

---

# Wildfire Evacuation Plan

# Oak Valley North

---

**FEBRUARY 2024**

*Prepared for:*

**T&B PLANNING INC.**

3200 El Camino Real Suite 100

Irvine, California 92602

Contact: Tracy Zinn

*Prepared by:*

**DUDEK**

605 Third Street

Encinitas, California 92024

Contact: Michael Huff



---

# Table of Contents

<b>SECTION</b>	<b>PAGE NO.</b>
Acronyms and Abbreviations.....	iii
Quick Reference – Wildfire Preparedness .....	v
1 Introduction .....	1
1.1 Project Description .....	1
1.2 Applicable Regulations, Standards, and Planning Tools.....	2
1.2.1 Federal.....	2
1.2.2 State .....	2
1.2.3 Local .....	5
2 Background .....	7
3 Riverside County Evacuation Planning .....	9
3.1 PACE Evacuation Planning.....	10
3.2 Evacuation Objectives .....	12
3.3 Evacuation Coordination Process.....	14
3.4 Evacuation Response Operations .....	15
3.4.1 Evacuation Points and Shelters .....	15
3.4.2 Pet Evacuations .....	16
3.4.3 Shelter-in-Place (County EOP Discussion).....	16
4 Evacuation Road Network .....	19
4.1 Evacuation Assumptions and Scenarios.....	20
4.2 Potential for Project Evacuation Impact on Existing Conditions.....	23
4.2.1 Mass Evacuation Vehicle Traffic .....	26
4.3 Evacuation Route Determination .....	28
5 Wildfire/Evacuation Awareness .....	29
6 Evacuation Procedures.....	31
6.1 Relocation/Evacuation.....	31
6.2 Project Evacuation Baseline .....	32
6.3 Civilian and Firefighter Evacuation Contingency .....	32
6.3.1 Safety.....	33
6.3.2 Temporary Firefighter Refuge Areas.....	34
6.4 Social Aspects of Wildfire Evacuation .....	35
6.4.1 Evacuation of Special Populations .....	36
6.4.2 Re-Entry Procedures .....	36
7 Implementing Conditions.....	37

8 Limitations..... 39

9 References ..... 43

**TABLES**

1 PACE Evacuation Plan for Oak Valley North Project..... 11

2 Evacuating Vehicles ..... 23

3a Evacuation Time Summary..... 24

3b Evacuation Time Summary with Roadway Improvements..... 24

**EXHIBIT**

1 Incident Command System Local Government EOC Functional Interactions. ....9

**FIGURES**

1 Evacuation Routes ..... vii

2 Project Vicinity ..... ix

3 Project Land Use ..... xi

**APPENDICES**

A-1 Wildfire Safety Checklist

A-2 “Ready, Set, Go!” Wildland Fire Action Guide

B-1 Ready Business How To Guide

B-2 Business Emergency Response Plan

C Evacuation Modeling Results

---

# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ARC	American Red Cross
CFD	Calimesa Fire Department
CMC	Calimesa Municipal Code
CAL FIRE	California Department of Forestry and Fire Protection
CALTRANS	California Department of Transportation
CERT	Community Emergency Response Team
CHP	California Highway Patrol
City	City of Calimesa
County	County of Riverside
DAS	Department of Animal Services
EAS	Emergency Alert System
EMD	County of Riverside Emergency Management Department
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
IC	Incident Command
IFTSA	International Fire Service Training Association
NIMS	National Incident Command System
NWFCG	National Wildland Fire Coordinating Groups
OA	Operational Area
Project	Oak Valley North Project
RCFD	Riverside County Fire Department
RCSD	Riverside County Sheriff's Department
SCAG	Southern California Association of Governments
SEMS	State Emergency Management System
TRA	Temporary Refuge Area
VOAD	Volunteers Active in Disasters
VoIP	Voice over Internet Protocol
WUI	Wildland-Urban Interface

INTENTIONALLY LEFT BLANK

---

# Quick Reference – Wildfire Preparedness

The Quick Reference Guide provides helpful tips and educational resources, so occupants are prepared in the event of a wildland fire evacuation.

