Justice 40 online databases as referenced above.

The analysis presents findings on equity data collected at the city level, regional level, and state and federal level.

7.3 Equity Analysis

This section summarizes demographic data for the City of Indian Wells, employee commute data for workers traveling to the City, and statewide collision safety data.

7.3.1 Race/Ethnicity

The City of Indian Wells, located in Riverside County, is situated between the cities of Palm Desert to the West and La Quinta to the East. The City of Indian Wells is the smallest of nine cities in the Coachella Valley with a population of 4,832, according to the US Census Bureau. **Table 6** provides a summary of the population of Indian Wells by race/ethnicity. The City's population is predominately White (87.7%) followed by Black (3.3%), Hispanic (3.1%), Asian (2.9%), two or more races (2.6%), and less than 0.5% of the population is characterized as Native Hawaiian/Pacific Islander or Other.

Table 6: City of Indian Wells Population by Race/Ethnicity

Race/ Ethnicity	Number of People by Race/Ethnicity	Percent of People by Race/Ethnicity
Asian	139	2.9%
Black	161	3.3%
Hispanic	152	3.1%
White	4,236	87.7%
Native Hawaiian or Other Pacific Islander	14	0.3%
Other	6	0.1%
Two or more races	124	2.6%
Total	**4,832**	

Source: US Census Bureau, 2022.

7.3.2 Age

Table 7 provides a summary of the population of Indian Wells by age. According to the US Census Bureau, the City's population is predominately made up of residents 66 years and older, which accounts for 57.3% of the population. The two highest age groups, 45-64 and 65+, represented over 85.7% of the total population.

7.3.3 Income

Table 8 provides a summary of the percentage of households of Indian Wells by income. According to the US Census Bureau, the City of Indian Wells has a median household income of $132,479. The total number of households in the City is 2,581 households. As shown in Table 3, of all the households in the City, 26.1% have an income of less than $50,000.

Table 7: City of Indian Wells Population by Age

Age Range	Number of People by Age	
Less than 15	218	4.5%
15 - 24	115	2.4%
25 – 34	215	4.4%
35 - 44	139	2.9%
45 - 64	1374	28.4%
65+	2771	57.3%
Total	4,832	

Source: US Census Bureau, 2018-2022.

7.3.4 County Demographics

The City of Indian Wells has workers that travel from surrounding cities for employment. According to the LEHD LODES data from 2021, approximately 9,007 people commute into the City from other census tracts within Riverside County. The following presents information on the concentration of workers commuting to Indian Wells and the racial ethnic makeup of those census tracts. While these demographics are for populations outside of the City of Indian Wells, they help to present information on the composition of commuters who travel to the city.

Figure 14 shows the concentration of workers traveling to the City of Indian Wells from surrounding cities. Many residents travel from Palm Desert, Rancho Mirage, La Quinta, Indio, and Coachella to Indian Wells.

Figure 15 shows the demographic characteristics of workers traveling to the City by minority population from surrounding cities.

SR 111, which runs through the middle of the City, is a critical transportation link for the Coachella Valley (CV) and is used by surrounding disadvantaged residents The City does not preclude bicyclists or pedestrians from access through the City; CV Link is simply one access option not available. The City encourages bicycle and pedestrian traffic on multi-use paths along Highway 111. As the report discusses below there are a number of bicycle and pedestrian collisions along SR 111 which traverses the City and County.

7.4 Collisions by Race/Ethnicity

Collision data included in this analysis is based on SWITRS (2018-2022). The data is disaggregated by race, age, and income to identify existing safety conditions for different subsets of the population. Analyzing collision data against demographic indicators helps to identify any disproportionate impacts to facilitates tailored safety improvements and projects for vulnerable and disadvantaged populations.

A total of 218 collisions were reported during the five-year period, with 489 people involved in these collisions. Bicycle collisions accounted for six collisions while pedestrian collisions accounted for five collisions.

Figure 14: Concentration of Workers to Indian Wells

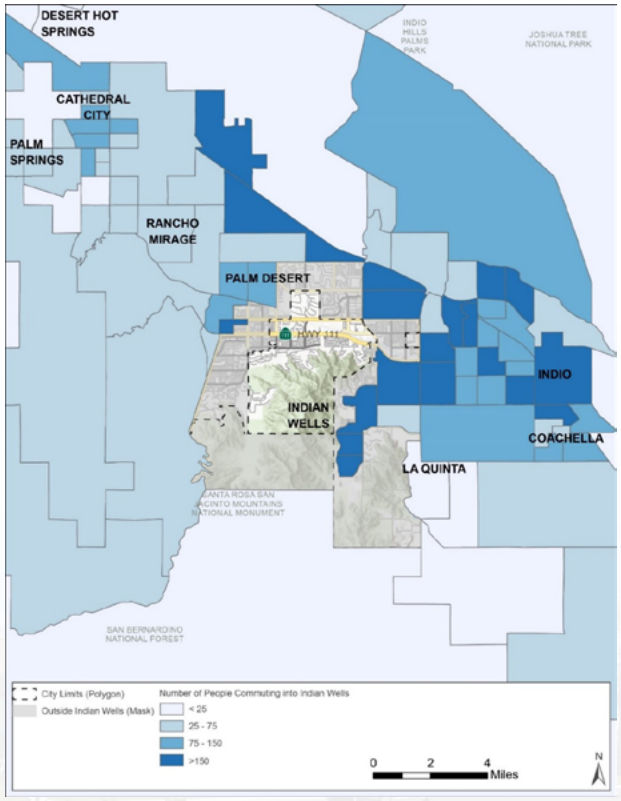


Figure 15: Percentage of Minorities Outside of Indian Wells

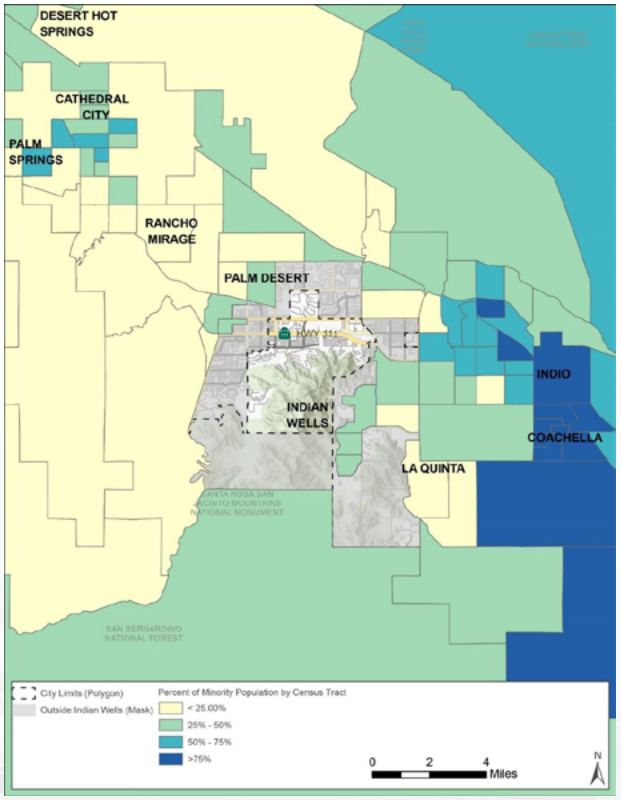


Table 8: City of Indian Wells Household Income

Age Range	Percent of Households
Less than $50,000	26.1%
$50,000 - $74,999	9.0%
$75,000 - $99,999	7.3%
$100,000 - $149,999	11.3%
$150,000 - $199,999	11.7%
$200,000+	34.5%

Source: US Census Bureau, 2018-2022.

7.4.1 Total Collisions by Race/Ethnicity

In disaggregating collisions by race/ethnicity, the data shows that most people involved in collisions in the City of Indian Wells were White (128). Collisions involving Hispanic individuals accounted for 25% of all collisions (121). It is interesting to note that a number of individuals involved were characterized as Other (206) or were not identified by race/ethnicity (23). Few reported collisions involved Black (5) and Asian (6) individuals. **Table 9** shows the number of people involved in collisions in the City by race/ethnicity. **Figure 16** shows all collisions by severity. **Figures 17 through 20** show collision locations by race of parties involved.

When the percentage of people involved in collisions by race/ethnicity are compared with City-wide demographic information, there is a higher percentage of Hispanic individuals (24.7%) involved in collisions then represented in the City-wide demographics (3.1%), shown in Table 1. This suggests that local and area

commuters of Hispanic origin are adversely affected by unsafe roadway conditions.

When the severity of collisions from **Figure 16** are compared with disadvantaged communities shown on the Justice 40 map in **Figure 13**, there are a number of collisions in areas where disadvantaged communities are located. These include areas along Cook Street near SR 111 and Fred Waring Drive as well as near Fred Waring Drive, Warner Trail, and Washington Streets.

7.4.2 Bicycle Collisions by Race/Ethnicity

Overall, there are relatively few bicycle collisions in the City and few incidents involved people of color. **Table 10** shows the number of people involved in bicycle collisions by severity and race/ethnicity. **Figure 21** shows bicycle collisions by severity. Of the six bicycle collisions reported from 2018-2022, 12 people were involved and none of the fatal or severe inquires involved people of color. The only collision resulting in a fatal injury involved two White identifying individuals and the only severe injury collision involved a White identifying individual and the other individual did not provide information on race/ethnicity. The three minor injury collisions involved White (1), Hispanic (2), Other (1), and No Information Identified (2) identifying individuals. Two individuals Hispanic (1) and White (1) were involved in the only collision resulting in a complaint of pain.

7.4.3 Pedestrian Collisions by Race/Ethnicity

Overall, there are relatively few pedestrian collisions within the City of Indian Wells, none of these involved individuals identified as people of color. **Table 11** shows the number of people involved in pedestrian collisions by severity and race/ethnicity. **Figure 22** shows pedestrian collisions by severity. Of the five pedestrian collisions, 10 people were involved. Two of the collisions with fatal injuries included individuals who identify as White (2) and Other (2). The two collisions resulting in severe injury involved individuals identifying as White (1) and Other (3).

Table 9: People Involved in Collisions by Race/Ethnicity

Race/ Ethnicity	Number of People by Race/Ethnicity	Percentage of People by Race/Ethnicity
Asian	6	1.2%
Black	5	1.0%
Hispanic	121	24.7%
White	128	26.2%
Other	206	42.1%
No Information Provided	23	4.7%
Total	**489**	**100%**

Source: SWITRS, 2018-2022.

Table 10: People Involved in Bicycle Collisions by Severity and Race/Ethnicity

Race/ Ethnicity	Fatal	Severe	Minor	Pain
Asian	0	0	0	0
Black	0	0	0	0
Hispanic	0	0	2	1
White	2	1	1	1
Other	0	0	1	0
No Information Provided	0	1	2	0
Total = 12 People Involved in Bicycle Collisions	**2**	**2**	**6**	**2**

Source: SWITRS, 2018-2022.

Table 11: People Involved in Pedestrian Collisions by Severity and Race/Ethnicity

Race/ Ethnicity	Fatal	Severe	Minor	Pain
Asian	0	0	0	0
Black	0	0	0	0
Hispanic	0	0	0	0
White	2	1	0	0
Other	2	3	2	0
No Information Provided	0	0	0	0
Total = 10 People Involved in Pedestrian Collisions	**4**	**4**	**2**	**0**

Source: SWITRS, 2018-2022.