Figure 1 illustrates the emergency evacuation routes potentially available to the Oak Valley North Project and surrounding communities. Figure 2 displays the Project’s vicinity location, and Figure 3 is the Project’s site plan.

The Project’s evacuation routes for employees and visitors of the Project are detailed in Section 4, Evacuation Road Network, and illustrated in Figure 1. Employees and visitors should know available routes, stay informed, and follow directions provided by law enforcement or fire agencies, news media, and other credible sources. Do not rely on navigation apps that may inadvertently lead persons toward the approaching wildfire.

## Nearest Medical Facilities

### Hospitals

**San Geronio Memorial Hospital**  
600 N Highland Springs Avenue  
Beaumont, California 92220

**Directions:**

Head southeast on Calimesa Boulevard  
Turn right to head west onto Cherry Valley Boulevard  
Follow signs for I-10 East  
Exit I-10 East at Highland Springs Avenue  
Turn left to head north on Highland Springs Avenue  
Hospital on right

**Redlands Community Hospital**  
350 Terracina Boulevard  
Redlands, California 92373

**Directions:**

Head northwest on Calimesa Boulevard  
At Sandalwood Dr follow signs for I-10 West  
Exit I-10 West at Cypress Avenue  
Turn left to head southwest onto Cypress Avenue  
Turn right onto Terracina Boulevard  
Hospital on left

### Urgent Care Facilities

**All Valley Urgent Care**  
1044 Cherry Valley Boulevard  
Calimesa, California 92223

**Optum – Beaumont Sundance  
Urgent Care Center**  
839 N Highland Springs Avenue  
Beaumont, California 92223

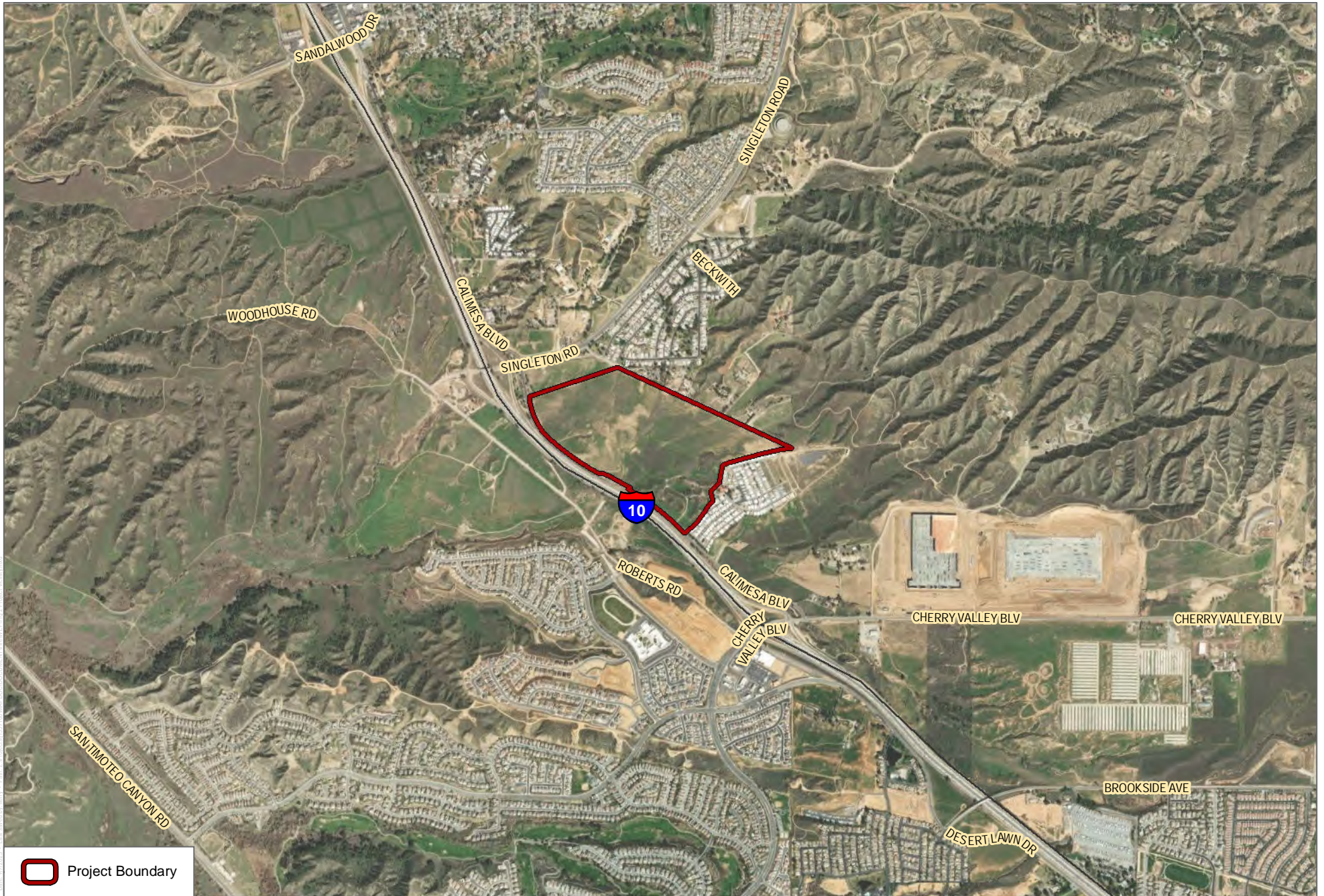
**Rapid Care Urgent Care**  
6350 Ramsey Street Q  
Banning, California 92220

INTENTIONALLY LEFT BLANK





INTENTIONALLY LEFT BLANK



SOURCE: AERIAL-ESRI MAPPING SERVICE 2022

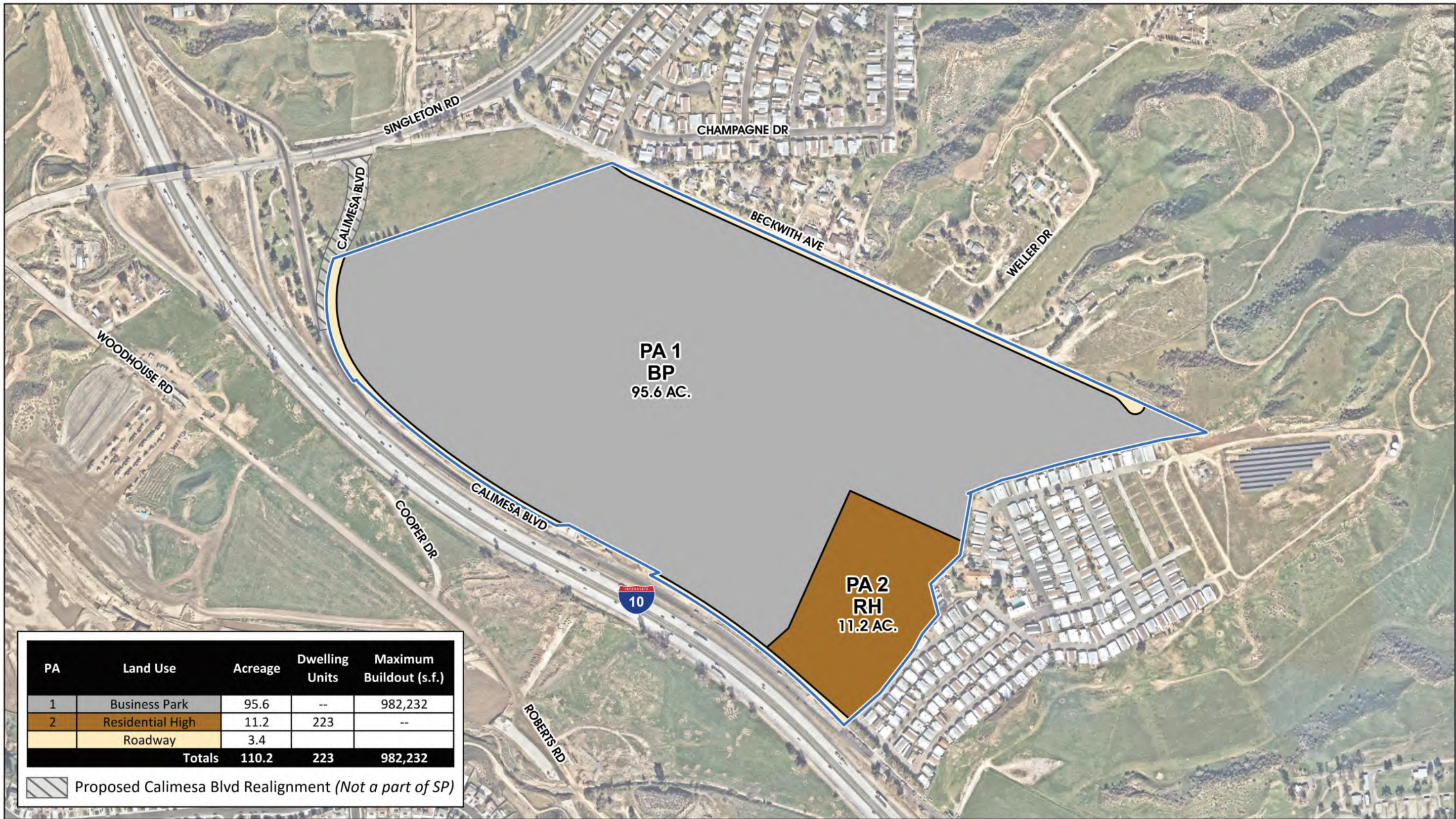


FIGURE 2

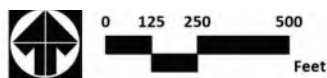
Project Vicinity

Wildfire Evacuation Plan for the Oak Valley North Project

INTENTIONALLY LEFT BLANK



Source(s): ESRI, NearMap (2023), RCTLMA (2022)



SOURCE: HPA 2023

INTENTIONALLY LEFT BLANK

## Register to Receive Emergency Alerts

The City of Calimesa (City) utilizes Civic Engage, which is a regional asset managed by the County of Riverside Emergency Management Department (EMD). In the event of a wildfire within the City limits, the Incident Command (IC), Calimesa Fire Department (CFD) or other City departments will contact coordinate with the Riverside County Sheriff’s Department (RCSd) to release emergency communications to affected populations. The RCSd has the responsibility to release an emergency notification to affected population via the Alert RivCo system. Therefore, owners and employees of the Oak Valley North Project are strongly advised to register all business land lines, mobile phone numbers and email addresses with Reverse 9-1-1 and Alert RivCo system (<https://rivco.genasys.com/portal/en/register>) in order to receive emergency evacuation instructions. The occupants of Oak Valley North are part of the greater Los Angeles- Palm Springs media market and the media outlets will also be a good source of information, via television and radio, on