Figure 16: All Collision Types

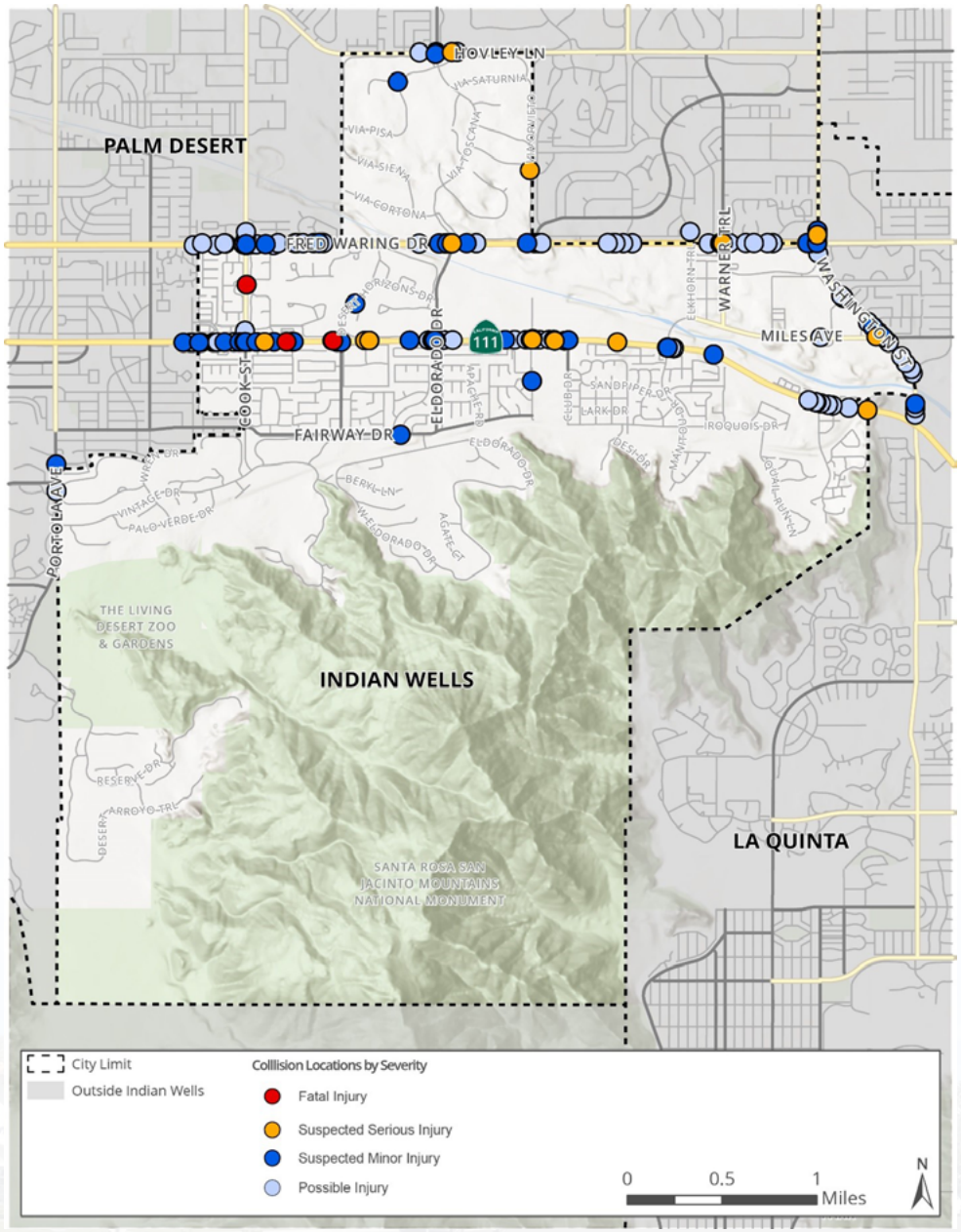


Figure 17: All Collision Types: Locations by Race of Parties Involved – Asian

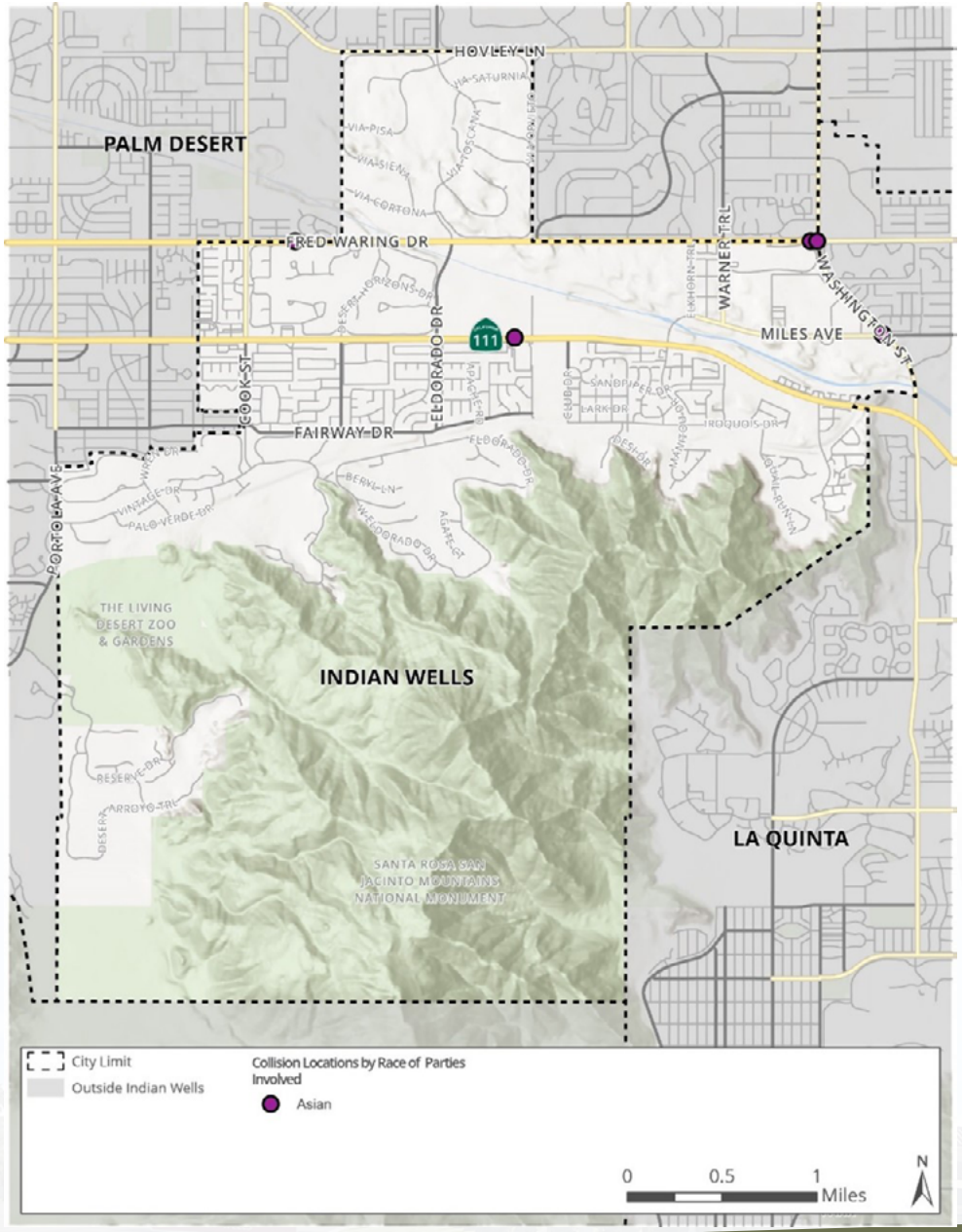


Figure 18: All Collision Types: Locations by Race of Parties Involved – Black

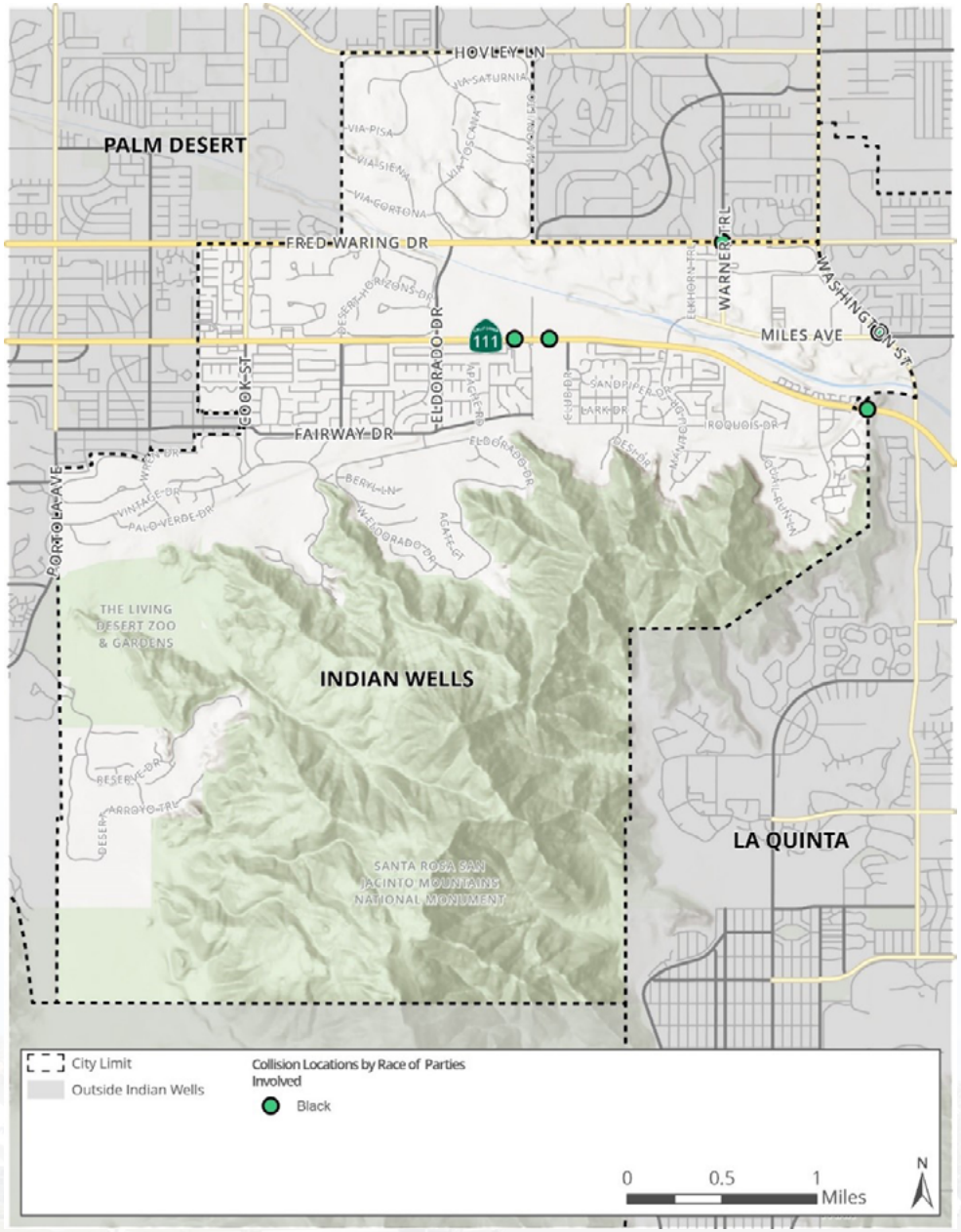


Figure 19: All Collision Types: Locations by Race of Parties Involved – Hispanic

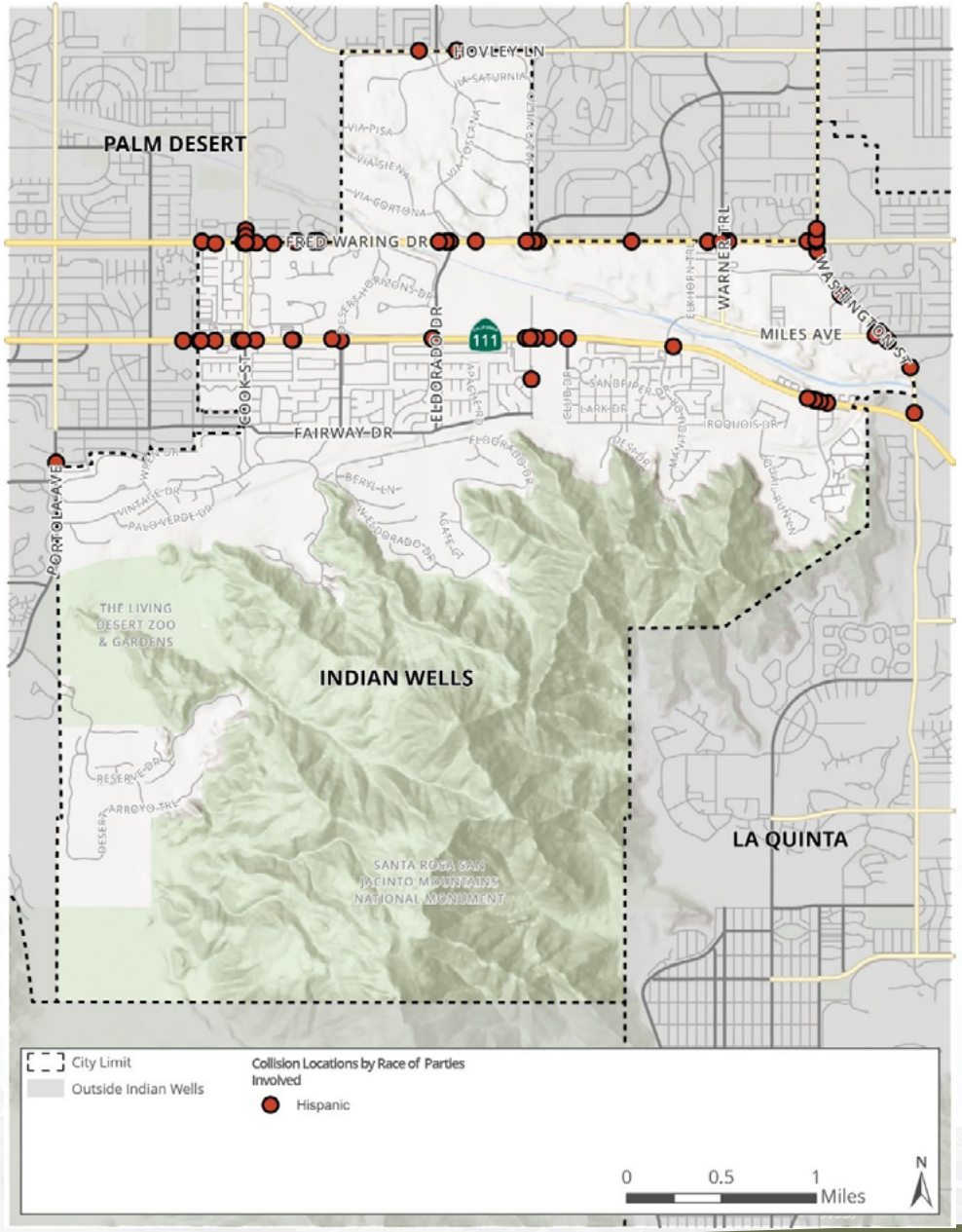


Figure 20: All Collision Types: Locations by Race of Parties Involved - White

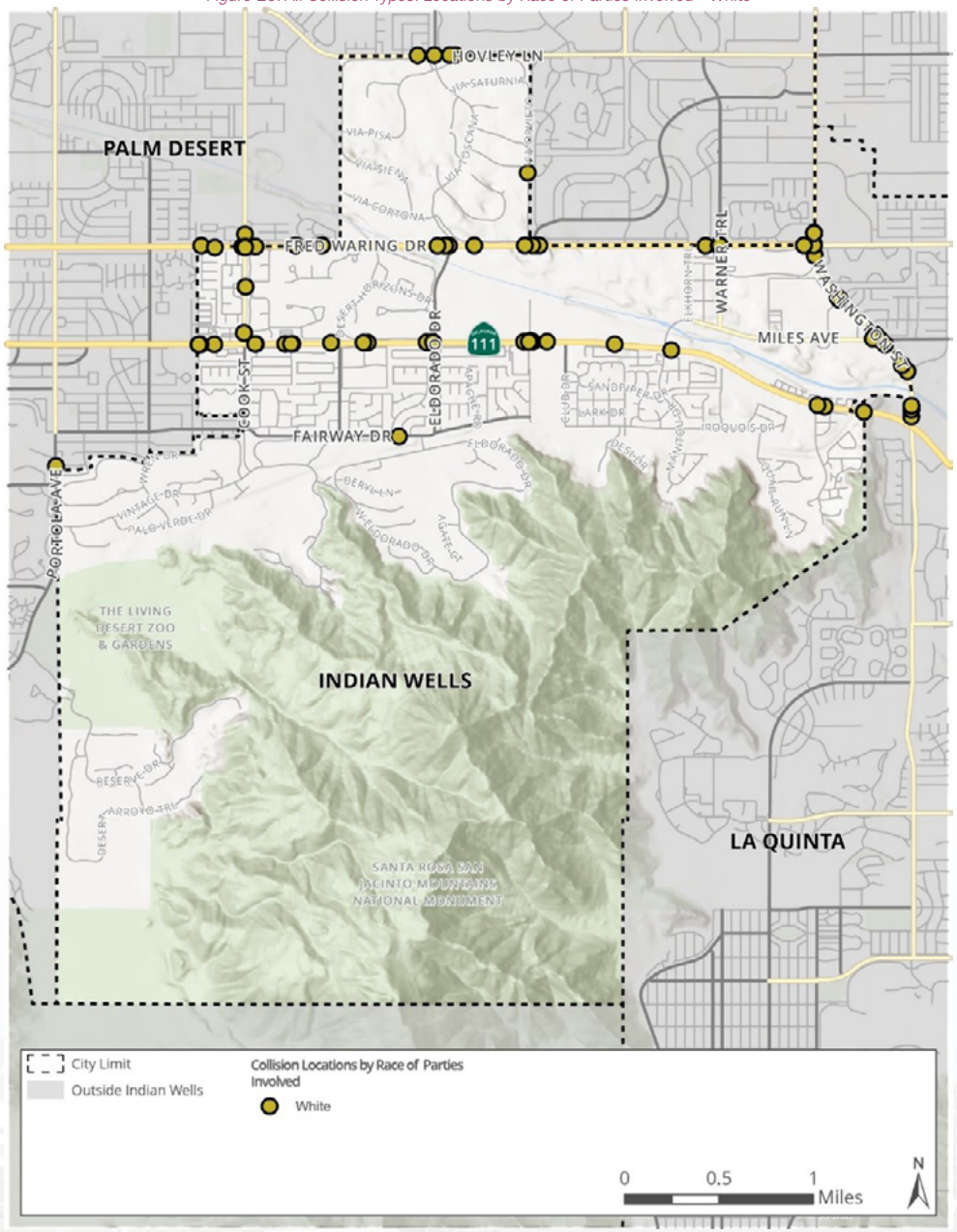


Figure 21: All Collision Types Locations by Race of Parties Involved - Other

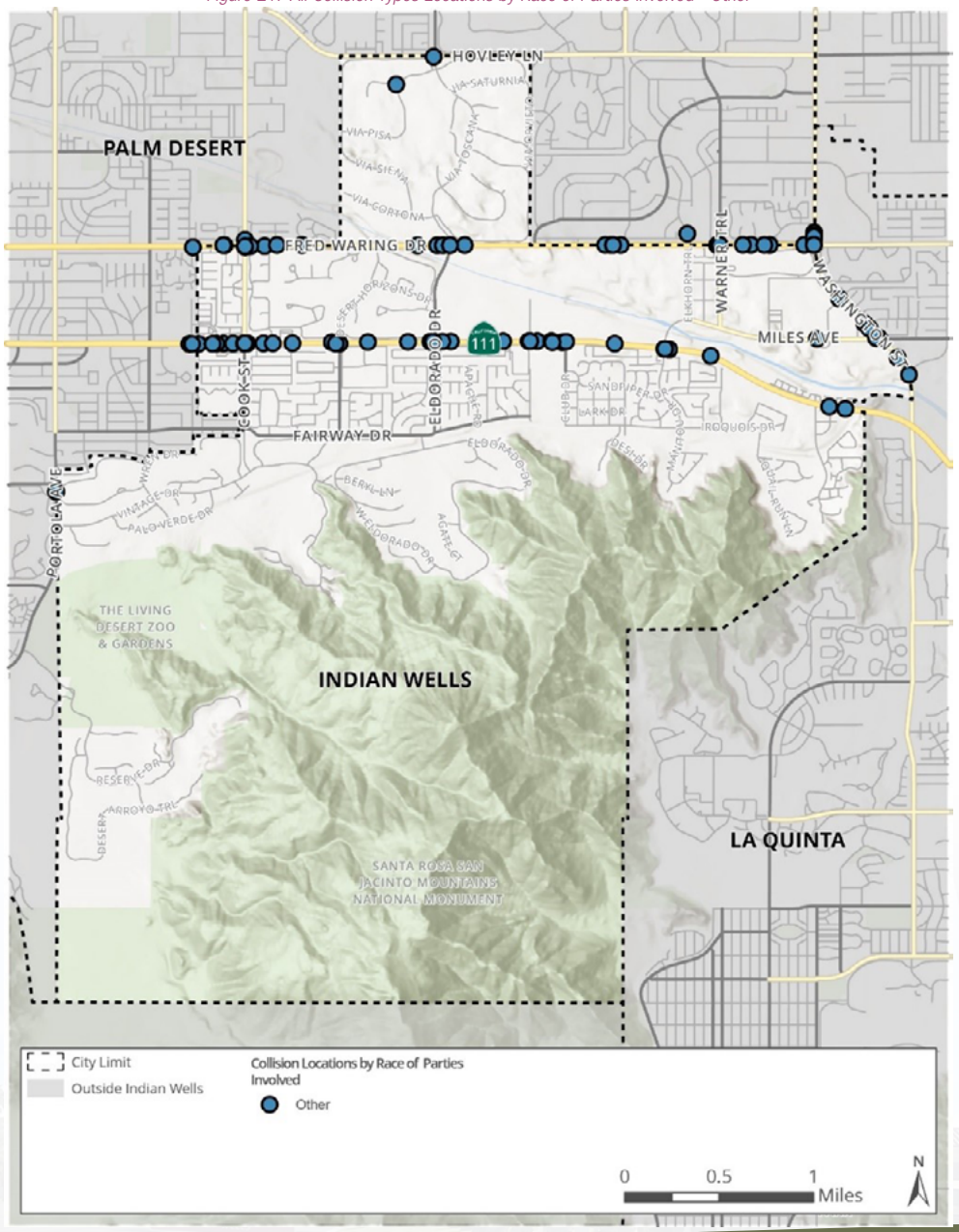


Figure 22: Bicycle Collisions by Severity

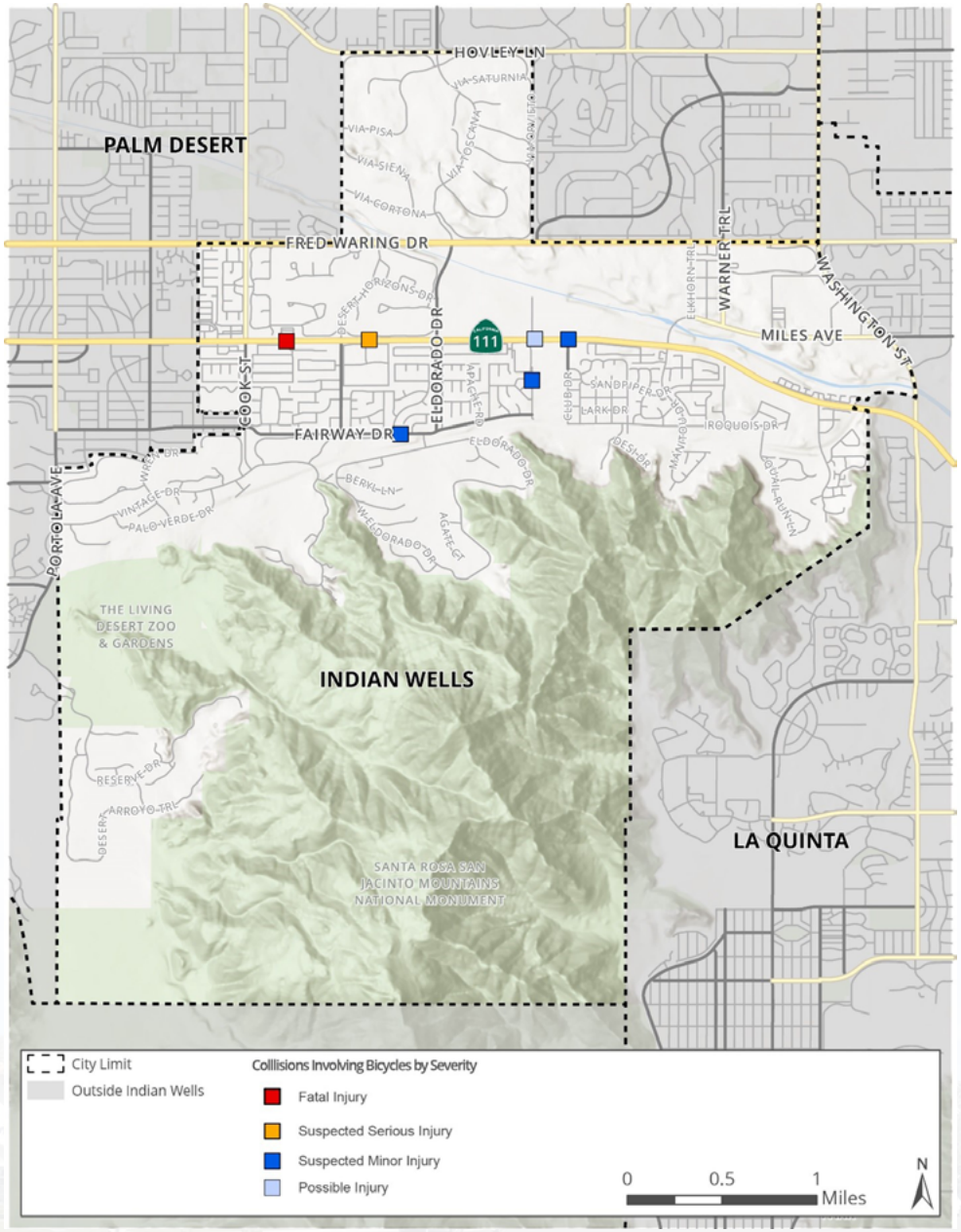
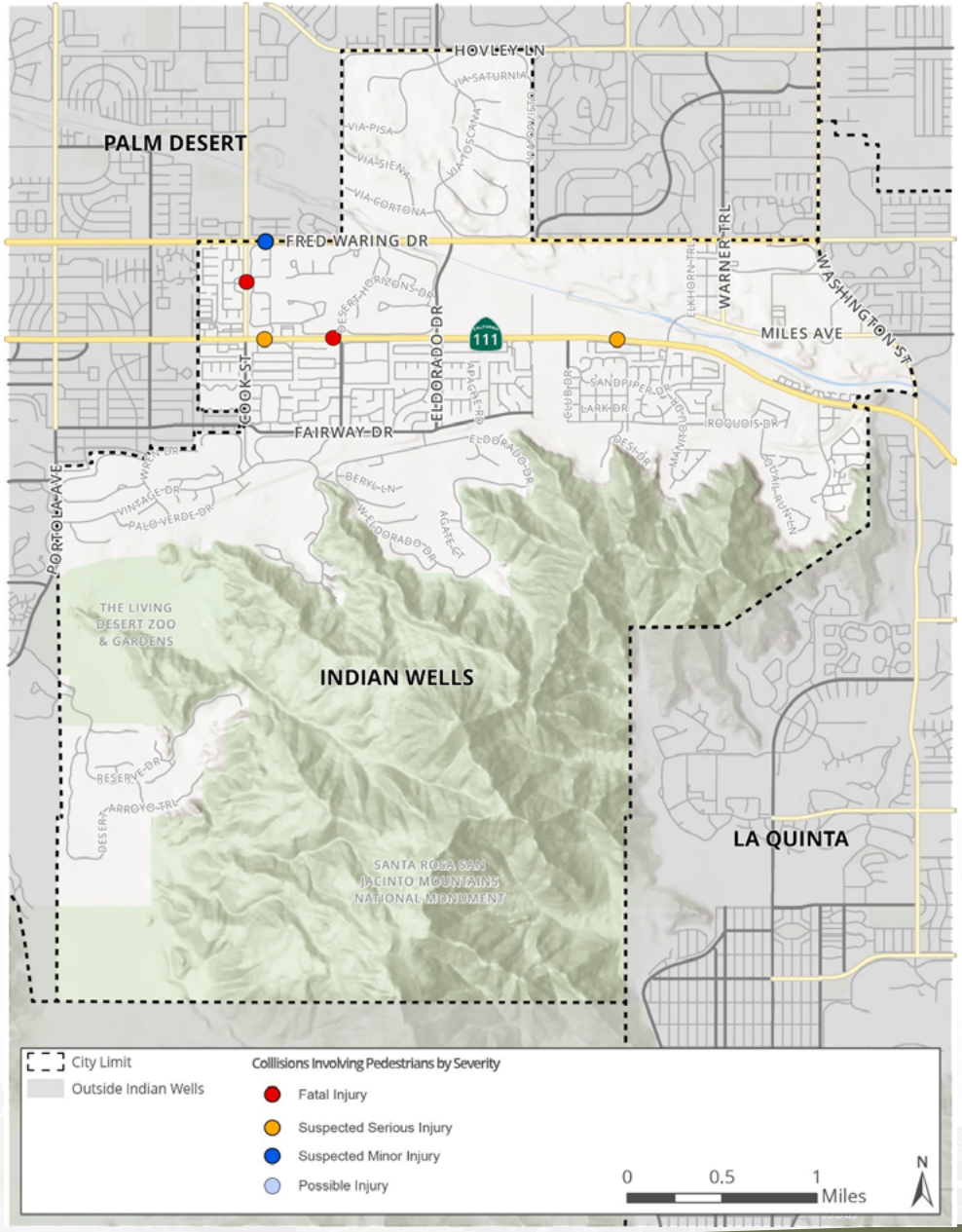


Figure 23: Pedestrian Collisions by Severity



7.5 Collisions by Age

7.5.1 Total Collisions by Age

Of the total 218 collisions within the four-year period, 489 people were involved in the collisions. The number of people involved in each collision per age group is shown in **Table 12**. Most of the 218 collisions within this period involved individuals between the ages of 45 and 64 (128) followed by individuals over 65 years of age (93). These numbers indicate the 19% of the people involved in collisions were over the age of 65.

Table 12: Total Number of People Involved in Collisions by Age

Age Range	Percent of Households
15 - 24	75
25 – 34	92
35 - 44	81
45 - 64	128
65+	93
Age Not Provided	20
Total	**489**

Source: SWITRS, 2018-2022.

7.5.2 Bicycle Collisions by Age

The number of people involved in bicycle collisions by severity and age group is shown in **Table 13**. Of the total 12 individuals involved in bicycle collisions, six individuals, or 50% of individuals, were over the age of 45. Two individuals between the ages of 25 – 34 were involved in bicycle collisions that resulted in minor injuries. Two people were involved in a bicycle collision resulting in fatal injuries, both individuals were over the age of 65. However, three individuals involved in bicycle collisions did not provide age information. Most bicycle collisions in the City involve older individuals, 50% of the individuals involved in bicycle collisions were over the age of 45.

7.5.3 Pedestrian Collisions by Age

The number of people involved in pedestrian collisions by severity and age group is shown in **Table 14.** Of the total 10 individuals involved in the five pedestrian collisions, six individuals, or 60% of individuals, were over the age of 45. Four people were fatally injured in pedestrian collisions between the ages of 15-24 (1), 35 – 44 (2) and 45 – 64 (1). Most of the pedestrian collisions in the City involve older individuals, 60% of the individuals involved in pedestrian collisions were over the age of 45.

Table 13: People Involved in Bicycle Collisions by Severity and Age

Race/ Ethnicity	Fatal	Severe	Minor	Pain
15 – 24	0	0	0	0
25 – 34	0	0	2	0
35 – 44	0	0	0	0
45 – 64	0	0	2	1
65+	2	1	0	1
Age Not Provided	0	1	2	0
Total= 12 People Involved in Bicycle Collisions	**2**	**2**	**6**	**2**

Source: SWITRS, 2018-2022.

Table 14: People Involved in Pedestrian Collisions by Severity and Age

Race/ Ethnicity	Fatal	Severe	Minor	Pain
15 – 24	1	0	0	0
25 – 34	0	1	0	0
35 – 44	2	0	0	0
45 – 64	1	3	1	0
65+	0	0	1	0
Age Not Provided	0	0	0	0
Total= 10 People Involved in Pedestrian Collisions	**4**	**4**	**2**	**0**

Source: SWITRS, 2018-2022.

7.6 Key Takeaways

The following includes key findings from the equity analysis as it relates to demographic factors and an evaluation of collision data by race/ethnicity and age.

- The City of Indian Wells has 4,832 residents that are predominately older with 85.7% of the population in the 45-64 and 65+ age categories and predominately White (87.7%). In addition, while a significant percentage of households (57.5%) make over $100,000 a year, there is a noticeable percentage of households (26.1%) that make less than $50,000 per year.
- Collisions involving **Hispanic individuals accounted for 24.7%** of all collisions between 2018-2022.
- There is a much higher percentage of Hispanic individuals (24.7%) involved in collisions then represented in the City-wide demographics (3.1%). This suggests that **minority commuters either within the City or coming into the City of Indian Wells are disproportionately affected by traffic injuries roadway conditions.**
- **The City of Indian Wells has a number of people who travel to the city for work, many from minority rich cities** to the east and north, within the Coachella Valley. These workers may utilize City transportation facilities to travel across the city. While safety is a priority for residents, visitors and workers who contribute to the local economy would also benefit from safety improvements.
- There are two **areas identified as disadvantaged according** to the Justice 40 tract map. These include the northwestern portion of the City surrounded by Fred Waring Drive, Cook Street, and SR 111 as well as the northeastern part of the City near Fred Waring Drive and Warner Trail and Washington Streets.
- Comparing the severity of collisions and the locations of disadvantaged communities, **there are a number of collisions in disadvantaged areas of the city.** These incidents range from Fatal to Minor. The locations include Cook Street near SR 111 and Fred Waring Drive as well as near Fred Waring Drive and Warner Trail and Washington Streets.
- A considerable number of collisions involved older adults, **19% of individuals involved in collisions were 65 and older.**
- Both bicycle and pedestrian collision involved high numbers of older individuals, **50% of bicyclists involved in bicycle collisions and 60% of pedestrians involved in pedestrian collisions were 45 and older.**
- A majority of fatal and severe collisions that occurred within the city between 2018-2022, **were along SR 111 or Cook Street**, indicating that additional safety measures are needed along these major throughfares. These areas overlap with or are adjacent to disadvantaged communities.

The equity and collision analysis helps to identify areas of the city where additional safety improvements are needed to reduce the incidence of severe or fatal collisions and reduce disproportionate impacts on vulnerable populations. The city should explore traffic calming, bicycle and pedestrian friendly infrastructure and street improvements that prioritize safety. Directing policies and projects to equity focused areas of the city will help to improve conditions for everyone, including residents and workers traveling to and through the City of Indian Wells.



Figure 24: Photos of Indian Wells

8. Climate Change, Sustainable and Economic Competitiveness

Climate Change, Sustainable and Economic Competitiveness

The analysis was carried out utilizing REPLICA, a tool employed to access traffic data sets for specific geographic areas. The dataset available represents the population and their travel patterns in the City of Indian Wells.

8.1 Trip Origin - Trip Destination Analysis

This report utilizes REPLICA data for Spring 2023 to determine the volumes of network links. The data is derived from REPLICA's seasonal model, which provides volume information for a typical weekday. The metrics used in analyzing the network link volumes include the choice of mode, trip distance, trip purpose, and vehicle details. The dataset focuses on trip information at the network link level. **Figure 26** displays the locations of all transportation trips for various modes on the network link . Figure 27 through 29 depict the locations of pedestrian,bicycle, and transit trips on the network link. The volume data reveals that the top five roadway segments with the highest trip counts are Highway 111, Indian Wells Lane, Cook Street, El Dorado Drive, and Club Drive.

8.1.1 Network Volume

Table 15 presents an overview of the proportions of primary modes of travel within the roadway network of the City of Indian Wells. The most common primary mode of transportation in Indian Wells is private auto, accounting for 46.1%, followed by walking for 34.2% and commercial vehicle for 12.2%.

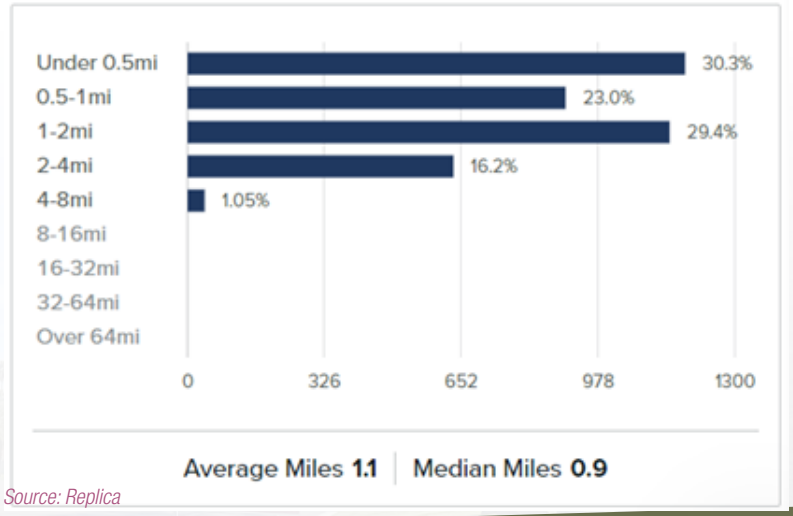
8.1.2 Trip Distance

The internal distribution of trip origin and trip destination exclusively within Indian Wells is illustrated in **Figure 25.** The greatest proportion of trips have a distance of less than 0.5 miles, accounting for 30.3% of the total. This is followed by trips with distances between 0.5 and 1 mile, which make up 23.0% of the total, and

Table 15: Overall Primary Mode

Primary Mode	Percentage
Private Auto	46.3%
Walking	34.1%
Commerical Vehicle	12.0%
Auto Passenger	3.93%
Other	2.64%
Taxi/Transportation Network Company	0.57%
Biking	0.51%

Figure 25: Trip Distance



Source: Replica

trips between 1 and 2 miles, which account for 29.4% of the total. It can be observed that approximately 82.7% of trips within Indian Wells are classified as short trips.

Further analysis was conducted to identify the primary modes of transportation for trips with distances under 0.5 miles shown in **Table 16** . The results indicate that walking is the main mode, accounting for 61.7% of these trips. Followed by private auto and commerical vehicles.

Table 16: Primary Mode for Trip Distance (under 0.5 miles)

Primary Mode for Trip Distance Under 0.5 Miles	Percentage
Walking	61.7%
Private Auto	16.5%
Commerical Vehicle	10.3%
Other	8.73%
Auto Passenger	1.83%
Biking	0.83%
Taxi/Transportation Network Company	0.08%

8.2 Trip Origin and Destination Analysis

8.2.1 Trip by Origin

The number of trips originating in the City of Indian Wells is reported to be 21.2k, made by 13.0k trip takers. The term "trip by origin" refers to the number of trips that start within the boundaries of Indian Wells. This data provides an overview of the total number of person-trips taken in Indian Wells, including both residents who made trips and those who did not.

8.2.2 Origin-Destination Pairs

Table 17 presents a summary of the percentage of destination trips by city for trips originating in Indian Wells. The table highlights the top destinations for trips originating in Indian Wells. The city with the highest number of trips leaving Indian Wells is Palm Desert, accounting for 29% of the total trips. This is followed by Indian Wells itself, which accounts for 19% of the trips. Other popular destinations for trips leaving Indian Wells include La Quinta and Indio City.

Table 17: Origin-Destination Pairs

Destination by Cities	Percentage
Palm Desert City, CA	29%
Indian Wells, CA	19%
La Quinta, CA	12%
Indio City, CA	12%
Coachella, CA	4 %
Rancho Mirage, CA	4 %
Cathedral City, CA	4 %

Table 18: Trip by Destination

Destination by Tracts	Number of Trips
451.22 (Riverside, CA)	1410
451.23 (Riverside, CA)	964
451.25 (Riverside, CA)	603
451.17 (Riverside, CA)	540
451.28 (Riverside, CA)	156

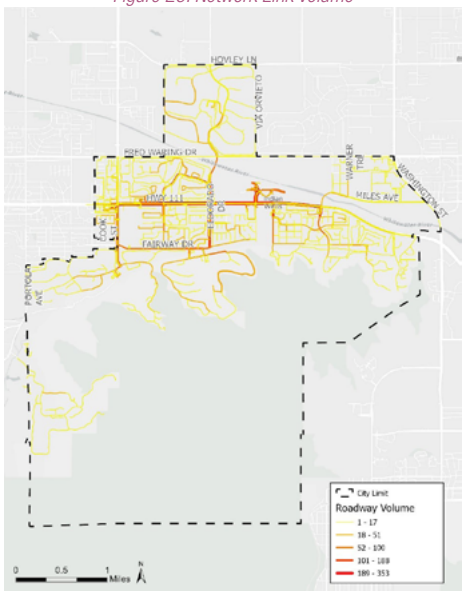
8.2.3 Trip by Destination

The number of trips originating in the City of Indian Wells and their respective destinations is reported to be 3,910 person-trips made by 1,920 trip takers. This data summarizes the total number of person-trips taken in Indian Wells, including both residents who made trips and those who did not.