overall emergency situations and how occupants should respond. In addition, the Riverside Emergency Alert System (EAS) is county-wide and broadcasts emergency information via six radio stations: KFI 640 AM, KFWB 980 AM, KNX 1070 AM, KFRG 95.1 FM, KVCR 91.9 FM, and KXFG 92.9 FM. The following television stations will provide information during an emergency:

- Press Enterprise - <https://www.pe.com/>
- ABC7 - <https://abc7.com/>
- NBC4 - <https://www.nbclosangeles.com/>
- KTLA - <https://ktla.com/>
- FOX LA - <http://www.foxla.com/>

Social media provides another outlet for news:

### City of Calimesa

- <https://www.facebook.com/cityof.calimesa>
- <https://twitter.com/cityofcalimesa>

### Calimesa Police Department (Riverside County Sheriff Department)

- <https://www.facebook.com/RCSd.Official/>
- <https://twitter.com/rso>

### CAL FIRE, Riverside County

- <https://www.facebook.com/CALFIRERRU/>

## Get Involved in Community Readiness

Employees of the Oak Valley North Project are encouraged to obtain Community Emergency Response Team (CERT) training through the County of Riverside’s Emergency Management Department (<https://www.rivcocert.org/>). The Owners/Property Manager will organize annual evacuation public outreach for all employees as well as maintain a fire safe page on the Project’s website, including this Wildfire Evacuation Plan and links to important preparedness information. This information will be made available to all occupants of the Project.

This Wildfire Evacuation Plan is prepared specifically for the Oak Valley North Project and focuses on wildland fire evacuations, although many of the concepts and protocols will be applicable to other emergency situations. Ultimately, this WEP should be used by employees for awareness of evacuation approaches during wildfires and

other similar emergencies. It is important for employees to understand the importance of being prepared, so if/when the time comes where evacuation is necessary, they will be able to calmly implement their evacuation plan. Some actions employees can take in advance include:

- Follow the “Ready, Set, Go!” model developed for wildfire evacuations.
  - Oak Valley North should create an evacuation plan, and share it with all employees.
  - All employees should know the available evacuation routes, stay informed and follow directions provided by credible sources.
  - No employee should rely on navigation apps that may inadvertently lead them toward an approaching fire.
  - All employees should be encouraged to prepare a car emergency kit, including cell phone charger, flashlight, jumper cables, water, and food.

Sample emergency preparedness resources available to the Oak Valley North Specific Plan occupants are provided in Appendices A-1 and A-2 (Wildfire Safety Checklist and “Ready, Set, Go!” Wildland Fire Action Guide) as well as Appendices B-1 and B-2 (Ready Business How To Guide and Business Emergency Response Plan), and occupants are encouraged to become familiar with the concepts detailed at the following websites:

1. “Ready, Set, Go!” Personal Wildland Fire Action Guide:  
<https://www.readyforwildfire.org/prepare-for-wildfire/ready-set-go/>
2. Red Cross Emergency Planning:  
<http://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan>
3. Hazardous Materials Emergency Preparedness:  
<https://www.ready.gov/hazardous-materials-incident>
4. Building a disaster kit:  
<http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready/get-a-kit>
5. FEMA Ready Business How-To Guide:  
[https://www.ready.gov/sites/default/files/2020-04/ready\\_business\\_how-to-guide.pdf](https://www.ready.gov/sites/default/files/2020-04/ready_business_how-to-guide.pdf)

## Evacuation Plan Purpose and Limitations

Wildfire and other emergencies are often dynamic events and the need for evacuations are typically determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams, including County EMD and the IC established for larger emergency events. As such, and consistent with all emergency evacuation plans, this Wildfire Evacuation Plan is to be considered a tool that supports existing pre-plans and provides for occupants who are familiar with the evacuation protocol but is subservient to emergency event-specific directives provided by agencies managing the event.



---

# 1 Introduction

This Wildfire Evacuation Plan (WEP) was prepared based on the Riverside County Emergency Operations Plan (EOP) (County of Riverside 2019) and the Calimesa Basic EOP (Calimesa 2019). The Calimesa EOP is not publicly available at this time; however, a complete copy of the Riverside County EOP can be downloaded from the respective link below:

**County of Riverside EOP:** <https://rivcoready.org/about-emd/plans>

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a place of safety, and offered appropriate temporary shelter facilities. When the threat to safety is gone, evacuees are able to return to their normal activities, or to make suitable alternative arrangements. The overarching goal of evacuation planning is to maximize the preservation of life while reducing the number of people that must evacuate and the distance they must travel to seek safe refuge. The purpose of the Calimesa and Riverside County EOPs is to provide an overview of evacuation functions, agency roles and responsibilities, and overall guidelines for the evacuation of people and animals from hazardous areas to areas of safety in incidents with and without warning (County of Riverside 2019).