8.2.4 Active Transportation

This analysis utilized Replica data to filter the primary modes of walking, biking, and transit in the City of Indian Wells. The top roadway segments for biking volume were identified as Hwy 111, Eldorado Drive, and Via Toscana. Similarly, the top roadway segments for walking volume were Highway 111, Cook Street, Desert Horizons Drive, and Rancho Palmeras Drive. This information highlights the importance of having adequate pedestrian and bicycle infrastructure in areas with high concentrations of vulnerable users. Comparing the data on vulnerable user collisions with the volumes of vulnerable user activity, it was observed that most collisions occurred on the roadway segments with the highest vulnerable user activity. This emphasizes the need for improved safety measures for pedestrians and cyclists in these areas.

Figure 26: Network Link Volume



The analysis also revealed that the primary mode of transportation in the City of Indian Wells is driving, with many people using this mode for short trips. **Figure 26** illustrates that the majority of trips were under 0.5 miles. It is important to consider the distances of these trips in order to explore alternative modes of travel, such as walking, biking, and transit. By enhancing connectivity throughout the city, it is possible to reduce the reliance on short car trips and promote other modes of transportation. **Figure 26-29** provide insights into the volume of trips across all modes of transportation, as well as specific modes. Improving roadway safety for non-automobile modes of travel can have several benefits, including reducing Vehicle Miles Traveled (VMT), greenhouse gas emissions, and pollutants. Improving the pedestrian environment enhances the overall quality of life for residents and improves the efficiency of the transportation network. By reducing reliance on private cars and promoting walking, biking, and public transit, Indian Wells can decrease the emission of carbon dioxide and other pollutants, contributing to efforts to combat climate change and improve air quality. Additionally, promoting active transportation can help reduce traffic congestion, leading to smoother traffic flow and fewer idling vehicles. This not only benefits businesses by providing faster and more reliable commuting options but also attracts new businesses and investments. Increased foot traffic and cycling can contribute to a vibrant local economy and foster a sense of community. Safer roads and alternative modes of transportation also contribute to the economic competitiveness of a city by reducing accident-related costs, improving transportation efficiency, and promoting environmental and public health. Therefore, increasing active transportation can enhance Indian Wells through improved connectivity to restaurants and shops, better public health outcomes, and enhanced environmental sustainability.

Figure 27: Bike Volume

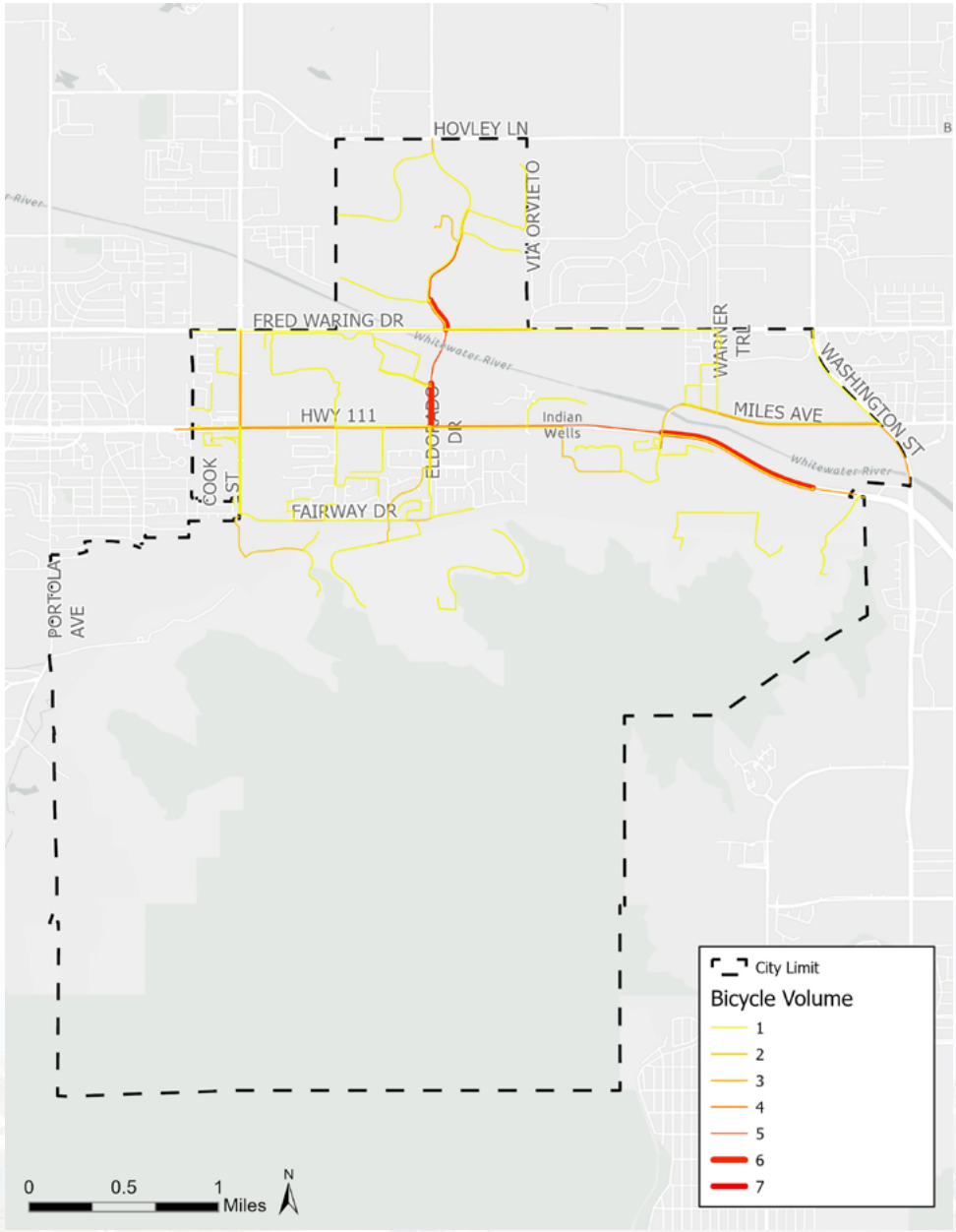


Figure 28: Pedestrian Volume

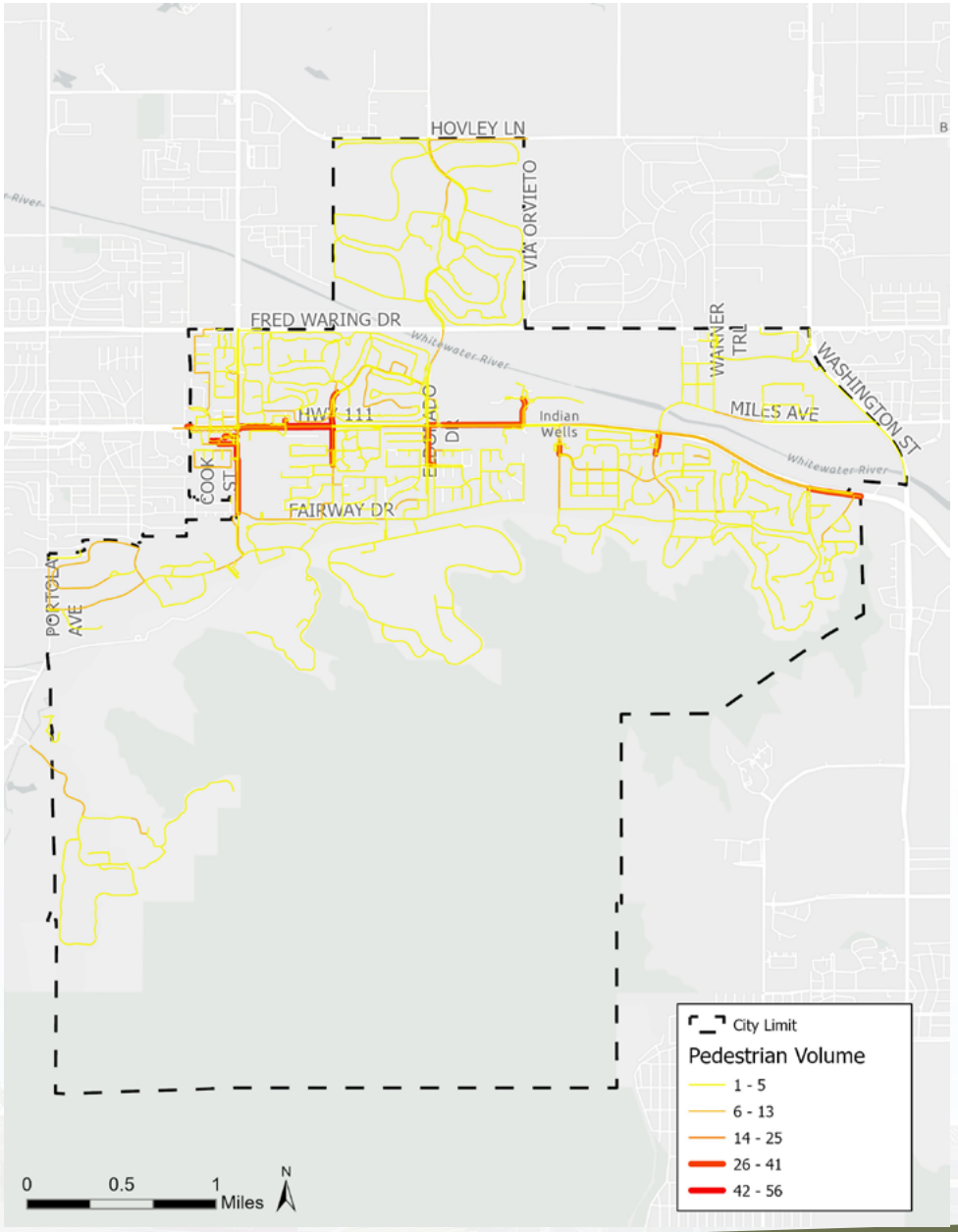
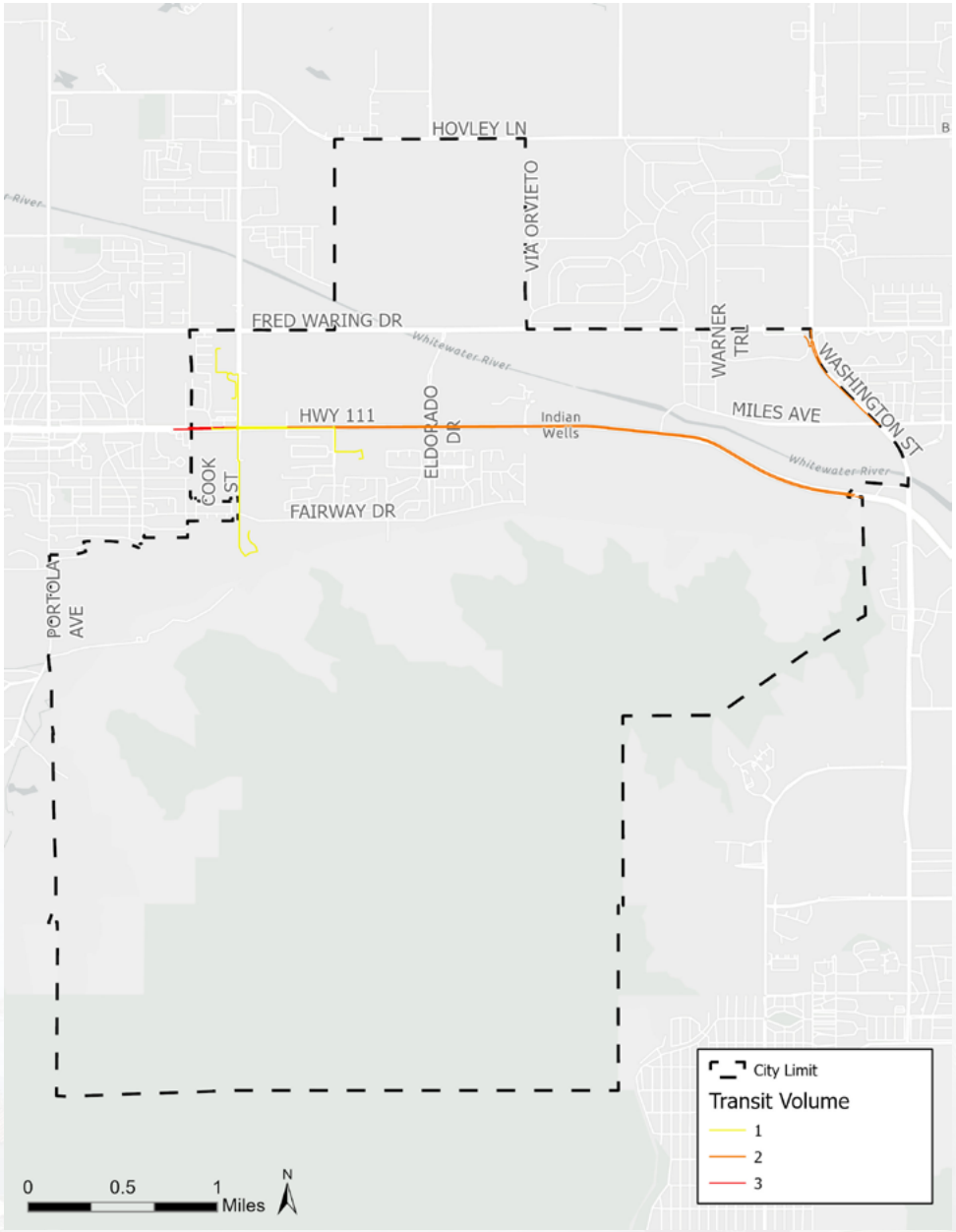


Figure 29: Transit Volume



9. Policy and Process Change

9.1 Literature review

Existing plans, policies, and projects that were recently completed, planned, or on-going were complied at the start of the SAP process to gain perspective on the existing efforts for transportation-related improvements within the City. High-level key points regarding transportation improvements and safety-related topics were identified to inform decision making in the SAP. **Table 19** outlines the relevant existing City plans, **Table 20** outlines the relevant existing/past city projects, **Table 21** outlines relevant existing and future City transportation projects, pedestrian projects, and traffic calming and safety projects found in the Capital Improvement Program (CIP)and their respective timelines.

Table 19: Review of Existing City and County Plans

Document Name	Summary/Goals
City of Indian Wells General Plan (2016)	▪ The City of Indian Wells General Plan is a plan that was originally created in 1996 but was amended most recently in 2016. This plan details the current state of the City's built and natural environment, and addresses state mandated issues (land use, housing, transportation, open space, conservation, noise, and safety). ▪ The goal of the plan is to guide improvement in quality of life (and address any threats to it), economic growth, and social cohesiveness through policy statements and recommendations. ▪ The Circulation Element of the general plan focuses on the proposals and plans of connectivity for multiple modes of transportation including bikeways, average daily traffic, and future roadway growth and enhancements. The general plan acts a document of collaboration between land use elements and circulation and setting standards and goals such as roadway improvements, increased number of travel modes, and improved quality of life.
Coachella Valley Association of Governments Active Transportation Plan (2019)	▪ This plan outlines the current and future landscape of active transportation projects and programs in the Coachella Valley region. The plan includes and details individual community bicycle plans, regional funding sources, and design guidance. ▪ The goals of this plan are to create and maintain local and regional bicycle and pedestrian networks, and identify areas of improvement in necessary infrastructure, implement safety programs, and encourage biking and walking through the creation of walk friendly bike/ped environment.
County of Riverside General Plan (2020)	▪ The purpose of the County of Riverside General Plan is to provide an update to the regions land use and infrastructure needs, update current design standards and guidelines, and create and implement strategies for future developments. ▪ The goals of the circulation chapter of the plan are to describe different classes of bike lanes and paths in the region, implement an integral network of trails in throughout the County, and to consider environmental impacts when planning for future bike/ped infrastructure

Document Name	Summary/Goals
Riverside County Long Range Transportation Study (2019)	▪ The Riverside County Long Range Transportation Study focuses on the long-term growth of transportation and transportation services in the region that includes but limited to transportation planning, regional challenges, funding, capital development for public transit and highways, and local roads improvement and traffic safety. ▪ The goals of this plan include improved quality of life, operational excellence, economy connectivity, and viable partnerships with all levels of government in the state (local, regional, and state) as it pertains to roads, transit, active transportation facilities, grants, and local Measure A Value
Riverside County Regional Park and Open Space District Comprehensive Tails Plan (2018)	▪ The Riverside County guides the future of bicycle trails in Riverside County and provides an analysis of the current trails in the region. The plan also discusses design guidelines, policy issues, and potential trail partnerships for funding of future trails in the region. ▪ The goals of this plan are to create a network of trails that are line with current other plans and jurisdictions, accessible, and create recommendations for future maintenance and management of trails in the region.
Riverside County Transportation Commission Traffic Relief Plan (2020)	▪ The RCTC Traffic Relief Plan is a strategy plan for Riverside County to help alleviate traffic congestion, improve traffic safety, improve transit frequency and reliability, and completing the regional trail system. ▪ The plan includes implementation and improvements to programs such as Safe Routes to School, specialized transit grant programs, and Commuter Assistance Programs

Table 20: Proposed Roadway Projects

Project Name	Plan/Funding	Project Description and Location	Status
Class II Bike Lane on Eldorado Dr	City of Indian Wells General Plan (2018)	Eldorado Dr, from Fred Waring Dr to 640 ft north of Fairway Dr	Completed
Class II Bike Lane on Cook St	City of Indian Wells General Plan (2018)	Cook St, from Fred Waring Dr to Fairway Dr, Highway 111	Completed
Class II Bike Lane on Hovley Lane East	City of Indian Wells General Plan (2018)	Hovley Lane, from Cook St to Washington St	Completed
Class II Bike Lane on Portola Ave	City of Indian Wells General Plan (2018)	Portola Ave, from Shadow Mountain Dr to Mesa View Dr	Completed
Class II Bike Lane on Miles Ave	City of Indian Wells General Plan (2018)	Miles Ave, from Highway 111 to Washington St	Completed

Project Name	Plan/Funding	Project Description and Location	Status
Class III Bike Lane on Highway III	City of Indian Wells General Plan (2018)	Highway 111, from Cook St to Washington St	Completed
Class III Bike Lane on Fairway Dr	City of Indian Wells General Plan (2018)	Fairway Dr, from Cook St to Eldorado Dr	Completed
Class III Bike Lane on Rancho Palmeras Dr.	City of Indian Wells General Plan (2018)	Palmeras Dr, from Highway 111 to Fairway Dr	Completed
The Bradshaw Trail	Riverside County Comprehensive Trails Plan	Traverses through Indian Wells, Banning, Indio, Palm Springs, Palm Desert, and Coachella	Proposed
Freedom Park Community Connector	Coachella Valley Association of Governments Active Transportation Plan	Whitewater River to Indian Wells	Proposed
Whitewater Channel	Coachella Valley Association of Governments Active Transportation Plan	Magnesia Falls Dr to Fred Waring Dr	Proposed
Washington St Bikeway	Coachella Valley Association of Governments Active Transportation Plan	La Quinta Northern City Limit to Eisenhower Dr	Proposed
Tennis Garden Community Connector	Coachella Valley Association of Governments Active Transportation Plan	Tennis Garden to Miles Ave	Proposed
Gerald Ford School Community Trail Connector	Coachella Valley Association of Governments Active Transportation Plan	Fred Waring Dr to Miles Ave	Proposed

Table 21: Review of City Projects from Indian Wells CIP

Project Name	Timeline	Roadway Improvements
Cook Street Phase II Rehabilitation	Future	Cook Street rehabilitation
Fairway Drive Sidewalk	Future	Installation of sidewalk on the south side of Fairway Drive
Highway 111 Overlay/Rehabilitation Project	Under Construction	Rehabilitation of Highway 111
Miles Avenue Improvements	Future	Improvements to Miles Avenue
Washington Street ADA Improvements	Under Construction	Improvements to ADA access ramps
Warner Trail Improvements	Future	Sinkhole repair and right-hand turn lane
Fairway Drive Complete Street Bicycle and Safety Improvements	Future	Road and bike land improvements to Fairway Drive
Eldorado Drive Complete Street Bicycle and Safety Improvements	Future	Road and bike land improvements to Eldorado Drive
Club Drive Complete Streets Project	Phase I Completed	Sidewalk and bike lane additions to Club Drive

10. Strategy and Project Selections

10.1 Consideration 1: Top Five Challenges Areas

One of the main considerations when developing focus areas for the Safety Action Plan (SAP) is where Indian Wells is exceeding the statewide average for certain challenge areas. When looking at the percentage of all crashes within a defined area that involve fatal or suspected serious injuries, there are five challenge areas where Indian Wells exceeds the average for California for crashes involving: Bicyclists, aggressive driving, impaired driving, distracted driving, and motorcyclists.

The percentage of fatal and suspected serious injury crashes involving bicyclists from 2010-2019 is 19% higher than the statewide average, while aggressive driving crashes are nearly 17% higher than the statewide average and impaired driving crashes are 15.6% higher than the statewide average. These categories are significantly higher than the statewide averages, while distracted driving crashes are approximately 4% higher than statewide averages and crashes involving motorcycles are nearly 2% higher.

The locations of these crashes using data from 2018-2022 for each of the top five challenge areas were considered, along with the output of the network screening results for each of the top five challenge areas. From these results, the majority of overlap occurred along Highway 111 between Village Court and Washington Street (~5.0 miles), along Fred Waring Drive from Phyllis Jackson Lane to Washington Street (~3.3 miles), along Washington Street from Fred Waring Drive to Highway 111 (~1.2 miles), along Cook Street from Fred Waring Drive to Highway 111 (~0.5 miles), and along Miles Avenue from Warner Trail to Washington Street (~0.9 miles).

10.2 Consideration 2: EPDO Ranking for Segments and Intersections

Using the outputs from the network screening analysis with 2018-2022 crash data, focus areas were also determined by examining the intersections and segments with the highest Equivalent Property Damage Only (EPDO) crashes, which takes into account all crashes and their severities.

Table 22: Review of City Roadway EPDO Ranking

Roadway	Limits	EPDO
Hwy 111	Miles Ave to Bay Club Dr/Mountain Cove Dr	194
Hwy 111	Cook St to Province Way	193
Hwy 111	Indian Wells Ln to Club Dr	188
Hwy 111	Club Dr to Miles Ave	167
Miles Ave	Warner Trl to Washington St	167

Four of the five segments with the highest EPDO rankings are on Highway 111, with Miles Avenue being the fifth segment within the top five highest EPDO scores. Highway 111 between Miles Avenue and Bay Club Drive had the highest EPDO score with 194, followed by Highway 111 between Cook Street and Province Way with a score of 193, Highway 111 from Indian Wells Lane to Club Drive with a score of 188, Highway 111 from Club Drive to Miles Avenue with a score of 167, and Miles Avenue from Warner Trail to Washington Street with a score of 167. These five segments have EPDO scores significantly higher than the rest of the segment, with the next highest EPDO score being 36 on Fred Waring Drive from the Entrada las Brisas to Washington Street.

Intersections overall had higher EPDO scores than segments, as the majority of crashes during the study period occurred at intersections. From this examination, there are seven intersections with EPDO scores above 200. Of these intersections, two involve Highway 111 and three involve Fred Waring Drive. The intersection of Calle del Norte and Avenida Paloma had the highest EPDO score of all the analysis intersections, along with being the sole unsignalized intersection with an EPDO score above 200.

Table 23: Review of City Intersection EPDO Ranking

Intersection	Intersection Type	EPDO
Calle del Norte & Avenida Paloma	Unsignalized	337
Highway 111 & Indian Wells Ln	Signalized	259
Washington St & Miles Ave	Signalized	252
Fred Waring Dr & Washington Dr	Signalized	251
Fred Waring Dr & Eldorado Dr	Signalized	235
Fred Waring Dr & Warner Trail	Signalized	229
Highway 111 & Rancho Palmeras Dr	Signalized	204

Of these high-scoring intersections and segments for EPDO, the intersection of Highway 111 and Indian Wells Lane and the intersection of Miles Avenue and Washington Street both of high-scoring EPDO intersections and segments which overlap.

10.3 Consideration 3: Equity

In addition to analyzing the frequency and severity of crashes, it is also important to examine existing conditions related to vulnerable populations to ensure that roadway and intersections improvements are implemented fairly. Data from the Justice 40 Initiative via the Climate and Economic Justice Screening Tool (CEJST) were utilized to identify disadvantaged census tracts within Indian Wells. Parts of two census tracts identified as disadvantaged intersect several roadway segments and intersections within and adjacent to the city limits. The streets and related intersections that fall within disadvantaged census tracts are shown in the table below.

Table 24: Review of City Roadway Near Disadvantaged Census Tracts

Roadway	Limits	Disadvantaged Census Tract
Fred Waring Dr	Phyllis Jackson Lane to Cook Street	06065045108
Highway 111	Village Court to Cook Street	
Cook Street	Fred Waring Drive to Highway 111	
Fred Waring Drive	Eldorado Drive to Washington Street	06065044911
Miles Avenue	Highway 111 to Washington Street	
Warner Trail	Miles Avenue to Fred Waring Drive	
Washington Street	Fred Waring Drive to Miles Avenue	

Several of these streets and their related intersections are also prevalent as either one of the top five challenge areas or as one of the high-scoring EPDO segments/intersections.

10.4 Analysis

When taking into account the three aforementioned considerations—Top Five Challenge Areas, High-Ranking EPDO Segments and Intersections, and Equity—there are several areas within Indian Wells that should be focused on for further analysis and/or improvements.

Area 1-Indian Wells Tennis Garden

One of these areas is on the roadways and intersections adjacent to the Indian Wells Tennis Garden/Stadium along Miles Avenue and Washington Street, along with the intersection of Miles Avenue and Washington Street. This area has high-ranking EPDO intersections and segments, intersections and segments with aggressive driving crashes, intersections and segments with distracted driving crashes, and falls within a disadvantaged census tract.

Area 2-Indian Wells Conference Center

Another focus area is adjacent to the Indian Wells Conference Center on Highway 111, taking into account Highway 111 from Eldorado Drive to Miles Avenue and including the intersections of Highway 111 with Eldorado Drive, Indian Wells Lane, Club Drive, and Miles Avenue. This area includes: two high-scoring EPDO segments; a high-scoring EPDO intersection; two intersections with bicycle-involved crashes; four intersections and three segments with aggressive driving crashes, including a suspected serious injury crash involving aggressive driving; three intersections and two segments with impaired driving crashes; and two intersections and two segments with crashes involving distracted driving.

Area 3-Village Shopping Center

This area focuses on Highway 111 between Village Court and Province Way, which runs adjacent to the Village Shopping Center located on both sides of Highway 111. This area includes: a high-scoring EPDO segment; a fatal bike crash and intersection with crashes involving bicycles; a fatal crash involving aggressive driving (note that this is the same crash involving a bicycle mentioned previously) along with five intersections and two segments with crashes involving aggressive driving; a suspected serious injury crash and three intersections involving impaired driving crashes; and one intersection involving crashes with distracted driving. This area also intersects with a disadvantaged census tract.

10.5 Best Practices Evaluation and Emphasis Areas

Table 25 identifies existing plans and policies that were recently completed, or are planned, or on-going within the City of Indian Wells. The intent of this review is to provide an idea of the types of strategies in place or encouraged by the City that may impact the safety analysis process. It will also identify opportunity areas where the City could adopt non-infrastructure countermeasures. This table also ties each topic and enhancement to the emphasis areas that are laid out in Table 24.

Table 25: Summary of Program, Policies, and Practices

Topic	Initiatives/ Current Status	Implement/Enhance
COMMITTEES / ROLES		
Does the City have an Active Transportation Coordinator?	The City does not have an Active Transportation Coordinator.	The City can designate a current staff member or position to serve as a primary point of contact for active transportation concerns, questions, and projects

Topic	Initiatives/ Current Status	Implement/Enhance
Does the City have a Safety or Active Transportation Advisory Committee?	Yes, a public safety committee consisting of City Council	The City could consider adding subject matter experts to the Committee.
Does the City have an Active Transportation Safety Education Program?	No, however CVAG does have an ATP.	The City could work with senior services organizations to provide driver refresher courses for older driver
Policy / Plans		
Does the City have a Complete Streets Plan?	No, but there were complete streets projects included in the CVAG ATP (2019)	The City could consider updating the Circulation Element in its General Plan to comply with California Complete Street Act and to better define multi modal street standards.
Does the City assess Traffic Impact Fees?	Yes	The City can include potential roadway safety impacts in the nexus study for new project to be included for impact fee funding.
Does the City have a Safe Routes for Seniors Program?	No, but the City does try to consider seniors on their infrastructure.	The City could consider adopting a Safe Route for Seniors program
Does the City have a Safe Routes to School program?	No, but this being considered in the CVAG ATP	The City can continue to coordinate with CVAG for safe routes to school needs.
Does the City implement Traffic Calming Policies?	No	The City can consider developing a neighborhood traffic calming program to aid implementation of this Safety Action Plan.
Does the City regularly conduct Speed Surveys?	Yes	Monitor updated guidance on AB43 implementation to provide more flexibility to setting local speed limits.
Does the City utilize Warrants for Stop Signs and Signals?	Yes	The City can continue to rely on latest CA-MUTCD traffic control standards.
Does the City have Transportation Demand Management (TDM) or Vehicle Miles Travelled (VMT) Reduction policies?	Yes, these are included in the City's General Plan	City could consider developing its own SB743 VMT analysis procedures and thresholds or could adopt existing Riverside County procedures to facilitate CEQA compliance
Does the City perform regular Traffic Crash Monitoring?	No	The City could conduct annual screening of crash data to track changing patterns and trends and to monitor progress on safety strategy implementation.

Topic	Initiatives/ Current Status	Implement/Enhance
Does the City have an Active Transportation Master Plan?	No,	The City could develop a local Active Transportation Plan to provide safe and comfortable passage for all modes.
Does the City have MUTCD-compliant Pedestrian Signal Timing?	Yes	The City can continue to monitor CA-MUTCD updated guidance on pedestrian timing and could consider leading pedestrian intervals where appropriate
Does the City implement Crosswalks at high pedestrian locations?	Yes, City Traffic Engineer shall establish and designate crosswalks at intersections when deemed appropriate.	Continue to implement these improvements where feasible; The City could consider updating its crosswalk standard to high visibility and could review intersections with missing crosswalk legs to prioritize pedestrian safety
What type of traffic enforcement does the City conduct?	Police enforcement is utilized to enforce traffic regulations.	The City could coordinate with the County Sheriff to conduct targeted safety campaigns to address driver behavior challenges at key locations.
What types of transit does the City have?	Bus, SunLine Transit	The City could work with SunLine to review bus stop locations and first/last mile connectivity to optimize safe system accessibility and operations.
What types of wayfinding does the City have?	Yes. Direction to resort campus and hotels	The City can continue to review wayfinding systems to capture key destinations and provide signage appropriate for each mode where applicable.
DATA COLLECTION / INVENTORY		
Does the City have an Inventory of Pedestrian Signs and Signals?	The City has no inventory of pedestrian signs and signals.	The City could develop a pedestrian signs and signals inventory process to keep track of existing infrastructure and assist with the implementation of new signs/signals.
Does the City have an Inventory/ Mapping of Active Transportation Routes?	Yes, in the General Plan	The City can continue to update inventory data to improve connectivity.
Does the City utilize a database for collision data?	Yes	The City can continue to use a database to monitor crash trends and patterns.

Topic	Initiatives/ Current Status	Implement/Enhance
Does the City have Active Transportation Volume Counting?	No	The City can implement a process to collect volume to monitor active transportation patterns, usage trends, and peak hours.
DATA COLLECTION / INVENTORY		
What ways can citizens give feedback about roadway safety?	Yes, the City has an Online Citizen Complaint website	The City can continue to provide outlets for the public to provide feedback on roadway safety. The City can continue to use the email used for the SAP to collect comments.
What types of Engagement with the School Districts does the City perform?	City regularly meets with school officials. City schools are managed by the Desert Sands Unified School District. The district does have safety services	The City can continue to establish relationships with local schools to gather input on safe routes to school.
What types of Law Enforcement/ Emergency Service Engagement does the City perform?	City regularly meets with Police, fire department and residents	The City can continue to coordinate with law enforcement and fire department as key stakeholders.

11. Emphasis Areas

Emphasis areas represent crash factors that are common in the City and provide the opportunity to reduce the largest number of traffic injuries with strategic investment. Emphasis areas were developed by revisiting the vision and goals of the planning process and comparing them with the trends and patterns identified in the crash analysis.

Emphasis Area #1: Aggressive Driving

Description: Aggressive driving includes several behaviors such as speeding, tailgating, and ignoring traffic signals and signs. One (1) fatal and five (5) severe injury crashes were caused by aggressive driving.

Goals for Emphasis Area #1:

- Reduce the number of crashes due to aggressive driving in the city.
- Identify hot spots and priority corridors where more aggressive driving collisions occur.
- Apply for funding and implement countermeasures to address aggressive driving.

Strategies for Emphasis Area #1

- Educational campaign to target aggressive driving.
- Increase law enforcement presence and enforcement of traffic laws related to aggressive driving.
- Implement traffic calming improvements and establish a monitoring program to determine which measures are most effective.

Emphasis Area #2: Impaired Driving

Description: Impaired driving includes collisions where any evidence of drug or alcohol use by the driver is present, even if the driver was not over the legal limit. Three (3) severe injury crashes and four (4) minor injury/possible injury crashes were caused by impaired driving.

Goals for Emphasis Area #2

- Reduce the number and severity of impaired driving crashes in the city
- Increase impaired driving awareness to help drivers make responsible decisions and avoid driving under the influence.
- Apply for funding to implement countermeasures to reduce impaired driving crashes

Strategies for Emphasis Area #2

- Establish or enhance enforcement programs to reduce impaired driving, such as:
  - Policies and program activities that aim to reduce underage drinking and impaired driving
  - Promote the use of transportation alternatives such as ride hailing, public transit and designated sober driver programs
  - High visibility enforcement to promote public awareness of the dangers of impaired driving and change high-risk behaviors
- Improve access to alternative transportation such as ridesharing services, public transportation, and designated driver programs. Promote these options as convenient and affordable alternatives to driving under the influence.

Emphasis Area #3: Bicyclist Safety

Description: Bicyclist safety was a major concern of residents and a significant cause of severe injury and fatality crashes in Indian Wells. Bicyclist safety aims to create an environment where cyclists feel safe and confident while riding on roadways. Bicyclist were involved with one (1) severe injury, one (1) fatality and four (4) minor injury/possible injury crashes.

Goals for Emphasis Area

- Reduce the number and severity of bicycle crashes in Indian Wells
- Increase bicycles safety on Indian Wells streets
- Increase visibility of bicyclists
- Increase cohesiveness of bicycle network

Strategies for Emphasis Area

- Provide outreach, education, and enforcement programs to encourage safer driving behaviors near bicyclist
- Install bicycle facilities along key corridors and neighboring city connections
- Work closer with local advocacy groups and bicycle clubs to assist in prioritizing bicycle improvements

Emphasis Area #4: Motorcyclists Safety

Description: Collisions involving motorcyclist are defined as a challenge area by the SHSP. Aims to create a safe and supportive environment for individuals who choose to ride motorcycles. Motorcyclist were involved two (2) severe injury crashes and seven (7) minor injury/possible injury crashes.

Goals for Emphasis Areas

- Reduce the number of motorcyclist collisions
- Identify hot spots for motorcycle collisions
- Apply for funding and implementing countermeasures that address motorcycle collisions

Strategies for Emphasis Areas

- Implement educational campaign to bring awareness to motorcyclist safety
- Promote the use of protective gear such as helmets, gloves, and protective clothing.
- Implement countermeasures along roadways that have high concentration of motorcyclist collisions

Emphasis Area #5: Distracted Driving

Description: Distracted driving collisions, as defined by the SHSP, includes instances where the driver of a vehicle was not paying attention or using an electronic device. It involves engaging in tasks or behaviors that take a driver's focus away from the road, including visual, manual, or cognitive distractions. Distracted driving involved twenty-four (24) crashes accounting for 4% of collisions.

Goals for Emphasis Areas

- Reduce the number of distracted driving collisions
- Identify hot spots for distracted driving collisions
- Apply for funding and implement countermeasures involved distracted driving

Strategies for Emphasis Area

- Address distracted driving collisions by implementing proven countermeasures
- Implement educational program to address causes of distracted driving
- Increase enforcement of distracted driving in the City

11.2 Potential Improvements

This section provides information on general identified issues, crash reduction factors, improvements and countermeasures identified for the City of Indian Wells, as well as for specific project locations identified as part of this analysis. Potential improvements/countermeasures are based on data analysis, stakeholder input, and site visits.

11.2.1 Improvement (Countermeasure) Selection Process

Part D of the Highway Safety Manual (HSM) provides information on Crash Modification Factors (CMF) for roadway segments, intersections, interchange, special facilities, and road networks. CMF are used to estimate the safety effects of highway improvements, specifically to compare and select highway safety improvements. A CMF less than 1.0 indicates that a treatment has the potential to reduce crashes. A CMF less than 1.0 indicates that a treatment has the potential to reduce crashes. A CMF greater than 1.0 indicates that a treatment has the potential to increase crashes. A Crash Reduction Factor (CRF) is directly connected to the CMF and is "mathematically defined as (1 – CMF) (the higher the CRF, the greater the expected reduction in crashes)[4]." CMFs can help decision makers weigh potential alternative projects but are only one measure of a project's value and should be considered part of a larger decision-making process. Furthermore, it is important to note that not all CMFs are as reliable as others. The FHWA maintains a federal depository of CMFs and includes a star rating system to help users determine which CMFs are bolstered by the best and most thorough research. Key factors to consider when applying CMFs include:

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1. Selection of an appropriate CMF;
2. Estimation of crashes without treatment;
3. Application of CMFs by type and severity; and,
4. Estimation of the combined effect for multiple treatments (change)

Examples of Safety Countermeasures can be found through several sources. This Report the countermeasures found in the California LRSM and the CMF Clearinghouse (CMF CH) website. Countermeasures/improvements are based on the data analysis and site visits. Additional countermeasures were identified for the high-level issues on a city-wide level and are discussed in Section 11.2.3.

11.2.2 Infrastructure Improvements

This evaluation considered citywide trends to identify countermeasures that would likely provide the most benefit with widespread implementation. Section 11.2.3 outlines the citywide safety project opportunities, which is also referred to as the "Countermeasure Toolbox". Within the toolbox, the description of the countermeasure along with its Local Roadway Safety Manual (LRSM) ID number is listed. The next column, Crash Reduction Factor (CRF), are "multiplicative factors used to estimate the expected reduction in number of crashes after implementing a given countermeasure at a specific site (the higher the CRF, the greater the expected reduction in crashes)." For improvements that do not have a related countermeasure in the LRSM, a conservative 5% crash reduction factor was estimated. For each of these countermeasures, a planning level benefit/cost analysis was completed.

Applying the benefit/cost at the citywide level was estimated assuming some randomness in crash distribution. The location characteristics, such as whether there is a traffic signal, and the type of crashes, were used at the citywide level to calculate an average cost of crashes that the countermeasure might reduce. The benefit per location was then factored out to a 20-year lifecycle savings, with an Opinion of Project Probable Cost (OPCC) for the initial installation costs and a per-year maintenance cost estimate. The cost shown in Section 11.2.3 should be considered initial planning costs using 2024 dollars and not assumed final. These costs are based on typical construction conditions. Additional costs may be incurred based on unusual factors or other site-specific conditions. Treatments that are eligible for the HSIP set-aside categories are called out in the table. IDs for countermeasures are based on Local Roadway Safety Manual and Crash Modification Factors Clearinghouse.

11.2.3 General Citywide Safety Countermeasure Toolbox

ID	Potential Countermeasures	Where to apply?	Definitions	CRF	Per Unit Cost	Unit
NS01	Add Intersection lighting	Non-signalized intersections that have a disproportionate number of night-time crashes	Lighting fixtures and systems installed at intersections to improve visibility and safety for motorist, pedestrians, and cyclists.	40%	$25,000	Per intersection
NS05mr	Convert intersection to mini-roundabout	Crashes occurring in the intersection and/or influence area of the new control	A type of traffic control device used at intersections to manage traffic flow and improve safety. It is smaller version of a traditional roundabout and is designed to accommodate lower traffic volumes and slower speeds.	30%	$100,000	Per location

ID	Potential Countermeasures	Where to apply?	Definitions	CRF	Per Unit Cost	Unit
NS06	Install/upgrade pedestrian crossings at uncontrolled locations	Non-signalized intersection where pedestrians are known to be crossing intersections that involve significant vehicular traffic	Pedestrian crossings at uncontrolled locations are designed to provide a safe and visible pathway for pedestrians to cross the road. They aim to enhance pedestrian safety by establishing a clear right-of-way for pedestrians and reducing risk of accidents or conflict with vehicles.	35%	$8,400	Per sign
NS21PB	Upgrade intersection pavement markings (Non-Signalized Intersection)	At intersections to provide additional warnings to approaching motorists	Enhanced or improved pavement markings. These markings are designed to provide clear and visible guidance to drivers, cyclists, and pedestrians.	25%	$50,000	Per intersection
R08	Install raised median	Areas experiencing head-on collisions that may be affected by both the number of vehicles that cross the centerline and by the speed of oncoming vehicles	Physical barrier or strip of lane that separates opposing lanes or traffic on a roadway. It is typically elevated above the roadway surface and can be constructed using various materials such as concrete,asphalt,or landscaping elements.	25%	$1,068	Per LF
R14	Road diet	Roadway segments with higher frequency of head-ons, left-turn, and rear-end crashes.	A traffic management strategy that involves reducing the number of travel lanes on a roadway to improve safety, accommodate other modes of transportation, and enhance the overall functionality of the street.	30%	$79,200	Per mile
R21	Improve pavement friction (High Friction Surface Treatment)	Roadway segments where skidding is determined to be a problem or inability to stop due to insufficient skid resistance	A specialized pavement treatment that improves the skid resistance of road surfaces.	55%	$186,000	Per approach

ID	Potential Countermeasures	Where to apply?	Definitions	CRF	Per Unit Cost	Unit
R26	Install dynamic/variable speed warning signs	Roadway segments with a significant number of collisions due to unsafe speeds	Electronic traffic signs that display variable speed limits to drivers based on real-time traffic conditions or other factors.	30%	$22,800	Per sign
R27	Install delineators, reflectors and/or object markers	Roadway segments with a risk of fixed object collisions or on curves	Devices used on roads and highways to provide visual guidance and increase visibility for drivers.	15%	$40,800	Per mile
R33PB	Install separated bike lanes	Roadway segments with high volumes of bike traffic and/or high bike vehicle collisions	Dedicated lanes on the roadways that provide a physical separation between bicyclists and motor vehicle traffic.	45%	$84,000	Per mile
R34PB	Install sidewalk/pathway (to avoid walking along the roadway)	Roadway segments that do not have adequate or no sidewalks and a history of walking along roadway pedestrian crashes	A paved or surfaced pedestrian walkway that is typically located alongside a road, street, or within a community or urban area.	80%	$80	Per LF for 4' sidewalk
R35PB	Install/upgrade pedestrian crossing (with enhanced safety features)	Roadway segments with no controlled crossings for a significant distance in high-use midblock crossing areas and/or multilane roads locations	Crossings are equipped with additional safety measures beyond the standard crosswalk markings to increase visibility.	35%	$30,000	Per crossing
S02	Improve signal hardware: lenses, back plates with retroreflective borders, mounting, size, and number	Signalized intersections where signal heads are not equipped with these features	Retroreflective borders enhance visibility of the signal during day or night. The retroreflective border provides a clear outline around the signal.	15%	$26,400	Per intersection
S07	Provide protected left-turn phase (left turn already exists)	Locations where currently have a permissive left-turn or no left-turn protection that have a high frequency of angle crashes	A specific timing sequence at a signalized intersection that allows vehicles traveling in one direction to make a left turn while opposing traffic is stopped.	30%	$45,600	Per intersection

ID	Potential Countermeasures	Where to apply?	Definitions	CRF	Per Unit Cost	Unit
S10	Install flashing beacons as advance warning (Signalized Intersection)	Locations where drivers are unable to see the traffic control device in time to comply	The use of flashing lights, typically mounted on a sign or a separate structure, to alert drivers of a specific condition ahead. These beacons are typically used to warn drivers of potential hazards or changes in traffic patterns.	30%	$25,000	Per beacon
S18PB	Install pedestrian crossings	Signalized intersections with no marked crossing and pedestrian signal heads	A designated area on a road or street where pedestrians are permitted to cross safely. Crossings are typically marked with pavement markings, signage, and sometimes traffic signals to regulate the flow of both pedestrian and vehicular traffic.	25%	$74,400	Per intersection
S21PB	Modify signal phasing to implement a Leading Pedestrian Interval	Intersections with signalized pedestrian crossing that have a high turning vehicle volume and have had pedestrian vs vehicle crashes	A traffic signal feature that provides pedestrians with a head start to enter the crosswalk before vehicles receive a green signal.	60%	$45,600	Per intersection
	Advanced Dilemma Zone (Cameras existing)	Applied at signalized intersections where there is a potential conflict between a vehicle approaching the intersection and a signal change. They are designed to address the "dilemma zone" which is the area where drivers have difficulty deciding whether to stop or proceed through the intersection when the signal changes from yellow to red.	A specific area on the approach to a signalized intersection where drivers face a dilemma when deciding whether to stop or proceed through the intersection when the signal changes from yellow to red.	5%	Varies	Per system

ID	Potential Countermeasures	Where to apply?	Definitions	CRF	Per Unit Cost	Unit
	Remove merging lane/ taper lane	Based on thorough analysis of the specific roadway conditions and traffic patterns.	A designated lane on a roadway that is specifically designed to allow vehicles to merge safety from one lane into another.	5%	Varies	Per marking
	Add segment lighting (pedestrian scale lighting)	Based on roadway conditions, traffic patterns, and safety consideration.	Lighting fixtures and systems installed at roadway segments to improve visibility and safety for motorist, pedestrians, and cyclists.	5%	Varies	Per system
	Reduce lane width	If a roadway has a history of high-speed crashes or a significant number of crashes, reducing lane width can help to slow down vehicle speeds and improve safety. Narrower lanes can make drivers more cautious and attentive, reducing the risk of collisions.	The process of decreasing the width of a traffic lane on a roadway.	5%	Varies	Per marking
	Reduce curve turn for yield	Used in situations where there is a need to slow down vehicles and enhance safety.	Intersection design that incorporates a smaller turning radius than a standard curve.	5%	Varies	Per system
	Move bus stop far sided to remove conflict on the right turn lane	Based on analysis which include traffic flow, pedestrian safety, and transit operations.	A bus stop that is located on the far side of an intersection. The bus stop is positioned after the intersection when the bus is travelling in the same direction as the flow of traffic.	5%	Varies	Per System

ID	Potential Countermeasures	Where to apply?	Definitions	CRF	Per Unit Cost	Unit
	Chicane	Applied in situations in residential areas, school zones, commercial zones, and areas with high crash rates. Based on analysis of the site characteristics including traffic volume, speeds, and pedestrian activity.	A traffic calming measure that involves the installation of a series of alternating curves or bends in a roadway. The purpose of a chicane is to slow down vehicular traffic, improve safety for pedestrians and cyclists, and discourage speeding or reckless driving.	5%	Varies	Per System
	Speed Hump	Applied in areas where there is a need to reduce vehicle speeds and improve safety. Specific location where speed humps are installed depend on factors such as traffic volume, speed limit, and the presence of vulnerable road users	A raised device placed across the road, typically made of asphalt or rubber, with a gradual incline and decline.	5%	Varies	Per System

12. Process and Transparency

12.1 Funding Sources

Competitive funding resources are available to assist in the development and implementation of safety project in Indian Wells. The City should continue to seek available funding and grant opportunities from local, state, and federal resources to accelerate their ability to implement safety improvements throughout Indian Wells. This section provides a high-level introduction to some of the main funding programs and grants for which the City can apply.

12.1.1 Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is a federally-funded, Caltrans-managed program that apportions funding as a lump sum for each state, which is then divided among apportioned programs. These flexible funds can be used for projects to preserve or improve safety conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for non-motorized transportation, and other project types. Safety improvement projects eligible for this funding include:

- Curb-extensions
- Pedestrian warning flashing beacons
- High visibility crosswalks
- Other projects listed in the Caltrans Local Road Safety Manual

California's local HSIP focuses on infrastructure projects with national recognized crash reduction factors. Normally HSIP call-for-projects is made at an interval of one to two years. The applicant must be a city, a county, or a tribal government federally recognized within the State of California.

Additional information regarding this program at the Federal level can be found online at: https://safety.fhwa.dot.gov/hsip/. California specific HSIP information – including dates for upcoming call for projects - can be found at: http://www.dot.ca.gov/hq/LocalPrograms/hsip.html. HSIP Cycle 12 applications are expected to be due in September 2024.

12.1.2 Caltrans Active Transportation Program

Caltrans Active Transportation Program (ATP) is a statewide funding program, created in 2013, consolidating several federal and state programs. The ATP funds projects that encourage increased mode share for walking and bicycling, improve mobility and safety for non-motorized users, enhance public health, and decrease greenhouse gas emissions. Projects eligible for this funding include:

- Bicycle and pedestrian infrastructure projects
- Bicycle and pedestrian planning projects (e.g., safe routes to school)
- Non-infrastructure programs (education and enforcement)

This program funding is provided annually. The ATP call for projects typically comes out in the spring. Information on this program and cycles can be found online at: http://www.dot.ca.gov/hq/LocalPrograms/atp/.

12.1.3 California SB 1

The California SB 1 is a landmark transportation investment to rebuild California by fixing neighborhood streets, freeways, and bridges in communities across California and targeting funds toward transit and congested trade and commute corridor improvements.

California's state-maintained transportation infrastructure will receive roughly half of SB 1 revenue: $26 billion. The other half will go to local roads, transit agencies and an expansion of the state's growing network of pedestrian and cycle routes. Each year, this new funding will be used to tackle deferred maintenance needs both on the state highway system and the local road system, including:

- Local Street and Road Maintenance and Rehabilitation: $1.5 billion
  - This funding is dedicated to improve local road maintenance, rehabilitation, and/or safety through projects such as restriping and repaving.
- Bike and Pedestrian Projects: $100 million
  - This will go to cities, counties, and regional transportation agencies to build or convert more bike paths, crosswalks, and sidewalks. It is a significant increase in funding for these projects through the ATP.
- Local Planning Grants: $25 million

12.1.4 California Office of Traffic Safety Grants

This program has funding for projects related to traffic safety, including transportation safety education and encouragement activities. Grants applications must be supported by local crash data (such as the data analyzed in this report) and must relate to the following priority program areas:

- Alcohol Impaired Driving
- Distracted Driving
- Drug-Impaired Emergency Medical Services
- Motorcycle Safety
- Occupant Protection
- Pedestrian and Bicycle Safety
- Police Traffic Services
- Public Relations, Advertising, and Marketing Program
- Roadway Safety and Traffic Records

12.1.5. Safe Streets and Roads for All (SS4A) Grant Program

This program has allocated $1B annually for the next 3 years for local cities, counties, MPOs, and other roadway owners (excepting state DOTs) for safety improvement grants for safety planning, education, enforcement, and roadway improvements. This program is not benefit / cost based. Evaluation criteria are oriented to the project's alignment with the Safe Systems approach. There is a 20% local match requirement (can be in-kind contribution via staff billable hours). Planning grants are open to any eligible agency and Implementation grants are open to agencies with a completed safety plan such as a Local Roadway Safety Plan and Safety Action Plan. Planning grants are expected to range from $100K to $1M and Implementation grants are expected to range from $1M to $20M. Grant applications are expected to be due in July 2024.

12.1.6. Infrastructure Investment and Jobs Act

In November 2021, the President signed into law the $1.2 trillion Infrastructure Investment and Jobs Act. In addition to the SS4A grant program described above, this law provides billions of dollars in additional funding for improvements and investment in the transportation sector nationwide. The law provides $30 billion in funding over 5 years for competitive RAISE grants for transportation projects, as well as additional funding for repair and environmental mitigation projects. As these grant programs continue to be developed, City can position itself by identifying potential projects and programs to pursue.

12.2 Implementation Plan

Once the Safety Action Plan has been completed, the City can plan to regularly review and monitor crash data for trends and changes. The City can also plan to prioritize and implement certain improvements that were identified in this plan.

12.2.1. Monitoring

The City can plan to regularly monitor the success of the SAP and its related implementations by performing the following steps. This before and after analysis can be performed every second year. The City can also meet with the Police Department on a regular basis to discuss roadway safety issues and compare to the latest crash analysis.

- Pull yearly crash data from Crossroads database to determine year-over-year trend
- Utilize Crossroads or GIS software to review the number of crashes occurring at specific locations. Locations where improvements have been made should receive priority for monitoring.
- Based upon changes in crash activity, determine efficacy of improvements and adjust strategies going forward

12.2.2. Analysis Update

Every five (5) years the City will perform a major update to the analysis and the Safety Action Plan by performing the following steps. This update will maintain eligibility for grant funding for the City. This analysis should continue to focus on both systemic and location-specific safety needs.

1. Obtain updated Statewide Integrated Traffic Records System (SWITRS) crash data from the Crossroads database.
2. Identify new or changing hot spots through GIS mapping. Review crash data in changing trends, new land uses, and evolving driver behavior.
3. Update the roadway shapefile with any new or upgraded roadways.
4. Update the intersection shapefile with any new or upgraded intersections.
5. Evaluate crash trends to determine whether new emphasis areas are emerging.
6. Document implemented countermeasures and review changes in crash activity.
7. Review the Crash Toolbox to determine if any additional countermeasures should be considered for implementation in the City.