This WEP will outline strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the case of a wildfire emergency effecting the Oak Valley North Project. It is noted that the on-set of a wildfire or other emergency is generally unplanned and more often than not, occupants and visitors will be faced with decisions that need to be made quickly and determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams. Therefore, this WEP is to be considered a tool that supports existing pre-plans and provides for occupants who are familiar with the evacuation protocol but is subservient to emergency event-specific directives provided by agencies managing the event.

## 1.1 Project Description

The Oak Valley North Project covers approximately 110.2 acres and proposes development of up to 982,232 square feet of warehouse and office building space and up to 223 multifamily residential units or a church on 110.2 gross acres. Building 1 would have 236,892 square feet of floor area and 37 loading docks. Building 2 would have 249,840 square feet of floor area and 74 loading docks. Building 3 would have 249,000 square feet of floor area and 93 loading docks. Building 4 would have 246,500 square feet of floor area and 50 loading docks. Two additional Development Plan Reviews are proposed to establish two trailer lots. Trailer Lot 1 would be 10.04 acres and provide for 254 trailer parking spaces and 5 auto spaces. Trailer Lot 2 would be 27.24 acres and provide for 708 trailer parking spaces and 5 auto spaces. Also, a Tentative Parcel Map is proposed to subdivide the property and create 7 parcels and dedicate public roadway right-of-way to the City of Calimesa for improvements to Beckwith Road and Calimesa Boulevard.

## 1.2 Applicable Regulations, Standards, and Planning Tools

### 1.2.1 Federal

#### 1.2.1.1 Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires that a state mitigation plan, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: “Standard” and “Enhanced.” States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Disaster Mitigation Act also established a new requirement for local mitigation plans.

#### 1.2.1.2 National Incident Management System

The National Incident Management System (NIMS) guides all levels of government, nongovernmental organizations and the private sector to work together to prevent, protect against, mitigate, respond to and recover from incidents. NIMS provides community members with a shared vocabulary, systems and processes to successfully deliver the capabilities described in the National Preparedness System. The National Preparedness System is a Presidential Policy Directive establishing a common goal to create a secure and resilient nation associated with prevention, protection, mitigation, response and recovery to address the greatest risks to the nation. One core area is fire management and suppression.

NIMS defines operational systems that guide how personnel work together during incidents.

#### 1.2.1.3 Pet Evacuation and Transportation Standards Act

The Pets Evacuation and Transportation Standards Act of 2006 amends the Stafford Act, and requires evacuation plans to take into account the needs of individuals with household pets and service animals, prior to, during, and following a major disaster or emergency.

### 1.2.2 State

#### 1.2.2.1 Fire Hazard Severity Zones

To assist each fire agency in addressing its responsibility area, California Department of Forestry and Fire (CAL FIRE) uses a severity classification system to identify areas or zones of severity for fire hazards within the state. CAL FIRE is required to map these zones for State Responsibility Areas and identify Very High Fire Hazard Severity Zones (VHFHSZ) for Local Responsibility Areas (LRA). The Project currently spans an area statutorily designated as a Very High Fire Hazard Severity Zone (VHFHSZ) in local responsibility area (LRA) (CAL FIRE 2008).

#### 1.2.2.2 California Wildland-Urban Interface Code

On September 20, 2005, the California Building Standards Commission approved the Office of the State Fire Marshal’s emergency regulations amending the California Building Code (CBC) (24 CCR 2). Section 701A of the

CBC includes regulations addressing materials and construction methods for exterior wildfire exposure and applies to new buildings located in State Responsibility Areas or Very High Fire Hazard Severity Zones in Local Response Areas.

### 1.2.2.3 California Fire Code

The 2022 California Fire Code (24 CCR 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas. The City of Calimesa has adopted the 2022 California Fire Code as Chapter 15.10 of the Calimesa Municipal Code, as amended, including appendices addressing fire-flow requirements for buildings.

### 1.2.2.4 California Emergency Services Act

The California Emergency Services Act (California Government Code Section 8550 et seq.), provides for the creation of an Office of Emergency Services, assign and coordinate functions and duties to be performed during an emergency, facilitate mutual aid, and assign resources (including manpower and facilities) throughout the state for dealing with any emergency that may occur.