12.3 Implementation Strategies

The opportunities identified in this report provide systemic and location-specific countermeasures that can be implemented within the City. Implementation will be dictated by funding and available resources, this guidance is preliminary and subject to change. Over the near-term and mid-term, the City can concentrate its efforts on the following emphasis areas.

- Aggressive Driving
- Impaired Driving
- Bicyclist
- Motorcyclist
- Distracted Driving

Analysis conducted at the citywide level indicated that these factors were some of the most frequent influences contributing to crashes within the City. The countermeasure opportunities previously discussed in this report for both systematic and project-specific improvements can be used as a basis for developing projects at locations where addressing these focus areas would be of the most benefit. Projects that address these focused areas citywide can be developed with a high benefit-to-cost ratio (by applying City-wide crash rates), allowing competitive projects to be developed even at sites with little to no direct crash history, but with conditions that might contribute to future crashes. For location-specific improvements, the City can utilize benefit-cost ratio calculations to help prioritize projects as funding and resources become available.

The City can also plan to implement the non-engineering improvements identified throughout this report, including actions related to Enforcement, Education, and Emergency Services. These actions will require coordination with internal and external stakeholders, such as City departments, law enforcement, local government organizations, and local community organizations. Early buy-in and engagement from these stakeholders will be key to the success of these actions.

To aid in these actions, the City can assemble a 'Task Force' of representatives from different City departments, such as Public Works, Community Development, Planning, and Code Enforcement. This task force will be instrumental in the monitoring, analysis update, project development and project implementation outlined in this plan.

13. Next Steps

The City has completed this SAP to guide the process of future transportation safety improvements for years to come. In addition to the actions identified in the Implementation Plan, the City can perform the following to guide the success of this SAP and the safety efforts overall.

- Develop investment program to help achieve the City's crash reduction goals.
- Work with state and partner agencies on implementation of large-scale programs and policies.
- Incorporate safety analysis findings in future updates of safety programs.
- Monitor statewide safety priorities, guidance, and funding opportunities.

Appendix A - Case Study Sheets

Case Study Sheet: Location #1

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

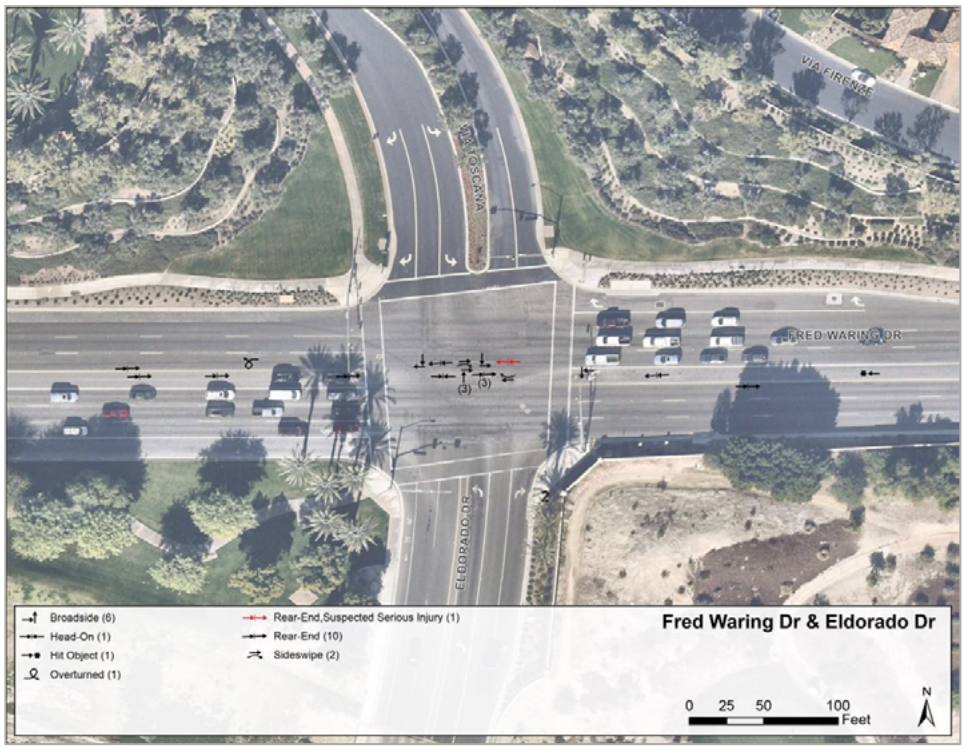
Prepared by: Kimley-Horn
Checked by:
Date: 2024

SIGNALIZED INTERSECTION

Project Location, Description & Maps

Intersection: Fred Waring Drive & Eldorado Drive
Example of Similar Intersections: Hovley Lane East & Eldorado Drive





Case Study Sheet: Location #1

Project Location, Description & Maps

Collision Data	
Total Collisions	22
Fatal and Severe Injury Collisions	3
Top 3 Collision Types (%)	Rear-End (50%) Broadside (27%) Sideswipe (9%)
Dark Collisions	6
Impaired Collisions	2

Collision Data	
Number of Approaches	4
Total Entering Vehicles	44,525
Crosswalk Condition	Good
Control Type	Signalized
Lighting	Well Lit
Highest Posted Speed Limit	55

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
26	0	0

Field Visit Notes

- Permissive left turn north and southbound.
- High speeds though the intersection.

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Curb extension (bulb-outs) at intersections	35% (R35PB)	$2,648,135	$120,000	22.07
High visibility crosswalks (all intersections, painted crosswalks at selected locations)	35% (R35PB)	$2,648,135	$120,000	22.07
Install speed feedback signage (various locations)	30% (R26)	$2,269,830	$68,400	33.18

Countermeasure Evaluation (continued)

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Improve signal hardware; lenses, back plate with retroreflective borders, mounting, size, and number	15% (S02)	$1,134,915	$26,400	42.99
Turn phase (left turn already exist)	30% (S07)	$2,269,830	$45,600	49.78
High Friction Surface Treatment	55%	$4,161,355	$83,622	49.76
Striping to narrow travel lanes	5%	$378,305	$30,000	12.61

Case Study Sheet: Location #2

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

SIGNALIZED INTERSECTION

Project Location, Description & Maps

Intersection: Highway 111 & Village Center Drive

Example of Similar Intersections: Fred Waring Drive & Warner Trail





Kimley»Horn

Case Study Sheet: Location #2

Project Location, Description & Maps

Collision Data	
Total Collisions	15
Fatal and Severe Injury Collisions	1
Top 3 Collision Types (%)	Rear-End (80%) Broadside (7%) Hit Object (7%)
Dark Collisions	2
Impaired Collisions	1

Collision Data	
Number of Approaches	4
Total Entering Vehicles	34,850
Crosswalk Condition	Good
Control Type	Signalized
Lighting	Well Lit
Highest Posted Speed Limit	55

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
15	0	0

Field Visit Notes

- Aggressive driving
- Vehicles driving through eastbound right turn only lane
- High speeds

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
High visibility crosswalks (all intersections, painted crosswalks at selected locations)	35% (R35PB)	$1,015,525	$180,000	5.64
Advanced dilemma zone on existing cameras	5%	$145,075	$32,000	4.53
Complete crosswalks	25% (R35PB)	1,015,525	$43,200	23.51

Countermeasure Evaluation (continued)

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Bus warning signage for bus stop pockets	15% (NS06)	$435,225	$16,800	25.90

Case Study Sheet: Location #3

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

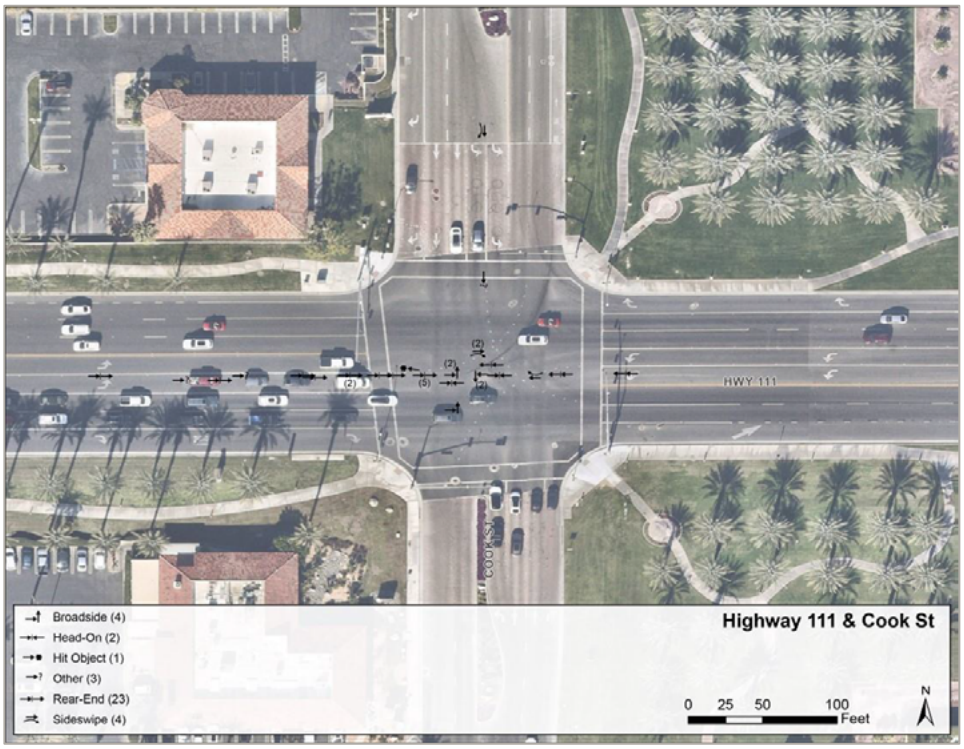
SIGNALIZED INTERSECTION

Project Location, Description & Maps

Intersection: Highway 111 & Cook Street

Example of Similar Intersections: Highway 111 & Miles Avenue





Case Study Sheet: Location #3

Project Location, Description & Maps

Collision Data	
Total Collisions	37
Fatal and Severe Injury Collisions	5
Top 3 Collision Types (%)	Rear-End (62%) Broadside (11%) Sideswipe (11%)
Dark Collisions	15
Impaired Collisions	6

Collision Data	
Number of Approaches	4
Total Entering Vehicles	43,375
Crosswalk Condition	Good
Control Type	Signalized
Lighting	Well Lit
Highest Posted Speed Limit	55

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
37	0	0

Field Visit Notes

- Vehicles driving through eastbound right turn only lane
- High speeds
- Lots of pedestrian activity

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Advanced dilemma zone	5%	$632,880	$32,000	19.78
Install high visibility crosswalks with Leading Pedestrian Interval (LPI)	60% (S21PB)	$7,594,560	$18,240	138.08
Install speed feedback signage	30% (R26)	$3,797,280	$68,400	55.52

Countermeasure Evaluation (continued)

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Curb Extensions (bulb-outs) at intersections*	35% (R35PB)	$4,430,160	$200,000	22.15
Curb Extensions (bulb-outs) paint at intersections*	35% (R35PB)	$4,430,160	$30,000	147.67

*countermeasures will only be feasible if the right turn lane does not become a through lane.

Case Study Sheet: Location #4

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

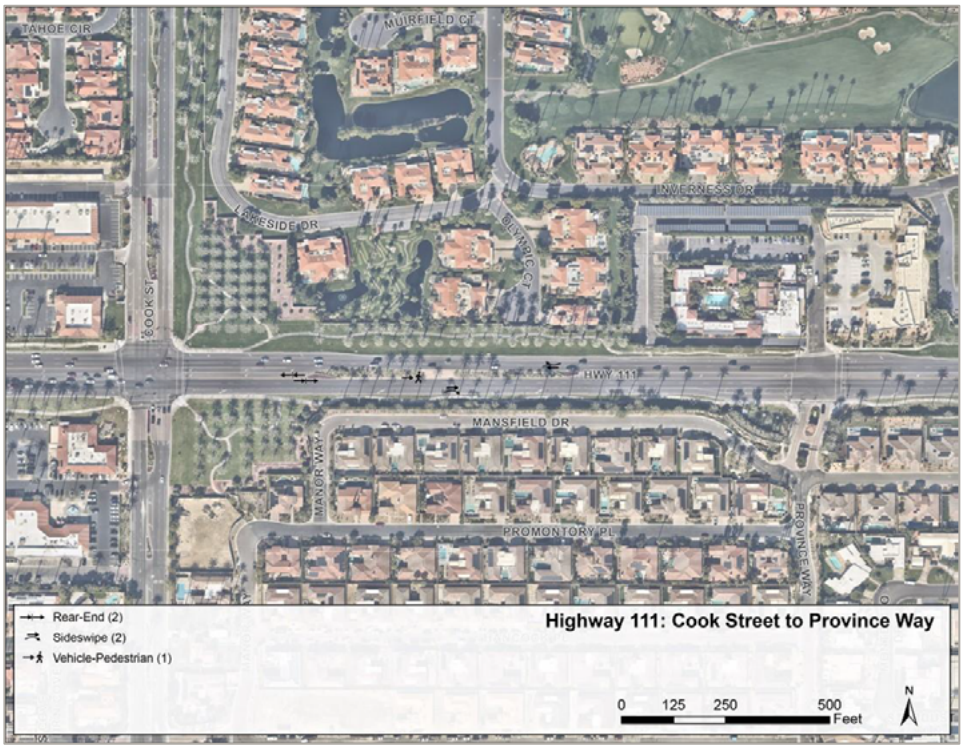
ROADWAY SEGMENT

Project Location, Description & Maps

Segment: Highway 111 : Cook Street to Province Way

Example of Similar Segments: Highway 111: Indian Wells Lane to Club Drive





Case Study Sheet: Location #4

Project Location, Description & Maps

Collision Data	
Total Collisions	5
Fatal and Severe Injury Collisions	2
Top 3 Collision Types (%)	Rear-End (40%) Sideswipe (40%) Rear-End (23%)
Dark Collisions	1
Impaired Collisions	0

Collision Data	
Number of Approaches	4
Average Daily Traffic	34,250
Crosswalk Condition	Good
Lighting	Well Lit
Highest Posted Speed Limit	45

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
4	1	0

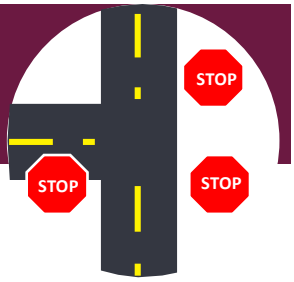
Field Visit Notes

- Vehicles driving through eastbound right turn only lane
- High speeds

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Remove merging lane/ taper lane on the east leg	40% (R23)	$240,345	$30,000	8.01
Install sidewalk/pathway	80% (R34PB)	$3,845,520	$422,400	9.10
Move bus stop to remove conflict on the right turn lane	5%	$240,345	$100,000	2.40

Case Study Sheet: Location #5



Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

ALL-WAY STOP INTERSECTION

Project Location, Description & Maps

Intersection: Fairway Drive & Rancho Palmeras Dr

Example of Similar Intersections: Fairway Drive & Indian Wells Lane





Kimley»Horn

Case Study Sheet: Location #5

Project Location, Description & Maps

Collision Data	
Total Collisions	0
Fatal and Severe Injury Collisions	0
Top 3 Collision Types (%)	-
Dark Collisions	0
Impaired Collisions	0

Collision Data	
Number of Approaches	3
Total Entering Vehicles	
Crosswalk Condition	None
Control Type	Unsignalized
Lighting	Well Lit
Highest Posted Speed Limit	55

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
26	3	1

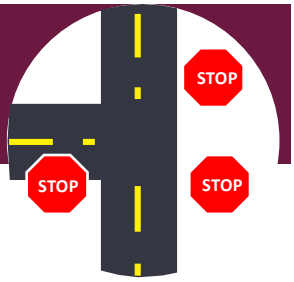
Field Visit Notes

- Lots of pedestrian and bicycle activity
- Rolling stop signs

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
High visibility crosswalk (need to comply with ADA)	35% (NS21PB)	-	$100,000	-
Two lane cycle track – multipath	5%	-	$120,000	-
Reduce lane width	5%	-	$120,000	-
Add segment lighting (pedestrian scale lighting)	40%		$25,000	

Case Study Sheet: Location #6



Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

ALL-WAY STOP INTERSECTION

Project Location, Description & Maps

Segment: Fairway Drive & Eldorado Drive

Example of Similar Segments: Vintage Drive West & Portola Avenue





Case Study Sheet: Location #6

Project Location, Description & Maps

Collision Data	
Total Collisions	3
Fatal and Severe Injury Collisions	0
Top 3 Collision Types (%)	Hit Object (60%) Sideswipe (40%)
Dark Collisions	0
Impaired Collisions	1

Collision Data	
Number of Approaches	4
Total Entering Vehicles	25,524
Crosswalk Condition	Good
Control Type	Hawk Signal
Lighting	Well Lit
Highest Posted Speed Limit	35

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
3	0	0

Field Visit Notes

- Lots of pedestrian and bicycle activity
- Rolling stop signs
- Fast speeds on the turns

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Reduce lane width	15% (S02)	$21,345	$26,400	.81
Neighborhood traffic circle	30% (NS05mr)	$42,690	$300,000	.14
Road diet	30% (R14)	$42,690	$79,200	.54

Countermeasure Evaluation (continued)

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Install high visibility crosswalk (must comply with ADA)	35% (R35PB)	$49,805	$120,000	.42
Install sidewalk (must comply with ADA)	80% (R34PB)	$113,840	$422,400	.27

Case Study Sheet: Location #7

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

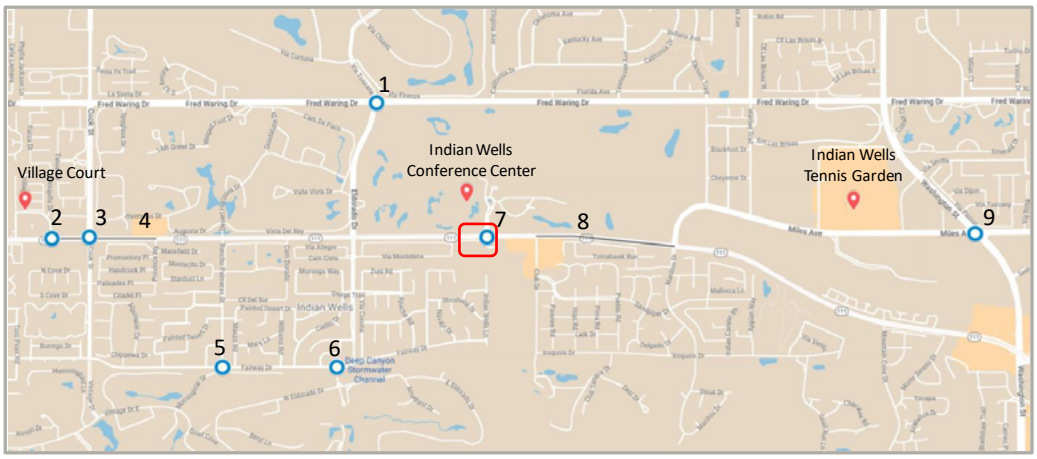
Prepared by: Kimley-Horn
Checked by:
Date: 2024

SIGNALIZED INTERSECTION

Project Location, Description & Maps

Intersection: Highway 111 & Indian Wells Lane

Example of Similar Intersections: Washington Street & Via Sevilla





Case Study Sheet: Location #7

Project Location, Description & Maps

Collision Data	
Total Collisions	25
Fatal and Severe Injury Collisions	1
Top 3 Collision Types (%)	Rear-Ends (68%) Broadside (16%) Hit-Object (8%)
Dark Collisions	5
Impaired Collisions	1

Collision Data	
Number of Approaches	4
Total Entering Vehicles	34,350
Crosswalk Condition	Good
Control Type	Signalized
Lighting	Well Lit
Highest Posted Speed Limit	55

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
25	0	0

Field Visit Notes

- High speeds – coming downhill eastbound
- High speeds overall

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
High visibility crosswalk	35% (R35PB)	$1,413,965	$120,000	11.78
Curb extensions	35% (R35PB)	$1,413,965	$120,000	11.78
Flashing yellow left turn (southbound approach)	30% (S07)	$1,211,790	$45,600	26.58
Advanced Dilemma Zone (camera existing)	5%	$201,995	$8,000	25.25

Case Study Sheet: Location #8

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

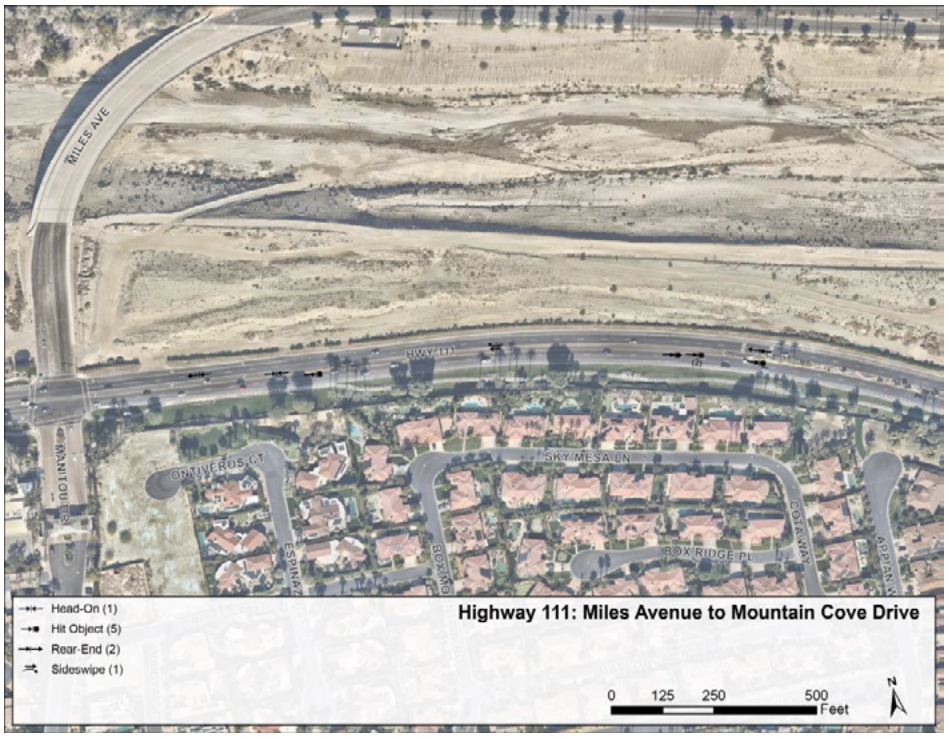
ROADWAY SEGMENT

Project Location, Description & Maps

Segments: Highway 111: Miles Avenue & Mt. Cove

Example of Similar Segments: Eldorado Drive: Highway 111 to Fred Waring Drive





Case Study Sheet: Location #8

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

ROADWAY SEGMENT

Project Location, Description & Maps





Case Study Sheet: Location #8

Project Location, Description & Maps

Collision Data	
Total Collisions	16
Fatal and Severe Injury Collisions	0
Top 3 Collision Types (%)	Broadside (40%) Sideswipe (23%) Rear-End (23%)
Dark Collisions	11
Impaired Collisions	0

Collision Data	
Number of Approaches	4
Total Entering Vehicles	25,524
Crosswalk Condition	Good
Control Type	Hawk Signal
Lighting	Well Lit
Highest Posted Speed Limit	35

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
26	3	1

Field Visit Notes

- Fast speeds
- Pedestrian and bicycle activity

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Extend existing median	25% (R08)	$618,650	$2,819,520	.22
Install delineators, reflectors and/or object markers	15% (R27)	$371,190	$81,600	4.55
Install speed feedback signage	15% (NS06)	$371,190	$16,800	22.09
Protected bike lanes	45% (R33PB)	$1,113,570	$84,000	2.65
Reduce lane width	5%	$123,730	$30,000	4.12

Case Study Sheet: Location #10

Project Name: Indian Wells SAP
Agency Name: City of Indian Wells
Contact Name:
Email:

Prepared by: Kimley-Horn
Checked by:
Date: 2024

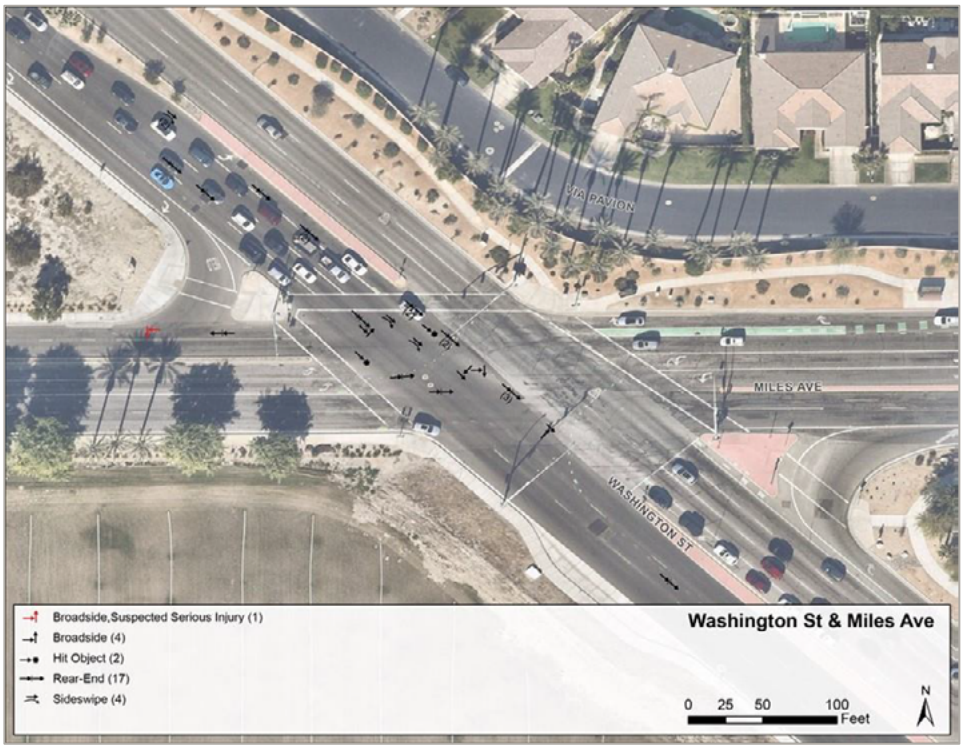
SIGNALIZED INTERSECTION

Project Location, Description & Maps

Intersection: Washington Street & Miles Avenue

Example of Similar Intersections: Washington Street & Fred Waring Drive





Case Study Sheet: Location #10

Project Location, Description & Maps

Collision Data	
Total Collisions	28
Fatal and Severe Injury Collisions	1
Top 3 Collision Types (%)	Rear-End (60%) Broadside (18%) Sideswipe (14%)
Dark Collisions	5
Impaired Collisions	1

Collision Data	
Number of Approaches	4
Total Entering Vehicles	38,600
Crosswalk Condition	Good
Control Type	Signalized
Lighting	Well Lit
Highest Posted Speed Limit	55

Collisions Involved With		
Vehicular	**Pedestrian**	**Bicycle**
28	0	0

Field Visit Notes

- High speeds
- Fast turns on the yield turn
- During events lots of pedestrian and bicycle activities

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Reduce curve turn for yield	5%	$392,535	$80,000	4.91
Install additional crosswalk	25% (NS20PB)	$2,747,745	$30,000	45.80
Event related pedestrian scramble	35% (R32PB)	$1,962,675	$400,000	4.91
Protected bike lanes	35% (R32PB)	$3,532,815	$672,000	5.26

Countermeasure Evaluation (continued)

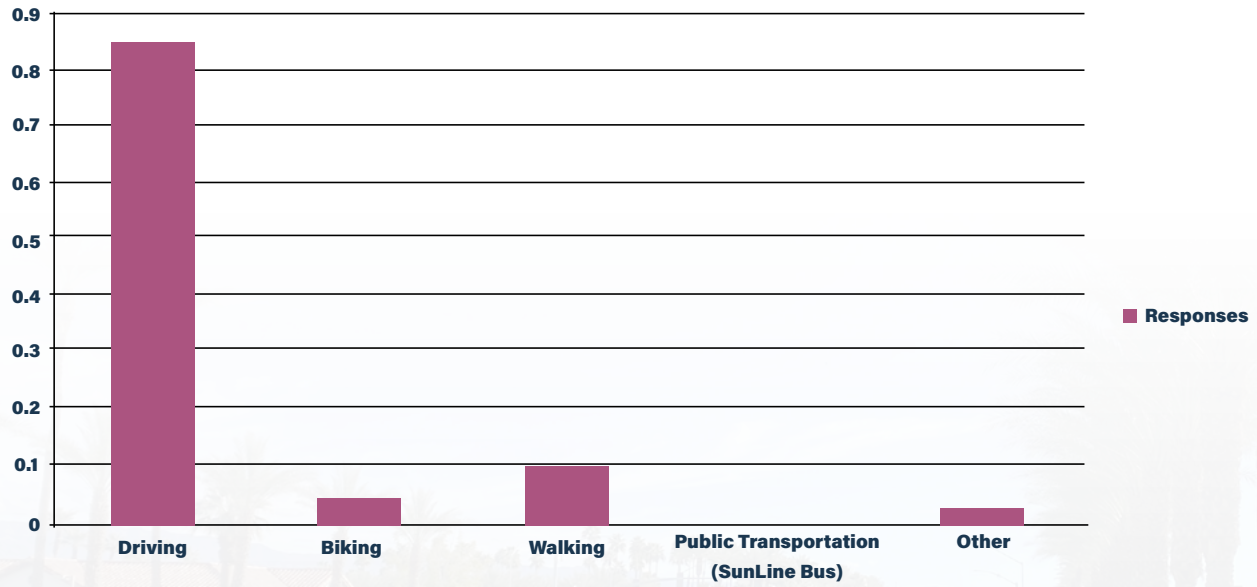
Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
High Visibility Crosswalk	35% (R35PB)	$2,747,745	$90,000	4.91

Appendix B - Public Engagement

Public Engagement (Comments, interactive map, and survey)

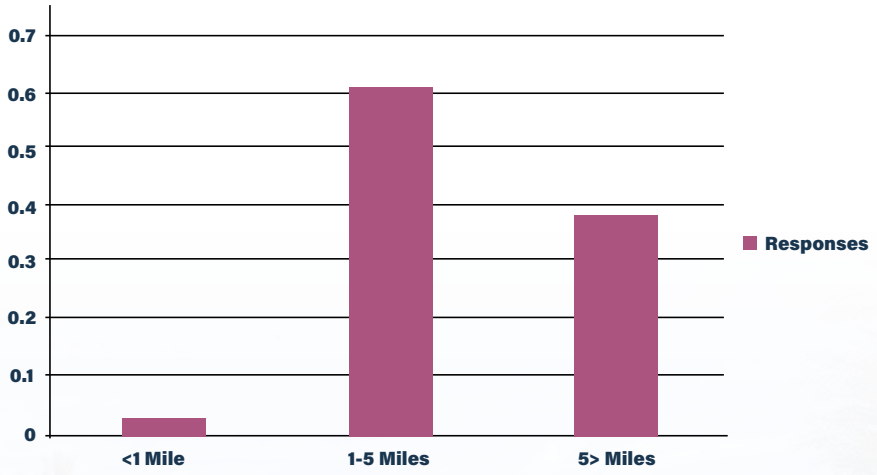
What form of transportation do you use most often to get around Indian Wells?

Answer Choices	Responses	
Driving	84.84%	414
Biking	3.48%	17
Walking	9.63%	47
Public Transportation (SunLine bus)	0.00%	0
Other - Please specify (Rideshare, scooter, etc.)	2.05%	10
	Answered	**488**
	Skipped	**5**



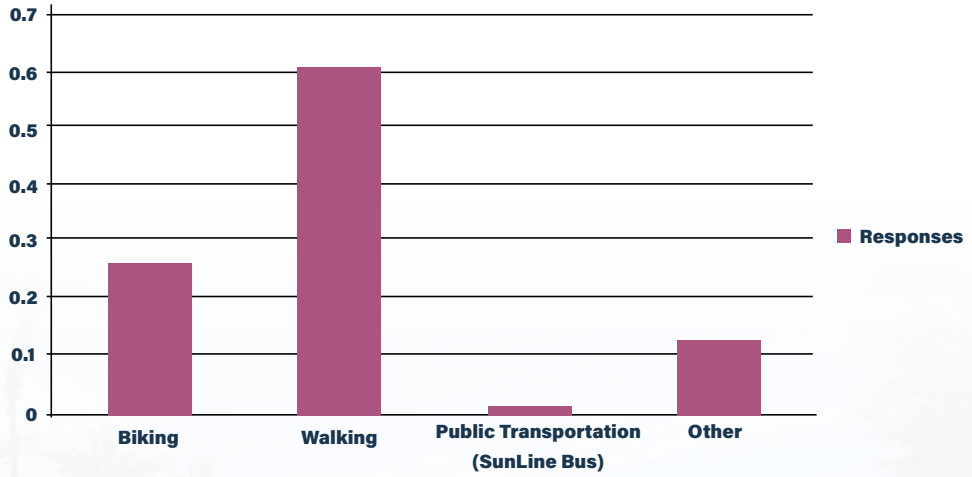
How far do you typically travel per day?

Answer Choices	Responses	
Less than one mile	2.44%	12
One to five miles	59.88%	294
More than five miles	37.68%	185
	Answered	**491**
	Skipped	**2**



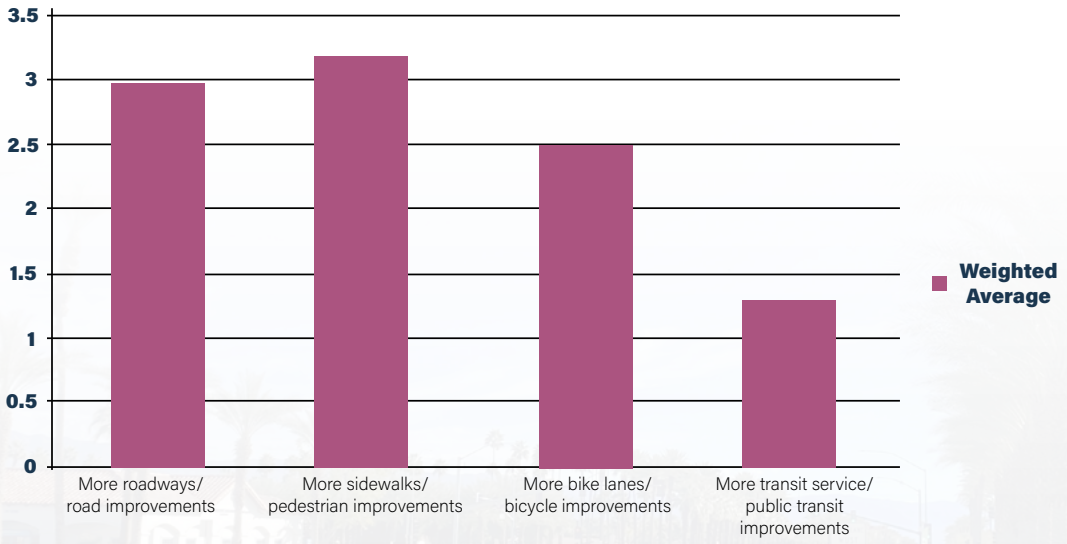
Besides driving, what mode of transportation is most appealing to you?

Answer Choices	Responses	
Biking	25.98%	126
Walking	61.03%	296
Public Transportation	0.62%	3
Other - Please specify (Rideshare, scooter, etc.)	12.37%	60
	Answered	**485**
	Skipped	**8**



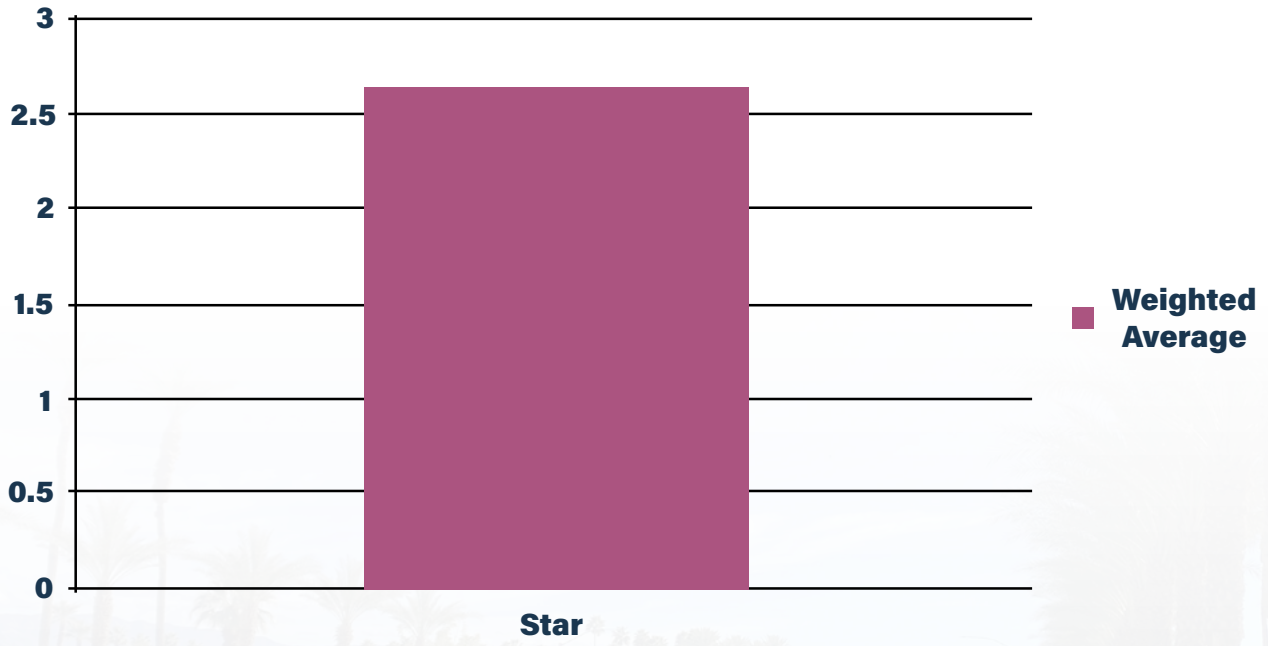
Which improvement areas would you prioritize to make Indian Wells safer? Please rank the items below. (Most important =1; least important=4)

	1		2		3		4		Total	Score
More roadways/road improvements	38.90%	163	28.16%	118	25.54%	107	7.40%	31	419	2.99
More sidewalks/ pedestrian improvements	42.72%	179	40.57%	170	13.13%	55	3.58%	15	419	3.22
More bike lanes/bicycle improvements	16.23%	68	27.92%	117	44.63%	187	11.22%	47	419	2.49
More transit service/public transit improvements	2.15%	9	3.34%	14	16.71%	70	77.80%	326	419	1.3
									Answered	**419**
									Skipped	**74**



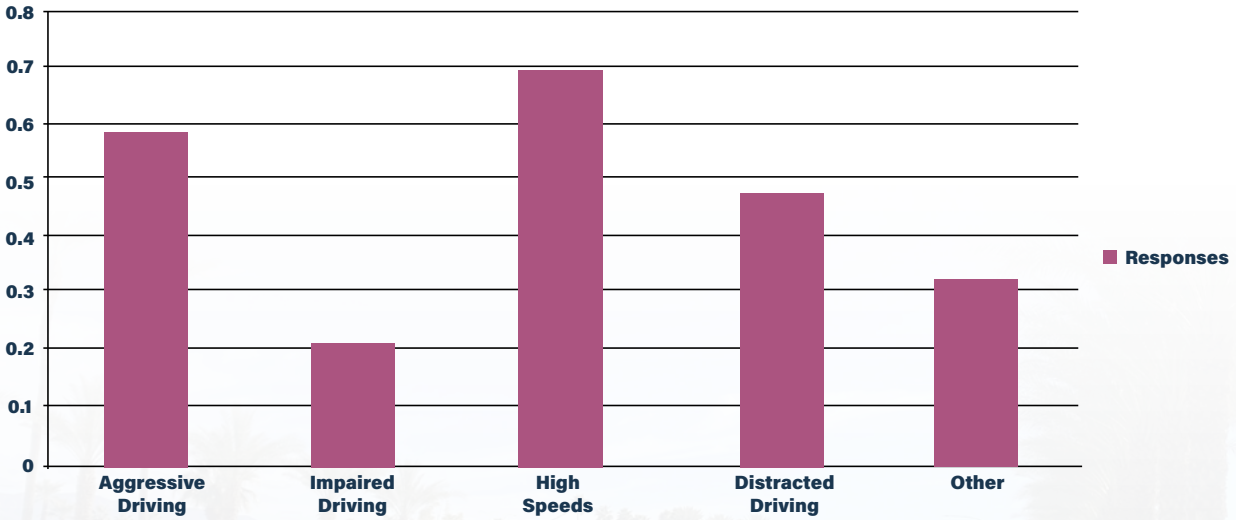
How important do you think alternative transportation [biking, walking, public transportation (SunLine bus) improvements are to the city?

	Not important		Somewhat important		Important		Very important		Total	Weighted Average
Star	15.20%	64	32.07%	135	25.42%	107	27.32%	115	421	2.65
									Answered	**421**
									Skipped	**72**



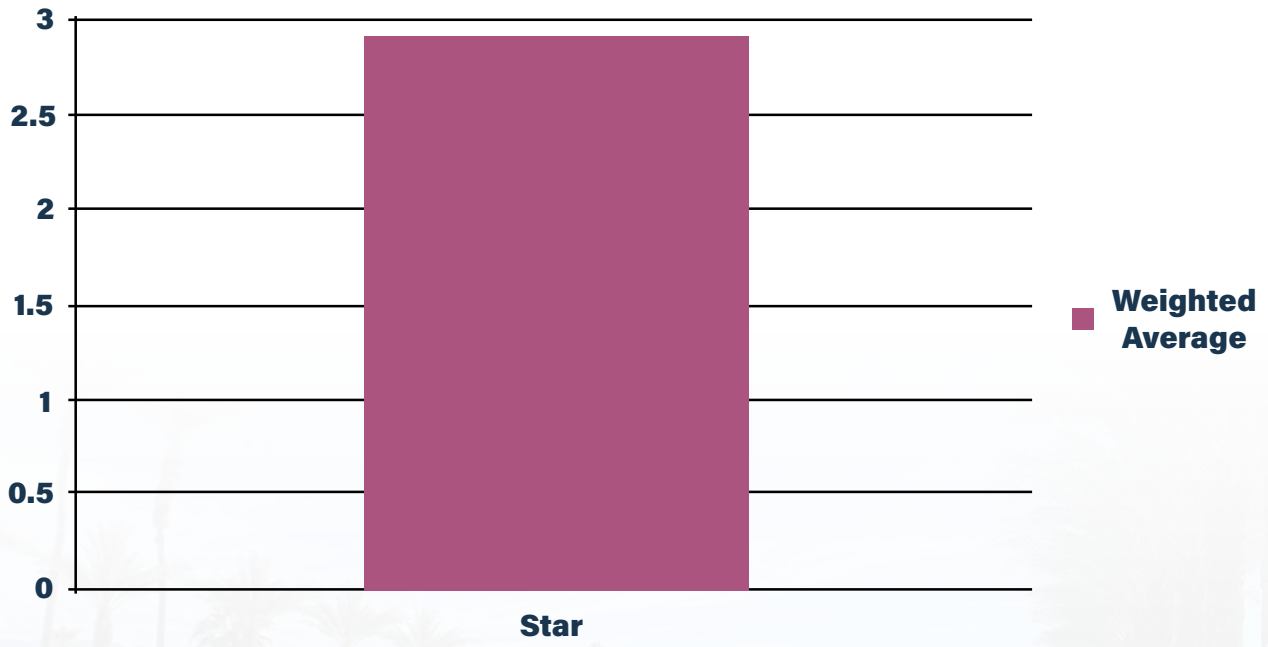
What kind of challenge areas does the city have that traffic safety effort should focus on? (Select all that apply).

Answer Choices	Responses	
Aggressive driving	58.75%	235
Impaired driving	21.00%	84
High speeds	69.25%	277
Distracted driving	47.25%	189
Other - Please specify	32.25%	129
	Answered	**400**
	Skipped	**93**



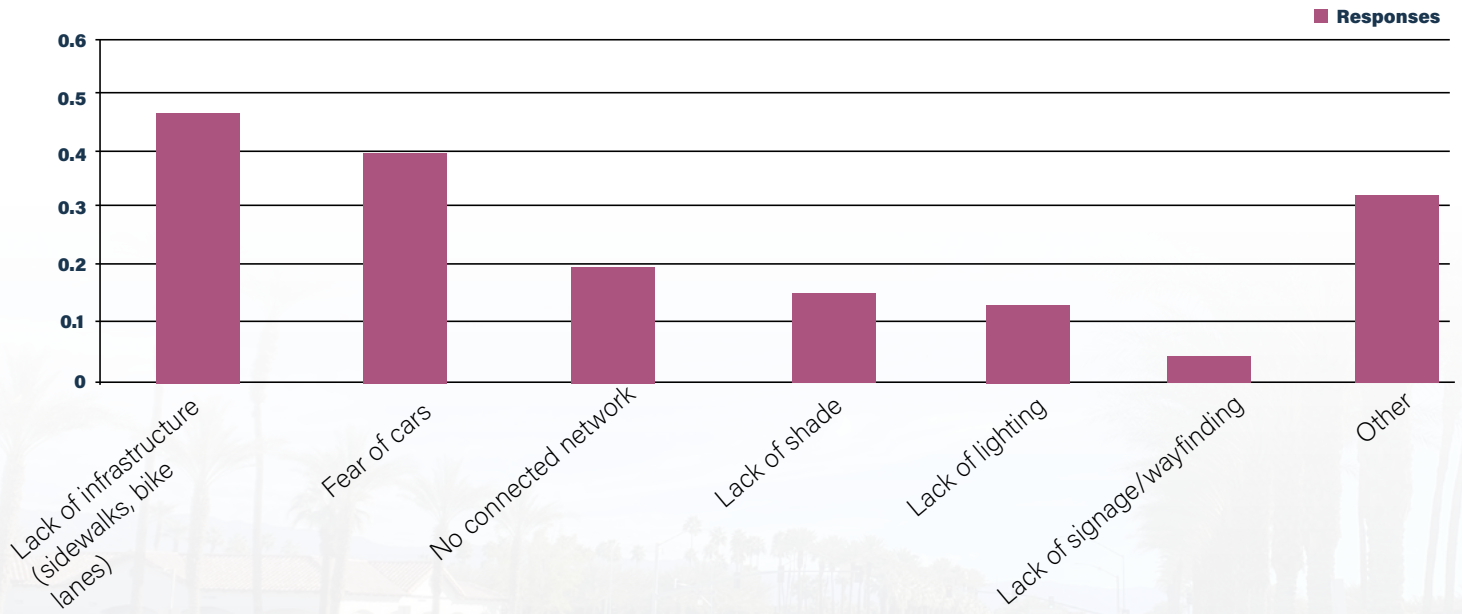
How safe do you feel when walking around Indian Wells?

	Not safe at all		Somewhat safe		Safe		Very safe		N/A		Total	Weighted Average
Star	6.25%	25	27.00%	108	33.00%	132	30.50%	122	3.25%	13	400	2.91
											Answered	**400**
											Skipped	**93**



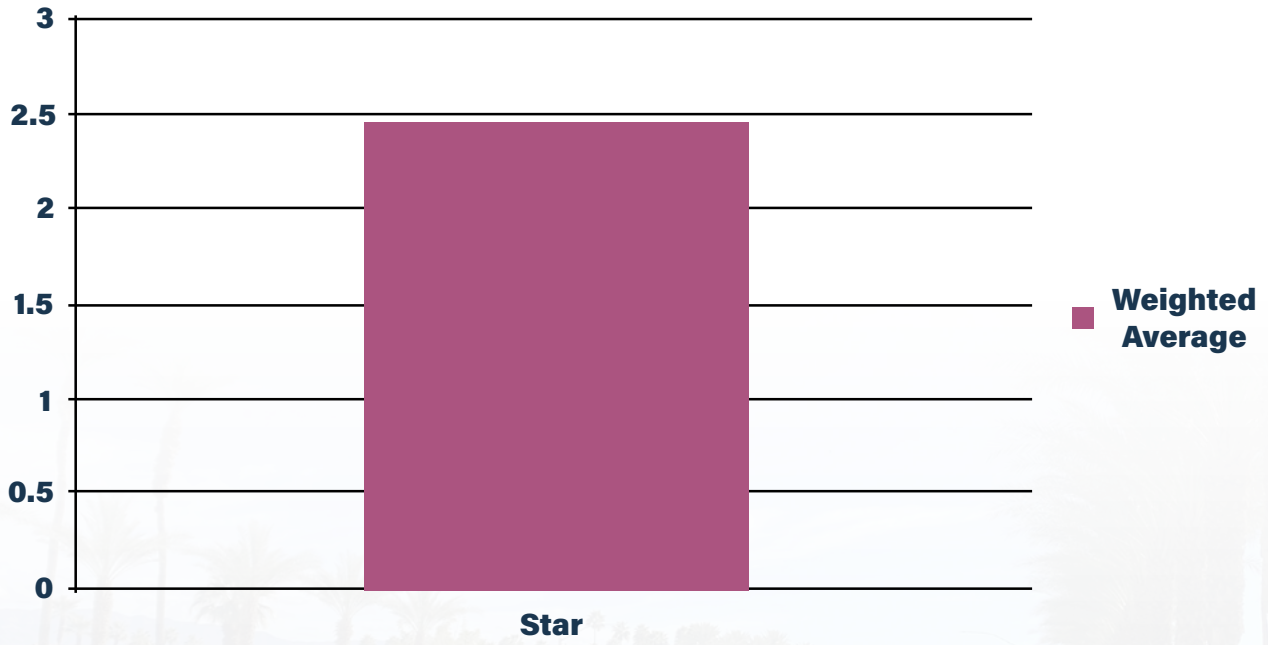
What barriers currently cause safety concerns from traveling to key destinations in Indian Wells via walking? (Select all that apply)

Answer Choices	Responses	
Lack of infrastructure (sidewalks, bike lanes)	47.83%	187
Fear of cars	40.15%	157
No connected network	19.18%	75
Lack of shade	16.37%	64
Lack of lighting	14.07%	55
Lack of signage/wayfinding	4.86%	19
Other - Please specify	30.95%	121
	Answered	**391**
	Skipped	**102**



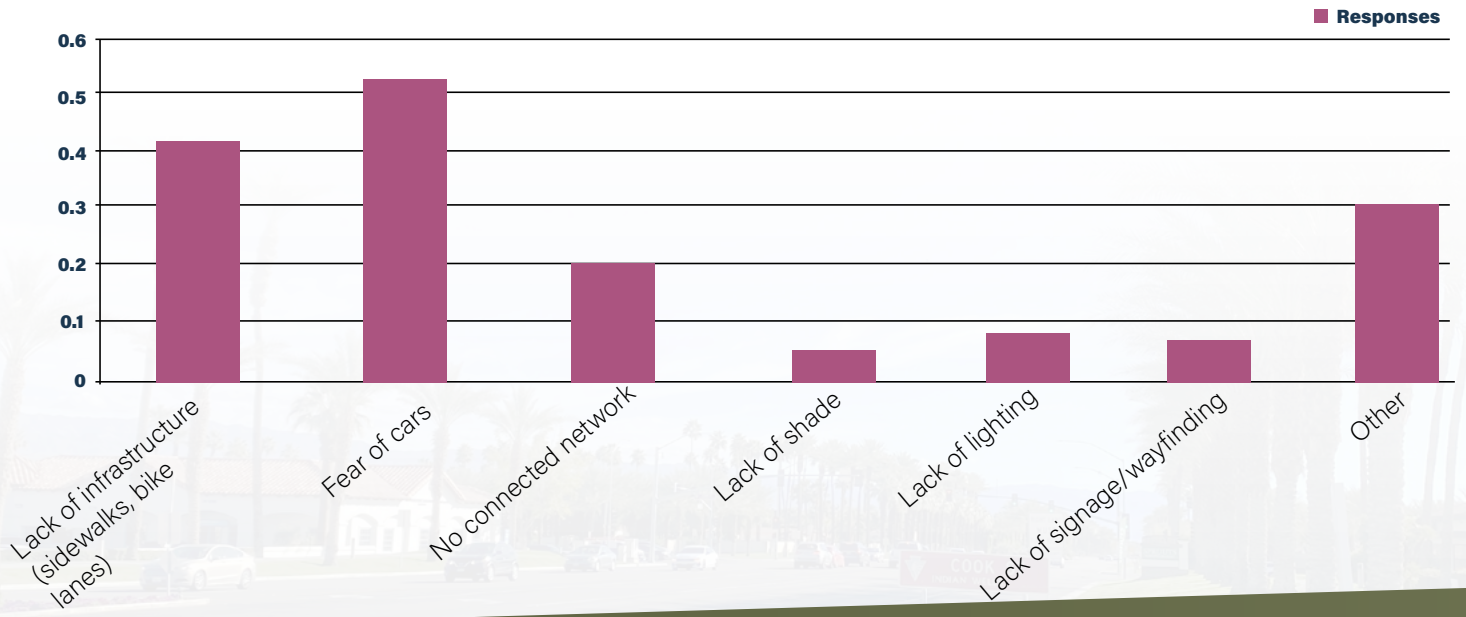
How safe do you feel when Biking around Indian Wells?