### 1.2.2.5 California Office of Emergency Services

The California Office of Emergency Services (OES) is responsible for the coordination of overall state agency response to disasters. Assuring the state's readiness to respond to, recover from all hazards and assisting local governments in their emergency preparedness, response, recovery and mitigation.

#### 1.2.2.5.1 Standardized Emergency Management System

The Standardized Emergency Management System (SEMS) is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. SEMS incorporates:

- **Incident Command System (ICS)** - A field-level emergency response system based on management by objectives
- **Multi/Inter-agency coordination** - Affected agencies working together to coordinate allocations of resources and emergency response activities
- **Mutual Aid** - A system for obtaining additional emergency resources from non-affected jurisdictions.
- **Operational Area Concept** - County and its sub-divisions to coordinate damage information, resource requests and emergency response.

### 1.2.2.6 Attorney General Guidance

In October 2022, the California Office of the Attorney General issued guidance (Guidance) outlining best practices for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA) (Office of the Attorney General 2022). The Guidance is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help project design in a way that minimizes wildfire ignition and incorporates emergency access and evacuation measures. Importantly, the Guidance does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations.

The Guidance states that evacuation modeling and planning should be required for all projects located in HFHSZ/VHFHSZ that present an increased risk of ignition and/or evacuation impacts. It further states that local jurisdictions should require evacuation modeling and planning to be developed prior to project approval to provide maximum flexibility in design modifications necessary to address wildfire risks and impacts. The Project is in an area designated as a VHFHSZ within the LRA and is adjacent to open space areas, which is why this Wildfire Evacuation Plan was prepared for the Project and includes the analysis of several evacuation scenarios, including existing and with Project conditions.

The Guidance further states that evacuation modeling and analysis must augment existing information when necessary to include adequate analysis of the following:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access. Existing and future roadway capacities are analyzed in Section 4 of this Evacuation Plan.
- Assessment of the timing for evacuation. Analysis of evacuation timing is detailed in Section 4.1, Evacuation Assumptions and Scenarios.
- Identification of alternative plans for evacuation. Alternative plans for evacuation would be feasible due to the high ignition resistance level of Project structures.
- Evaluation of the Project's impacts on existing evacuation plans. Existing evacuation plans do not exist for the area. The Project would utilize primary evacuation routes that would be available to other evacuees. This Evacuation Plan is based on County's Emergency Operations Plan, including Emergency Support Function 16, Evacuation and Re-entry.
- Consideration of the adequacy of emergency access, including the Project's proximity to existing fire services and the capacity of existing services. Emergency access is provided that is consistent with the fire code requirements.
- Traffic modeling to quantify travel times under various likely scenarios. This Wildfire Evacuation Plan utilizes a basic formula approach that is comprehensive but based on the number of vehicles anticipated in the Study Area, including the Project, and road capacities currently and with the Project.

In consideration of the above, the AG Guidance encourages local jurisdictions to develop thresholds of significance for evacuation times based on community-wide standards. Any conclusion that an increase in evacuation times is a less than significant impact should be based on a threshold of significance that reflects community-wide goals and standards. Thresholds should also consider consistency with an adopted emergency operations or evacuation plan, a safety element updated to integrate wildfire and evacuation concerns, or recommendations developed by CAL FIRE relating to safety of subdivisions. The Project also has the potential to minimize on-road traffic when it is

considered necessary and/or safer by temporarily providing refuge on site in protected structures, which offers a contingency not available to all communities/developments and assists in providing flexibility and options for emergency managers.

At the time this WEP was prepared, there are no established thresholds for evacuation times for this community or any California community to the knowledge of the authors. This is primarily because every location and fire scenario are unique. While it may take one community 20 minutes to evacuate safely, it is not a valid assumption to consider a 3-hour evacuation for another community as unsafe. The 3-hour evacuation can be very safe while the 20-minute evacuation may be unsafe due to the conditions and exposures along the evacuation routes. Therefore, the Project does not utilize a threshold, but does compare its evacuation times with that of historical evacuations of the area and similarly situated communities. Accordingly, as detailed in Section 4, under the most conservative scenario, the Project would evacuate in 2 hours, 13 minutes, and changes in evacuation times are expected to be a maximum 40-minute increase in evacuation time with the Project. Given the location of the Project in a rural setting, it is unlikely that a full evacuation of the Project would be required as a result of wildfire.