	Not safe at all		Somewhat safe		Safe		Very safe		N/A		Total	Weighted Average
Star	10.41%	41	26.90%	106	20.56%	81	10.91%	43	31.22%	123	394	2.46
											Answered	**394**
											Skipped	**99**



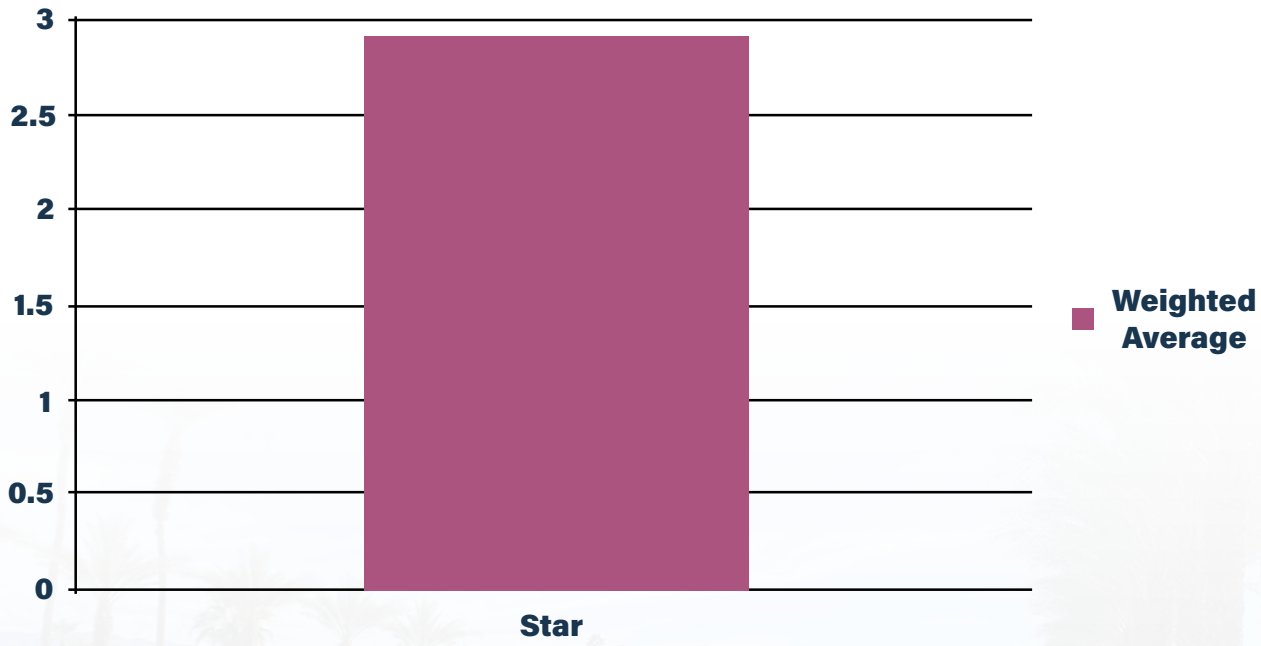
What barriers currently cause safety concerns from traveling to key destinations in Indian Wells via biking? (Select all that apply)

Answer Choices	Responses	
Lack of infrastructure (sidewalks, bike lanes)	43.51%	161
Fear of cars	52.43%	194
No connected network	20.00%	74
Lack of shade	5.41%	20
Lack of lighting	7.57%	28
Lack of signage/wayfinding	7.03%	26
Other - Please specify	29.46%	109
	Answered	**370**
	Skipped	**123**



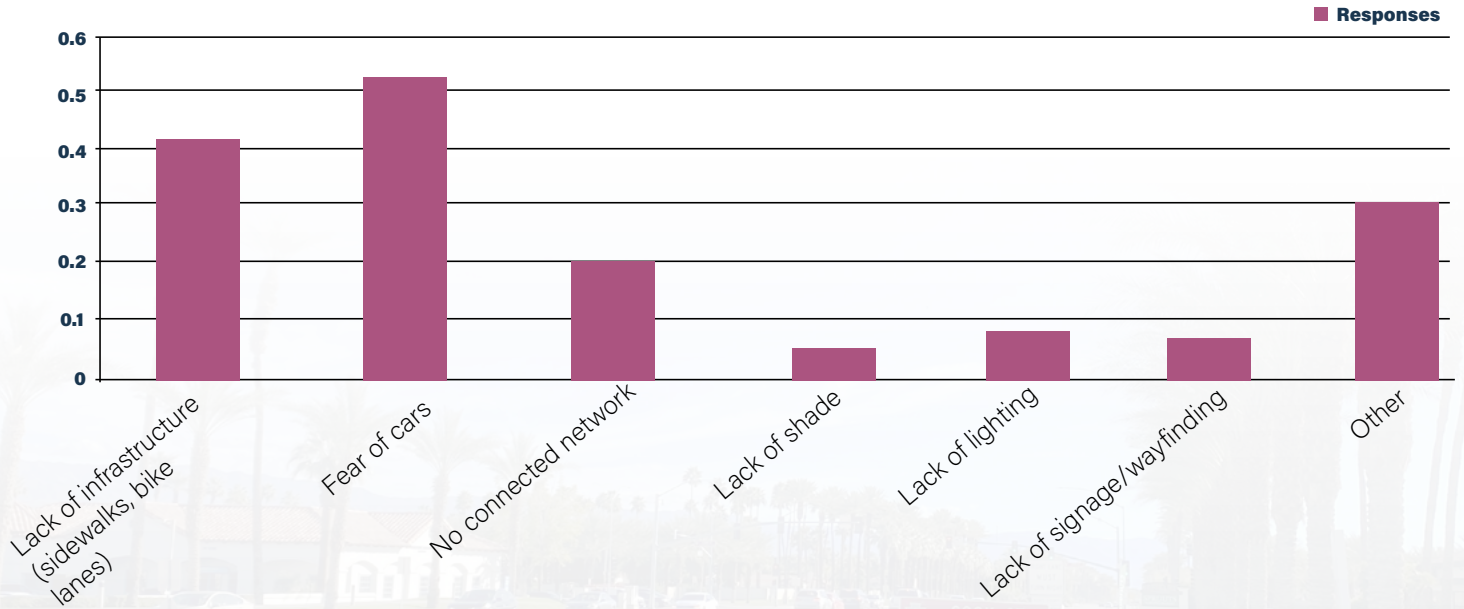
How safe do you feel when taking public transportation (SunLine bus) around Indian Wells?

	Not safe at all		Somewhat safe		Safe		Very safe		N/A		Total	Weighted Average
Star	1.79%	7	3.06%	12	5.61%	22	6.12%	24	83.42%	327	392	2.97
											Answered	**392**
											Skipped	**101**



What barriers currently causes safety concerns from traveling to key destinations in Indian Wells via public transportation (SunLine bus)? (Select all that apply)

Answer Choices	Responses	
Lack of infrastructure (sidewalks, bike lanes)	12.12%	32
Fear of cars	12.88%	34
No connected network	11.74%	31
Lack of shade	5.68%	15
Lack of lighting	4.92%	13
Lack of signage/wayfinding	10.61%	28
Other - Please specify	64.39%	170
	Answered	**264**
	Skipped	**229**



Interactive Map Comments

Type	Comment	Latitude	Longitude
Walk	Please put a proper sidewalk here for all of us that live in La Rocca and The Cove and The Vintage Club to walk safely to the corner of Cook St. and 111. It is especially dangerous at night. Thank you!!	33.716298	-116.355818
Walk	"I live in The Cove. I walk and run Cook to Fairway almost daily. The speed of many drivers is simply scary. It is not if someone is going to get hit, it is when. There are many elderly folks, people with dogs, bikers along Cook and Fairway street all day long. I suggest calming/speed bumps. I think it is the only way to slow the cars down. Thank you for all that you are doing to make the neighborhood safer."	33.718914	-116.360579
Other	The Golf Cart Lane on the Miles Avenue Bridge should connect to multi-use path along 111. Right now it dead-ends and there is no connection (blocked by landscape) to the 111 path.	33.721239	-116.316376
Walk	set aside walkway on Fairway road or grass for pedestrians and bikes - all along	33.711797	-116.348759
Walk	striped walkways on Ranch Palmeras and El Dorado and separated walkway on Cook for pedestrians and bikes.	33.715153	-116.338686
Bike	Good bike path along Fred Waring and on El Dorado north of 111.	33.727791	-116.346396
Vehicle	Enforce the 4 way stops in IWCC. All of them. Very dangerous for pedestrians.	33.717504	-116.317899
Bike	connect with valley bikeway from La Quinta (at Washington) and Palm Desert (at Cook by high school) that is along wash. Gives people a safe way to walk and ride to La Quinta stores and Palm Desert Aquatic Center (should do resident support for the pool too). It is finished on the other ends. Let it go through so we have paths like in Orange County. Gets kids and seniors away from roads to go places they need to.	33.717688	-116.301984
Bike	Bikes lane (preferably without golf carts).	33.714095	-116.344013
Vehicle	There needs to be a sign on Miles at 111 telling cars planning on going west from the right lane on Miles to turn only into the right lane on 111. Motorists coming out of the IWCC on Manitou who want to go west on 111 should not need to yield to those turning right from Miles onto 111, but many cars go illegally into the wrong lane from Miles when going west onto 111.	33.717504	-116.317899
Other	This connection is necessary to bike stroller jog and also needs to be better lit as it get very dark	33.721239	-116.316376
Walk	This sidewalk opposite the school dead ends into rocks and landscape as well as making it impossible by stroller/ bike to get from the housing neighborhoods to the elementary school and traffic will never stop / in fact speeds up to make light	33.726606	-116.312599

Type	Comment	Latitude	Longitude
Bike	I agree that the two borders with Palm Desert and La Quinta could have much better bike transition safety zones. With thousands of cyclists going across the three communities this should be a priority and collaborative opportunity with our neighbor cities.	33.717688	-116.301984
Walk	I live on Fairway, cars and trucks drive way to fast. Fairway in Palm Desert the speed is a lot slower, i'm not sure why, when they pass Cook they all speed up. Things that I have done to slow traffic. I covered the 35mph sign with a speed bump sign, it's amazing how much cars slow down. I've also stood outside with a radar gun, when drivers see what i'm doing they slow down.	33.713759	-116.353626
Vehicle	I know Hwy 111 is very busy, but on numerous occasions I have sat literally for minutes waiting for a green turn arrow into Desert Horizons Way when there is NO oncoming traffic west bound on Hwy 111. Is it possible to install a flashing yellow left turn signal as part of the traffic light? These are in use in other cities.	33.720668	-116.346073
Walk	Thank you for putting in the sidewalk from 111 on Cook south to the entrance to The Villages by IW Coffee. It would be safer if you didn't have to step into traffic entering the plaza to get to the walkway in front of IW Coffee. People take that turn into the parking fast and blind. I walk to The Villages, as do my neighbors in Los Lagos, and that last bit can't be very dangerous.	33.720449	-116.356502
Bike	Add bike lane and have signal recognize cyclists	33.724244	-116.312624
Bike	Add green bike lane markers on the pavement along Hwy 111. Motorist often use the "bike" lane as a right turn lane at Club Drive.	33.721181	-116.327472
Bike	I ditto this comment	33.714095	-116.344013
Bike	I agree. Connect the bike paths.	33.717688	-116.301984
Walk	Keep bike lane separate from pedestrian walking path	33.711797	-116.348759
Walk	"The speeding on Fairway Drive is beyond what a residential street should have to tolerate. This is a well known issue that needs to be addressed and prioritized for the well being and safety of our city. Further, the contractor use in lieu of 111 is beyond abusive. I live on Fairway Drive and witness countless speeding on a daily basis. It certainty is puzzling why Hwy 111 has a posted speed limit of 45 mph and Fairway Drive being solely a residential street is posted at 35 mph. ."	33.713759	-116.353626
Vehicle	The left turn signals from Cook onto Cachuma and Horizon Way change very slowly when there is no traffic coming, especially late at night. Could the signals be changed to a flashing yellow or as they have done in Palm Springs, allow turning on a green light when it is safe and then turn on the green arrow if there hasn't been a break in the traffic to allow a safe turn.	33.72472	-116.355643

Type	Comment	Latitude	Longitude
Bike	100% agree. beautiful area for family and friends to cycle but need safe transition zones for commuters and casual bikers	33.717688	-116.301984
Vehicle	If speed limits on 111 were reduced, turning left without dedicated green light across two lanes of oncoming traffic would be much safer.	33.720668	-116.346073
Vehicle	Can the City reduce the speed limit on 111 or does only the State have that authority? If the speed limit cannot be lowered unilaterally, can the City better enforce the existing speed limits?	33.718272	-116.310196
Bike	Cycling IW HiWay 111 onto Washington toward La Quinta Cove is dangerous. Riding through Von's busy parking lot is not a plan. Unsafe transitions between routes undermines the value of good faith efforts to open the area to commuters and tourists. Cycling IW to La Quinta, La Quinta Cove, PGA West and beyond are some of the best routes in the valley. Is it possible to collaborate with La Quinta to "find a better way" ?	33.714645	-116.299767
Walk	Can the city please look into repairing the cracks and chunks of concrete that have fallen out of the sidewalk along 111 on both sides of it? Its very unsafe for walkers and bikes.	33.716425	-116.311283
Vehicle	This signal stops traffic on 111 early morning hours but still commute hours when there is no cross traffic or pedestrians. This is not uncommon with many signals both crossing and on 111 which are not timed to change when there is no traffic .It appears this is a tactic by the city to increase moving violations due to apparent malfunctioning of signal sensors. Feel free to call me to discuss if you wish.	33.721306	-116.330152
Bike	Enforce bicycle traffic laws. Virtually 95% of cyclists do not stop at stop signs along fairway although officers are more than willing to cite vehicles that do the same.When asked why cyclists are not stopped, officers said they are too hard to catch! Hard to believe .	33.713488	-116.347146
Walk	Thank you for the opportunity to submit our safety concerns. Please add a sidewalk or protected walking / biking lane on Cook Street, between Fairway and Rte 111. Residents of the Cove of Indian Wells community (and others with Cook Street entrances) walk/bike to the Village of Indian Wells or to Fairway. Currently, we have to walk in the street or in the grass/uneven landscaped area.	33.718062	-116.356727
Walk	We live on Fairway Dr. and witness speeding on a daily basis. Our 35 mph speed limit is 10 mi. more than it should be in a residential area. Once you cross Cook going west it changes to 25mph. Why is this? We live across the street from the sign that shows drivers the speed they are traveling. Fifty percent of drivers are driving on average 45 mph. This is so dangerous. It's like a raceway. We need to lower the speed to 25mph AND a police officer ticketing Mon.-Fri. 7-10am and 3-5pm at a min..	33.713542	-116.343412
Walk	Make the walkway path DG and not cement. It will look much more natural/nature like and less commercial and will also not attract skaters and skateboarders. It will also save our city a lot of money.	33.711797	-116.348759

Type	Comment	Latitude	Longitude
Walk	Would like to see slower speeds all along Fairway between Cook and El Dorado. Would also like a couple of roundabouts on this section of Fairway to slow (and hopefully deter) all the traffic (especially large, speeding trucks).	33.714024	-116.345129
Vehicle	Left the same comment with the "walking" symbol. Traffic along Fairway between Cook and El Dorado is too much, too heavy and too fast. Would like to see roundabouts and slower speeds.	33.713809	-116.349978
Bike	Extend bicycle lane on Eldorado to Fairway. Currently the bicycle lane ends at Osage.	33.716647	-116.338949
Walk	From Montelena to Highway 111 is very dangerous for pedestrians as they have to walk on the roan in a very busy right hand turn lane	33.720578	-116.338783
Walk	Sidewalk section on east side of Miles Avenue is missing, making it inaccessible and forcing pedestrians to walk on uneven ruts and gravel. Sidewalk along Miles to the tennis garden is also overgrown. This is a black eye for IW, as residents and those staying in local hotels are not provided with an attractive walking route to access events.	33.720352	-116.317191
ADA	Sidewalk, the only way to walk along that section of Highway 111 or to access the tennis gardens, is unnecessarily narrow and does not allow those walking, cycling, or in a wheelchair to pass each other.	33.719674	-116.322255
Bike	The transition from three lanes to two at the boundary with La Quinta and the right turn bays to the west are abrupt and highly irregular, being designed entirely to assist car movements with little regard for the needs of cyclists who wish to keep right on the road shoulder for safety.	33.716636	-116.30363
Walk	Missing sidewalk/multi-use path connection on north side Highway 111 force pedestrians to cross 111 twice to get to Miles Avenue sidewalk, with a section of the south sidewalk being too narrow for wheelchairs if opposing wheelchairs, pedestrians, or cyclists are present. Consider reallocating some of the city's enormous road repaving budget to complete this missing link.	33.719601	-116.310797
Bike	Missing CV Link. While Palm Desert has created an excellent multi-use path along the Whitewater storm channel, it abruptly ends at Indian Wells. As there are no cycling facilities on Fred Waring, and cyclists are in fact banned from this section of Fred Waring, cyclists wishing to continue on the CV Link route are apparently expected to do a massive detour and then walk or ride along Highway 111, which is unpleasant. Indian Wells needs to step up and become a full member of the CV Link project.	33.729738	-116.346116
Bike	The connection between Cook Street sidewalks and bike lanes and Highway 111 multi-use paths and shoulder is highly problematic. High speed right turn bays, wheelchair ramps that don't align with crosswalks and force cyclists and those in wheelchairs onto the roadway, ped/bike actuator buttons in difficult locations, lack of route and warning signage... this and the city's other Highway 111 intersections need a complete safety audit and upgrade to make them less terrifying for those not in cars.	33.721274	-116.355515

Type	Comment	Latitude	Longitude
Bike	A "greenway" route (multi-use path for pedestrians, cyclists, and those using mobility devices) along the stormwater channel through the city's golf course between Cook/Fred Waring and Miles with connections to the hotels would be relatively straightforward and inexpensive to do and put Indian Wells on the tourism map as a non-motorized transportation destination. Palm Desert has done this and Indio is in the process of completing a path along the channel.	33.724639	-116.32762
Bike	Work with La Quinta to improve the section of Highway 111 at the east border of Indian Wells and the intersection of 111/Washington to provide a good pedestrian and bicycle connection. There are many excellent cycling and walking areas in La Quinta just east of Indian Wells, but this intersection and section of 111 would deter all but the bravest and most experienced cyclists from continuing east to these areas.	33.715451	-116.300454
Bike	As there are bike lanes and/or multi-use paths along Cook Street, Hovley Lane between Cook and Warner Trail, Miles Avenue, and Highway 111 between Miles and Cook, if traffic calming measures were placed on Warner Trail between Hovley Lane and Miles along with some missing sidewalk sections, this would make an excellent walking and cycling loop around Indian Wells.	33.722815	-116.312213
Walk	Reallocating and converting excess road space on Eldordo and Fairway Drive for a multi-use path for pedestrians and cyclists, which is easily achievable, would provide and excellent walking and cycling loop around Highway 111, Eldorado, Fairway, and Cook, as well as provide an attractive access to the new park at Eldorado and Fairway, which is being constructed at great expense but is currently very unpleasant to walk or cycle to.	33.718597	-116.33852

Email Comments

Date	Comment
03/29/24	I often cross 111 at Miles or from IWCC gate at Manitou. An increasing dangerous problem is the amount of cars, motocycles, trucks running the red light on the highway. This is particulary noticable with traffic coming from Washington going west. It is not uncommon for me to be waiting to cross 111 because of drivers clearly running the red light. Just in this past week a motocycle did so going at an excessive rate of speed. Cars commonly do this. I have lived in IWCC since 2000 and this problem has increased extremely in the past year. It is comparable to driving Fred Waring. We need some form of traffic control. 111 has turned into an a high speed highway. Prehaps the fault of synchronized east/west traffic lights????
03/05/24	Hello, the only thing I can think of for the traffic problem is to synchronize the lights better and the traffic light at the Province is way too long to let people turn, either out of province way or from HWY 111 into province coming from the east. It's a huge problem for the residents of Province. Thank you for your concerns.
03/05/24	The lights at Fred Waring and El Dorado needs to be on a trip. Coming in and out of Toscana is a pain and a very long light.
02/02/24	Since right hand turn outs, especially the long ones at Cook and rancho palmeras, many cheaters are not making right hand turn, going fast and cutting back into ongoing traffic. Locals are aware of this and take caution however very dangerous in my opinion instead of expediting. The turn out at Eldorado going right is to short! Also causing other issues. Much busier for right hand turns to residences in IW including Eldorado estates. Traffic light timing is another one. To long or to short and right hand turns exiting residential and businesses along HWY 111 create braking and rear ending issues. All in all the turn outs and cheaters are not punished and encouraged to occur.

Public Meeting Comments

Comment
Crosswalk needed across Eldorado. Urgent possible small traffic circle
Need sidewalks on Cook St, Eldorado and Fairway
Rancho restripe with speed bumps Increased focus on Fairway Drive speed management
Crosswalk needed across Eldorado. Urgent possible small traffic circle
Need sidewalks on Cook St, Eldorado and Fairway
Fairway Dr & Cahilla Dr - take curve out and extend curb out for bike and pedestrians
Calm Streets for multi-use (peds, bikers, golfcarts)
One lane for cars each direction on Cook, Fairway, El Dorado, and Rancho Palmeras
Reprioritize agressive driving focus on Cielito Dr, Fairway, Cook, Rancho Palmeras, and El Dorado
Add bike lanes to Rancho
Cook St & Palisades Pl needs a mid-block crosswalk
Add sidewalks on El Dorado
Bike path gap between Osage & Fairway
El Dorado & Fairway- needs crosswalk or sidewalk by park. Slow traffic down. Crossing distance.
No bike path at ends of HWY 111
Traffic calming on Fairway
Cars cut though Fairway instead of HWY 111
Lower speed limit on El Dorado

Public Comments on Draft Safety Action Plan

Date	Comment
5/29/2024	1. We need sidewalks. Pedestrian, golf cart & bikes, & cars are dangerous together. 2. Percentages give a poor and inaccurate data set. 3. Cars speed up to 100 mph on Ranch Palmeras Drive and Hwy 111. 4. Too many snowbirds do not know the rules if the road. 5. Despite signs requiring no 18 wheelers on Rancho Palmeras Dr. There are many trucks etc. That go up and down the street at all hours.
5/31/2024	I have noticed that to turn right onto Club Drive as I travel east on Highway 111, there is no right-turn lane. Turning right is hazardous because the fast-moving traffic behind me does not have room to adequately pass me as I slow down and get into the bicycle lane and gutter along the south side of Highway 111 as I prepare to turn right. Thank you for seriously considering marking the pavement with an actual right-turn lane at this location.
5/31/2024	Here are some comments to your 1st draft plan as it relates to La Quinta: 1.42% of your accidents are unsafe speed – consider immediately adding more enforcement of high speeds along these 50 mph streets 2.With the new laws coming into effect July 1st, consider re-evaluating speed limits for possible reduction to 45 mph (based on designating Washington near the Tennis Garden a "safety corridor" 3.Consider restriping for narrower lanes on major arterials to further reduce speed, can add buffered zones for bike lanes also in the process 4.Build enforcement cutouts/turnouts for enforcing speeds where possible

Date	Comment
6/3/2024	Hello! Thank you for sharing the draft Indian Wells Safety Action Plan document with the residents! Efforts to improve the quality of life for Indian Wells residents are truly appreciated. Please see three points of feedback that were discussed and documented at several community meetings: Cielito Drive: 1. High-speed vehicles using Cielito Drive as a thoroughfare During the Indian Wells-sponsored Safe Streets resident meetings, multiple residents expressed concerns about high-speed vehicles using Cielito Drive as a thoroughfare to avoid the El Dorado intersection, creating an unsafe environment in the residential neighborhood. The proposed traffic circles have the potential to further increase thoroughfare traffic on Cielito Drive. Action Requested: Please specify how the Indian Wells Safe Streets initiative traffic circles will address aggressive driving and through traffic on Cielito Drive. Also, consider stationing police vehicles on Cielito Drive for speed enforcement. 2. Cielito Drive used as a park-and-ride for El Dorado Country Club workers There is a daily occurrence of El Dorado worker/contractor vehicles parked near the Cielito Drive/Fairway intersection. At times, workers sit in their cars idling, listening to loud music ~ 6:30am- 7:30 am waiting for a ride. Many of these parked vehicles have expired DMV car registrations. There has also been an increase in reported property theft and safety concerns on Cielito Drive, which have been reported to the Riverside County Sheriff's Department. Action Requested: Specify how the Indian Wells Safe Streets initiative will address overflow parking from El Dorado Country Club on Cielito Drive. Please increase police patrol and vehicle parking enforcement on Cielito Drive. 3. Please specify the dates/timeline for the proposed Next Steps in the draft Safety Action Plan document"
6/5/2024	We need a Right turn lane ON Hwy 111 at club drive entrance for hotel, restaurant and golf course. Currently very dangerous
6/5/2024	I looked through the maps etc. It's a lot of information. I just want to emphasize and request that two things be addressed, and maybe they already are. 1. Intersection 111 and Cook, enforce the outside turn lanes in both directions so drivers don't drive straight through instead of turning. I see it happen quite often. 2. Please keep the wide shoulders on 111 for cyclists to use. If possible make it even more cycling friendly and safe. It's the only rideable connection from PD to La Quinta and will continue to be used no matter what so please make it as safe as possible. I love Indian Wells! Thank you for all the improvements. "
6/5/2024	Please review traffic lights. Timing is not good. Going into Desert Horizons takes forever unless someone is coming west then it switches for them to turn left and eventually for us to turn left. Also speeders going east on 111driving in turn right lane and passing others. People running red lights there going east.

Date	Comment
6/5/2024	Since moving to the Indian Wells community in 2018 I was shocked that the sport of running Red Lights is so popular. My neighbor experienced this in February as he was T-boned pulling out of Cook turning left on to #111. I am curious why we do not install camera to document these Red Light violation and enforce them with a hefty ticket? Also, in the afternoon during rush hours it is a common occurrence to see drivers on 110 heading east use of the right turn only lane to bypass the backed up traffic at Cook. Cameras would greatly alleviate this traffic violation. I would appreciate a response to my question. Thank you
6/5/2024	High rates of speed between El Dorado Dr and Indian Wells Ln have become a common theme. The speed limit is 25 mph and speeds in excess of 40mph have become common. This is a stretch of road that commonly has pedestrians, bicycles and and golf carts in addition to cars. No one wants speed bumps but a blinking device that would convey the actual speed bs posted speed may support calming. Similar to what was placed on Osage.
6/5/2024	"I would like to advocate for sidewalks on Fairway, El Dorado, Cook, and Rancho Palmeras. My husband and I bike or walk every day around the city, and it is much more settling to do so where there are sidewalks. It also creates a city that is more "bikeable" and thus reduces vehicle use. The sidewalks on 111 are a really amazing resource, surrounding by greenery. I hope new sidewalks will have the same beauty to them. I hope that any new sidewalks on El Dorado will integrate new trees to replace those that were destroyed in the 2023 storm. We have been anxiously awaiting those new trees as it was so beautiful before the storm."
6/5/2024	All shrubs and plants should be cut back on El Dorado so anyone crossing at Osage can see on coming traffic
6/5/2024	I read the very detailed report, and it is apparent that we are a very safe city. This truly is outstanding news. Unfortunately, we do have a speeding problem. This was substantiated when the Palm Desert Traffic Bureau recently conducted a Valley Enforcement Team between the hours of 0600-1200 resulting in over 100 motorists being cited, 55 due to driving in excess of the speed limit on Hwy 111, Fairway Drive, Fred Waring, Eldorado Dr and Cook St. Additionally, we are not in our busy season, and one must consider the increased number of speeding/violators when we are in our busy season. The desert population continues to grow, which will only compound this issue. We must be extremely proactive, as it's only a matter of time before we have a fatality with a motorist, pedestrian, bicyclist, and or golf cart. Furthermore, allowing this behavior is detrimental to all our residents and, certainly, quite a nuisance. In closing, we have a lot of work to do to mitigate and solve this pending issue inclusive of community outreach, cooperation from RSO, the city council, and city leadership. Thank you again for the report and your time and attention to this matter.
6/5/2024	I feel relocating the bus stop on 111 and Cook Street is a very bad idea which has not been thought out. If a bus is stopped on the south east corner of 111. It is still not going to stop people from going straight on a right turnOnly . The only problem that will cause is people will be behind a bus blocking possibly the intersection and going around the bus, which could be even more dangerous
6/5/2024	"I am a home owner at Province and I don't want the bus clogging up traffic in front of our entrance – why can't you leave it where it is ? I vote NO, do not move it the entrance at Province."

Date	Comment
6/5/2024	"So glad this problem is being addressed. A side walk is badly needed on Eldorado between 111 and Fairway. Very dangerous to walk on the West side of street. The West side is where walkway 1. should be placed as that's where homes face the road, 2. that's where the summer shade will protect walkers. 3. And that is the side where our new "park" is located. (I have to step into Eldorado traffic to get my mail, as we have no walk.) All the best in making a plan."
6/5/2024	I am a resident of The Province in IW and I adamantly oppose moving the bus stop to an area near our entrance. 1) I am on the HOA and we already have had problems from people across the way at the Nest and them wreaking havoc at times at The Province, our fountains, landscape, etc. I don't want to attract MORE people to our community, especially the type of riff raff that bus transportation can and does attract. Having them hang out at the bus stop will cause issues that we do not want. We are a residential area, not commercial why relocate it here? 2) The uptick of homelessness in CA and especially in our area, and the fact that they sleep at bus stops, hang out there constantly, and defecate there is absolutely NOT ok!! 3) The bus stop is an eye sore. We don't want that. There is a reason we chose to live in Indian Wells and it is not so a bus stop can be in our front yard. We pay enough in taxes and deserve to not have to deal with these sorts of problems. We don't want you as our city officials creating this problem for us here in The Province, which is what you will be doing if you move it. Keep the bus stop where it is or choose another spot, but it's not welcome here at The Province.
6/5/2024	First of all, wow - what a study! I can't help but feel that it is a plan in search of a real problem. I can only imagine that the consultants were given a very large budget to come up with this thing. Here are my two cents: ""road diets"" and turning circles rarely work as intended. First of all, people move to the desert to get away from ""road diets"" in urban areas like LA. People are attracted to the wide roads of the desert communities that move people quickly from Point A to Point B. Los Angeles has been road dieting for years in an effort to cater to a distinct, but highly vocal, minority of bike rider advocacy groups. The result is that each year vehicular traffic gets worse and worse. Turning circles look nice, but are very confusing, especially to older drivers. I can't think of a better way to increase the risk of collisions than to start installing traffic circles on major streets. What in the world does ""Equity"" have to do with traffic study? Why is race relevant? Not to state the obvious, but race and socio-economic status have absolutely nothing to do with driving quality or risk. I can't believe this is a credible area for analysis. Local vs. transient - OK. But race/ethnicity seems gratuitous at best. I don't understand the purpose of Section 8 regarding ""Climate Change"". Don't get me wrong, I appreciate the city's willingness to study traffic patterns and possible areas of concern. Personally, I think the roads are fantastic, especially compared to the rest of SoCal.
6/5/2024	Definitely opposed! As are most of our 100 plus - The Province at Indian Wells - homeowners to relocating the bus stop from Sprouts (a commercial area) to the corner of Cook St & Hwy 111 (a high end residential area). This would be a nightmare that would add noise, pollution and vandalism to a currently very pristine, meticulously maintained corner park and adjoining high end residential area that is only a half block away from the current bus stop. A terrible idea - do not make the change.

Date	Comment
6/5/2024	Please do not move the bus stop in front of the entrance to the Province. That will bring more traffic as well as more homeless individuals at our community entrance. As it is we have had theft and homeless sleeping on the sidewalk around the shopping center.
6/5/2024	We are residents at The Province and would not like to see the bus stop moved to the Date Palm area nearer to The Province. We believe the Bus Stop would be better to be moved West and keep it within the Commercial areas just West of Cook Street where most of the retail, hotel and office buildings are located. We are already suffering from all the vehicular noise along Hwy 111 that has no current policing including the racing that happens from 9pm to 1am at night in front of Province and The Nest. We hear so much loud mufflers and racing speeding cars and motorcycles during that time period with "excessive noise~..." We do not want the additional noise nor the walking traffic from public transit buses happening in front of The Province nor the stopping and starting of buses please. There is also the safety issue of those Bus Riders who should be getting on and off the bus in a more commercial zone which is West of Cook Street. We are further concerned by any increase in crime that bus travellers may bring to our neighborhood which would not be good. We do not agree with the proposed placement to relocate this Bus Stop. In addition we would like the City to adjust the stop light going in and out of The Province. It is a waste of time and gas for us to sit for 3-5 minutes for the left turn light to turn green in order to make a left turn into The Province when Westbound on Hwy 111. It is also the same problem when Northbound on Province trying to turn left onto Hwy 111, the light is more than 3 minutes waiting for it to turn green.
6/5/2024	"I live in the Province development and feel that having the bus stop relocated to the perimeter of our development is a terrible option for us homeowners here at the Province. We are already in the mist of noisy traffic surroundings, and by adding a bus stop will enhance the chaos for traffic issues, and noise disturbances for the private residents of this development. I live in the inside wall of the 111 side and would not like to experience chatting people hanging outside the development or stragglers to park themselves out on the bench for shade nor do I want to hear the steam of the bus coming and going at the stop, as it is we have to put up with the loud motorcycles, improper installation of vehicle mufflers and music booming from cars ripping through the street of Highway 111~ Let's NOT add more disturbances to our community, I am against this new proposed action."
6/5/2024	I wish I could be there for the meeting but the only thing I would love to see is more ticketing on the 111. Its crazy how people drive so insanely fast. If there was a sheriff there once in awhile using a radar to ticket speeding drivers it would slow down what's going on.

Date	Comment
6/5/2024	Let me express sincere appreciation for all of the excellent work and services provided by the City of Indian Wells. We love living here. Thank you! I must object to the proposed relocation of a bus stop from a high-utility commercial "destination" location near Sprouts, Urgent Care, restaurants, and CVS (an obvious destination of bus riders) to an area contiguous to a quiet residential area and less than a block from the gated entrance to the Province neighborhood. If you were to consider the needs and interests of the bus passengers, I believe the vast majority would prefer to be taken to and picked up at the location of Sprouts, CVS, Urgent Care, and the other many restaurant and commercial uses. A bus stop east of Cook Street would result in a significant flow of pedestrian traffic across Cook Street to CVS, Sprouts, Urgent Care, and the other destination locations at Indian Wells Village. I believe this increase in pedestrian traffic has not been considered or studied from the standpoints of traffic and circulation or pedestrian safety. Was the relocation the subject of consideration at the time the City's general plan was adopted? Has CEQA been complied with in terms of this proposed relocation? I think there are serious issues. There is another critical safety issue. While busses can occupy the No. 1 lane on Hwy 111 while crossing Cook Street (existing signage requires "right turn only, busses excepted" or words to that effect), the residents of the Provence neighborhood are precluded from doing so. This means we have to cross the Cook intersection in the No. 2 lane and then immediately change lanes into the No. 1 lane before turning into our gate area on Province Way. With any increased bus traffic and stops in that precise area, the danger to drivers entering the Province gate will be heightened, because we will have to "compete" with the busses to access the No. 1 lane. Further, Province drivers will often need to slow down in the No. 2 lane to let a bus clear the No. 1 lane, thereby affecting vehicular traffic in the No. 2 and possibly 3 lanes. This cannot be the effect the City is seeking. With busses' typical sudden departures, Province drivers trying to access the No. 1 lane will find it difficult to safely do so. This "competition" for access to the No. 1 lane could impact and even prevent drivers' entry into our neighborhood due to a bus's sudden departure from the proposed bus stop location and ramp up to traffic speed in less than a block – the precise location where Province drivers must change lanes from the No. 2 lane to the No. 1 lane, which is occupied by a bus trying to achieve traffic speed. I do not believe the City has considered this pervasive and potentially dangerous condition. Regardless of the City's decision regarding relocation of the bus stop, the signage just west of Cook Street advising drivers that only busses can occupy the No. 1 lane to cross Cook Street should be changed to read, "Right Turn Only. Busses and Province Residents/Guests Excepted." I'm sure you could choose better language for the sign, but you know what I mean. Having busses in the No. 1 lane play hob with Province residents trying to enter the neighborhood. We can avoid this safety issue by permitting those turning into the Province neighborhood to use the No. 1 lane to cross Cook Street. That way, at least, drivers could safely remain behind the busses without the need to change lanes in the short distance to the Province gate while "dodging" an oncoming bus. I do not believe the draft safety report identifies any real, tangible safety measures associated with the proposed bus stop move, at least none that would warrant the expense or change in character the bus stop would cause to the Date Palm Corner and the safety issues resulting from increased pedestrian traffic crossing Cook street and jockeying with bus drivers departing the bus stop. I understand the desire to locate bus stops on the far side of intersections; however, the current bus stop is just east of the entry to Indian Wells Village at Sprouts, nearly a full block from the intersection at Cook street.A bus stop would cause visual pollution obscuring the beautiful Date Palm Corner, one of the true "gateways" to the City. I have not seen an architectural rendering or plans, but I would think the bus stop would require revision of the sidewalk, encroachment onto the lawn area of the Date Palm Corner, and a serious adverse aesthetic impact and total loss of symmetry with the north side of the Date Palm Corner. The City pays to light the palm trees with festive colors at holiday time, and that very significant investment in beautification and character would be severely undermined by the construction and installation of a lighted bus stop with frequent bus stops at that location, obscuring the view and diluting the effect of the colored lights at that location. You will have hundreds and hundreds of unhappy residents if the City relocates the bus stop as proposed. You're smart people. You can find a better, safer, alternative, or simply live with the completely acceptable and preferable current bus stop location. Again, thank you for your consideration."

Date	Comment
6/6/2024	"I'm adamantly opposed to having a bus stop outside our Province Development. I'm a 5 year resident of the Province and have seen a deterioration of our exterior neighborhood in this time. Having a bus stop only invites unwanted loitering, using the shelter for sleeping, drugs, and if you are wondering how I know just drive to Palm Springs to see the result of Bus Stop locations. The bottom line is that bus stops devalue our property and way of life. Please relocate the proposed Stop to a location that is not near our Community."
6/6/2024	"My wife and I are residents of The Province in Indian Wells and we absolutely do not agree with having a bus stop moved in front of our community for numerous reasons. 1) There are numerous homeless people who ""live"" at bus stops and use the restroom in the open areas, leave their garbage, do drugs, etc., as well as sleep at these bus stops frequently and that decreases our feeling of safety. 2) There is an existing bus stop just a half of block down that is in that location for a reason and it is commercial based and has been for a very long time. 3) We pay high property taxes to live and reside in an upscale community, as well as HOA costs, and wish to continue to live in a safe and clean neighborhood. If this bus stop gets moved, it will most definitely create havoc for the residents of The Province, expand calls to law enforcement to remove unnecessary people from the area and could potentially increase crime in our community. Please reconsider leaving the bus stop at the Sprouts/CVS public area where it belongs.
6/6/2024	"My wife and I are residents of The Province in Indian Wells and we absolutely do not agree with having a bus stop moved in front of our community for numerous reasons. 1) There are numerous homeless people who ""live"" at bus stops and use the restroom in the open areas, leave their garbage, do drugs, etc., as well as sleep at these bus stops frequently and that decreases our feeling of safety. 2) There is an existing bus stop just a half of block down that is in that location for a reason and it is commercial based and has been for a very long time. 3) We pay high property taxes to live and reside in an upscale community, as well as HOA costs, and wish to continue to live in a safe and clean neighborhood. If this bus stop gets moved, it will most definitely create havoc for the residents of The Province, expand calls to law enforcement to remove unnecessary people from the area and could potentially increase crime in our community. Please reconsider leaving the bus stop at the Sprouts/CVS public area where it belongs."

Date	Comment
6/6/2024	"I have been a resident of Indian Wells since 1988, when my parents moved us here, and now I choose to raise my children here. We currently have 4 generations all living in this beautiful city. We choose this city because of the many positive ways the city impacts its citizens and focuses on both safety, quality of life, and proper fiscal management. In your most recent proposal to enhance the safety concerns and in particular the Cook St. and HWY 111 corridor, the proposed bus stop moving further east in front of the Province community is a mistake. After a review of the findings, this will provide a minimal reduced safety impact at a high overall cost and very likely increase the risk of safety to our neighbors at the newly established neighborhood of Province. We, as a community, have waited many years, after the great recession, for that corner to be built and completed and it's the duty of the city council to make our neighbors feel welcome and safe. If the bus stop is to be moved, it should be moved further west on HWY 111 towards the Sprouts and behind the Village Center light. It makes more sense for commuters of the bus system to be closer to commercial and business services than a residential area. Additionally, there is already a stop on the corner of Rancho Palmeras and HWY 111 less than a block away. "
6/6/2024	"totally opposed to moving the bus stop to the entrance to Province."
6/6/2024	"Well done, exhaustive analysis with a lot of good data. The data indicated that aggressive driving (mostly speeding) was the biggest contributor to accidents and injuries. My first suggestion would be to install speed cameras on all the major Indian Wells thoroughfares. People getting tickets for speeding would be much more effective than any education program. People already know that speeding and aggressive driving cause accidents. A financial incentive not to speed would be way more effective. My second suggestion would be to reduce the speed limits on many of the thoroughfares. The non-freeway speed limits in the Coachella Valley are among the highest I have seen anywhere. Approaching a signaled intersection at 50 mph is a recipe for fatal crashes. My third suggestion would be to install red light cameras at selected intersections. If this cannot be done I would recommend increasing the delay between red light in one sequence and green light in the next sequence. I have never seen so many cars go through red lights as I do in the Coachella Valley. I'm sure some of the fatalities are when a car darts out on a green light only to get T-boned by someone speeding through the red light."
6/6/2024	"As homeowners at The Province in Indian Wells, we are writing to express our objection to having a bus stop near the entrance of The Province. A bus stop will increase traffic congestion near the entrance and create greater noise for the residents living in the northern part of The Province. The bus stop will also increase pedestrian traffic. Not all people who congregate at a bus stop are waiting for a bus; some are homeless, using the bus stop as a resting place. This increases the chances that uninvited people enter The Province on foot while the gate is open for an authorized vehicle to enter or exit. The bus stop in its current location serves people who use the Indian Wells Village for shopping. Moving the bus stop makes it inconvenient for those people. We appreciate your consideration of these points."

Date	Comment
6/6/2024	"Locating public transportation next to multi-million dollar properties is a contentious issue, blending urban planning, socio-economic considerations, and lifestyle preferences. While public transportation offers numerous benefits, such as reducing traffic congestion, lowering emissions, and providing affordable travel options, its proximity to high-value residential areas can pose several challenges. This essay argues against the placement of public transportation hubs near multi-million dollar properties by examining issues related to privacy, property values, safety, and overall quality of life for residents. Firstly, privacy concerns are paramount for residents of high-value properties. Individuals who invest in multi-million dollar homes often seek seclusion, exclusivity, and tranquility. The presence of public transportation can lead to increased foot traffic, noise, and general disruption. Studies have shown that noise pollution from transportation can have detrimental effects on mental and physical health, contributing to stress, sleep disturbances, and cardiovascular diseases (World Health Organization, 2018). The constant influx of people using buses, trains, or trams can erode the sense of privacy and exclusivity that homeowners in these areas expect and pay for. Secondly, property values may be adversely affected by the proximity of public transportation. While it is true that accessibility can enhance property values in certain contexts, the opposite can be true for luxury properties. According to a study by the University of California, Berkeley, properties located near public transportation hubs can experience a depreciation in value if the area becomes too congested and noisy (Cervero & Duncan, 2002). High-net-worth individuals often prioritize quiet and peaceful surroundings, and the presence of a public transport hub can be perceived as a detriment, potentially leading to decreased property values. Safety concerns also play a significant role in the argument against public transportation near luxury properties. Increased foot traffic can lead to heightened security risks, including theft, vandalism, and other forms of crime. Data from the U.S. Department of Transportation indicates that areas with high public transit usage often experience higher rates of petty crime due to the increased flow of people (U.S. Department of Transportation, 2020). While public transportation is essential for urban mobility, the concentration of people in transit areas can attract unsavory elements, leading to potential safety issues for residents. Multi-million dollar properties often invest heavily in security measures, and the presence of public transportation can undermine these efforts by increasing the likelihood of unauthorized access and incidents. Moreover, the overall quality of life for residents can be negatively impacted. Luxury properties are often chosen for their peaceful surroundings, aesthetic appeal, and the lifestyle they afford. The noise, pollution, and increased activity associated with public transportation hubs can detract from these attributes. A report by the American Public Transportation Association (2016) noted that while public transit reduces overall emissions, localized pollution near transit hubs can be significant, affecting air quality and resident health. Residents may find the constant movement and noise disruptive, leading to dissatisfaction and a diminished living experience. Lastly, the placement of public transportation near luxury properties can lead to a clash of socio-economic interests. Residents of multi-million dollar homes often have different priorities and lifestyle expectations compared to the broader population that relies on public transportation. This divergence can lead to tensions and a lack of cohesion within the community. A study published in the Journal of Urban Economics (2019) found that socio-economic disparities can exacerbate conflicts and reduce the sense of community in neighborhoods with mixed-use developments. Public transportation aims to serve the masses and enhance urban connectivity, which may not align with the desires and expectations of residents in high-value residential areas. In conclusion, while public transportation is crucial for urban development and accessibility, its proximity to multi-million dollar properties presents significant challenges. Privacy concerns, potential decreases in property values, safety issues, and impacts on the overall quality of life for residents are compelling reasons to reconsider such placements. Urban planning should aim to balance the needs of all citizens, ensuring that public transportation is accessible while preserving the unique attributes of luxury residential areas. By thoughtfully considering the placement of public transportation infrastructure, cities can create harmonious environments that cater to diverse socio-economic groups without compromising the qualities that make certain neighborhoods desirable."

Date	Comment
6/7/2024	"It has come to our attention that the City of Indian Wells has plans to move the existing bus stop currently located in front of the Sprouts Farmers Market. We understand that the proposed location would be in front of the Province Date Park on the corner of Cook and Highway 111 (approximately 1/8 of a mile from the existing bus stop). We have concerns with this relocation for several reasons, most importantly being that the new location is HOA property for those living in the Province. As such, the homeowners of the Province will be taking all risks should there be lawsuits, accidents, or other issues. Apparently the reason for this relocation is because of safety issues due to cars merging out of the right lane at the last minute. I'm not sure how moving this bus stop would improve this situation. As with many of our neighbors, we are concerned with the potential issues this new bus stop would create. Because of the inviting grass and trees at this location, it would most likely become a place where drug addicts or transients hang out to escape the heat or conduct drug deals. As you are probably aware, there was an incident on May 17, 2024 where a felon entered our community and was being hunted down by police and helicopters circling. We understand this can happen anywhere but don't want to create a place that draws people to loiter and possibly enter our community. We moved to Indian Wells because we felt it was a beautiful safe place to live. We hope you will consider these points before making a final decision on whether to move the existing but stop.
6/7/2024	"We join all our neighbors in Province not allowing the bus stop to be moved from Sprout's to SE corner of Highway 111 and Cook near the Date Palm Park. We consider this potential counter proposal noted in the IW Safety Action Plan Draft a personal safety hazard. We would no longer walk on our Date Palm Park community side walks and enjoy the beautiful green belt and citrus tree lined area on the mentioned corner. The concern and fear is this area would become a welcome gathering place for transient, homeless and drug users. We have witnessed this in other residential areas and do not approve the potential countermeasure pgs. 69 and 86 of above draft moving of the bus stop."
6/7/2024	"As a new homeowner at The Province, I'm requesting the City of IW to NOT relocate the bus stop on Hwy 111 in front of the Sprouts market to The Province Date Palm Park. This change will increase the number of transient and homeless in our community. With the added risk of more violent and serious crime in our community that we have made a lifetime savings investment. Please reconsider the impact of this change on the health, safety and welfare of The Province community in Indian Wells. Again, I requesting that the City of IW to NOT proceed with this proposed project to relocate the Sprouts bus stop to The Province Date Palm Park."
6/7/2024	"We have a home in Province community. We join all our neighbors in Province not allowing the bus stop to be moved from Sprout's to SE corner of Highway 111 and Cook near the Date Palm Park. We consider this potential counter proposal noted in the IW Safety Action Plan Draft a personal safety hazard. We would no longer walk our Date Palm Park community side walks and enjoy the beautiful green belt and citrus tree lined area on the mentioned corner. The concern and fear is this area would become a welcome gathering place for transient, homeless and drug users. We have witnessed this in other residential areas and do not approve the potential countermeasure pgs. 69 and 86 of above draft moving of the bus stop.This report is very useful and we appreciate all the information it provided. Thank you for your time and support with this issue."
6/7/2024	"For one I do not see the need to re-locate it since it already has a turn-in lane for the bus, so it does not interfere with the flow of traffic. Next to move it would take creating a new turn in lane which would encroach on the park area and walkway between Cook and the entrance to the Province. Further it would be in an area that many people from our Community walk since the pedestrian gate is in that area. Additionally, there are areas where folks could hide behind the proposed new stop to attack pedestrians, ours or others, then jump on the bus, use the bushes for cover to relieve themselves, throw trash, etc. At the moment the current bus stop in totally out in the open with only a large parking lot behind it with essentially no place to hide. For all these reasons we see no need and will support all efforts to avoid this change."

Date	Comment
6/8/2024	"Today we were driving on 111 going towards Palm Desert from our home in IW. We were suddenly alarmed by a speeding SUV passing us using the bus lane to do so. We were in the right lane next to the bus lane that veers off. The SUV used the bus lane to not only pass us but the next car in front of us. I knew this would happen in the proposed bus lane at the Date Palm Park. There will be more traffic accidents because drivers will use the bus lane to pass those up on the far-right lane which is illegal and dangerous. As we continued our drive on Hwy 111 I saw a drugged out homeless man standing under the bus stop. Of course he is going to get out of this heat anywhere he can find shade. This was exactly our other concern as well as those in our community. The grass area at Date Palm Park isn't going to be out of bounds for anyone waiting for a bus. Since recently we had a felon hiding in someone's backyard, to think it cannot happen again is being naive. We do not want our neighborhood to become a statistic to crime. Many homeless drug users take buses town to town. They will steal whatever they can to get cash. It will be convenient to just sit at the bus stop after robbing someone. The bus stop will further create accidents because those who drive lawlessly will continue to drive lawlessly, especially on a bus lane. Drivers will not expect people to drive on the bus lane and not be prepared. A reckless and irresponsible driver will speed on through the bus lane cutting in front of everyone just like we saw today. It was beyond disturbing because any of our vehicles could have been in an accident because of this driver using the bus lane. The Sprouts bus stop is convenient for those working at Sprouts and at the shopping center. It is 1/8 mile away from our community. We are voicing our concerns with the strongest opposition to the proposed bus stop. It has been grievous to think about it. We are deeply burdened and distressed for our community. What we experienced today was a confirmation of what we believe will happen to us in regards to reckless drivers using the bus lane and drug addicts using the bus stop. "
6/8/2024	"I also live here at The Province and have spent hours out walking the area since we moved here in March 2023. I've walked east and west of Cook along the 111 and north and south on Cook nearly every day. I agree that this is a dangerous intersection both as a pedestrian and driver. I believe that moving the bus stop away from the commercial area, where people are exiting or entering the bus, to the residential area where they are not, would be a mistake. It would force pedestrians to go east or west right through that dangerous crosswalk needlessly in order to reach the bus or the commercial area. I believe there is a more important problem with the intersection that needs to be addressed. The eastbound ""bus lane"" is Right Turn Only except for busses. The right turn only is violated all day long. I have not walked or driven through the intersection where a car hasn't gone speeding through the right turn only lane. I'll bet that it gets violated at least every 10 minutes if not more often. I've nearly been T-boned turning right on the 111 from Cook. Most of the time bus drivers move to the second lane before they even reach the intersection at Cook from the current bus stop. They have another half mile before they get to the next bus stop and certainly don't need the blending lane past Cook eastbound. If you move the bus stop east of Cook, those drivers violating the right turn by racing through the intersection will run right up behind those stopped busses. Please do not move the bus stop as it will only cause a more dangerous situation, especially for pedestrians."

Date	Comment
6/9/2024	"great work on study. interesting. please: NO traffic circles on main roadways (Fairway, Eldorado, Fred Waring), including major intersections with Cook, Eldorado, etc. and NO road diets. road diets just move traffic to other areas, increasing traffic, speeding etc in those areas. i've experienced this it has destroyed both beautiful drives and traffic flow. it's awful. AWFUL. YES traffic bumps. you can start with Indian Wells Lane from fairway to dead end PLEASE create a lock system for the IWLane gate at Tommy Bahama/Mira Monte. just don't let hotels share the resident code. we have parking issues, theft issues, noise issues etc. cyclists do not need this they can use Eldorado etc to access. there's a beautiful, safe path along 111. Please. it is an increasing impact, becoming a dangerous, speeding street, drug deals at dead end, cyclists loud, often rude, messy."