## 1.2.3 Local

### 1.2.3.1 Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan

The purpose of the County's Multi-Jurisdictional Local Hazard Mitigation Plan (County of Riverside 2018) is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and human-made hazards. An important Riverside County Multi-Jurisdictional Hazard Mitigation Plan component is the Community Emergency Response Team (CERT), which educates community members about disaster preparedness and trains them in basic response skills, including fire safety.

### 1.2.3.2 Riverside County Emergency Operations Plan

The 2019 Riverside County Emergency Operations Plan (EOP) describes a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization, and describes the overall responsibilities for protecting life and property and providing for the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

### 1.2.3.3 City of Calimesa Basic Emergency Operations Plan

The primary objective of the City of Calimesa Basic Emergency Operations Plan (EOP) from 2019 is to integrate and synchronize all City facilities and personnel into a streamlined structure capable of promptly and efficiently addressing any emergency situation, including the need for evacuations. Part 2 of the EOP outlines the functions of the City of Calimesa Emergency Operations Center (EOC), which serves as the central administrative body responsible for overseeing and harmonizing the emergency response efforts of different City departments and external agencies. The purpose of the plan is to promote collaboration and coordination among multiple agencies and jurisdictions, specifically fostering effective communication and cooperation between the City of Calimesa, Riverside County, special districts, and state agencies during emergency operations.

### 1.2.3.4 City of Calimesa Fire Code

The City of Calimesa Fire Code consists of Calimesa Municipal Code Title 15, Chapter 15.10, which adopts the 2022 California Fire Code with some modifications, and applicable sections of the California Code of Regulations. Provisions of the California Fire Code are described under State Regulations, above.

### 1.2.3.5 City of Calimesa Building Code

The City's Building Code (CMC Title 15, Chapter 15.05) is intended to regulate the construction of applicable facilities and encompasses (and formally adopts) associated elements of the CBC. Specifically, this includes regulating the "regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, use, height, area and maintenance of all structures and certain equipment therein."

### 1.2.3.6 City of Calimesa Weed Abatement Program

The City's Hazardous Weed Abatement Standards (City of Calimesa Municipal Code 8.10.010 – 8.10.130) are intended to minimize wildland fire hazards through prevention activities and programs. These regulations follow Government Code Sections 39501 and 39502 and give responsibility to property owners, leasers, and occupants of the property to ensure that the prevention and abatement of public nuisances caused by weeds, hazardous vegetation or rubbish on or about any parcel.

Chapter 49 of the CFC, as adopted by the City, establishes vegetation management requirements for development within areas identified as High or Very High FHSZ, which includes 100 feet of fuel modification on publicly or privately owned lands adjacent to native or naturalized vegetation. The City requires Fuel Modification Plans for all new development, which are intended to reduce the risk of significant loss, injury, or death involving wildland fires.

---

## 2 Background

This Oak Valley North Project Wildfire Evacuation Plan was prepared based on the City of Calimesa Emergency Operations Plan (EOP) and the Riverside County EOP.

To establish a framework for implementing well-coordinated evacuations, the County, like most California emergency operations agencies, has adopted evacuation procedures in accordance with the State of California's Standardized Emergency Management System (SEMS) and the National Incident Command System (NIMS). Large-scale evacuations are complex, multi-jurisdictional efforts that require coordination between many agencies and organizations. Emergency services and other public safety organizations play key roles in ensuring that an evacuation is effective, efficient, and safe.

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a safer place, and offered temporary shelter facilities. When the threat passes, evacuees are able to return to their normal activities, or to make suitable alternative arrangements.

Evacuation during a wildfire is not necessarily directed by the fire agency, except in specific areas where fire personnel may enact evacuations on-scene. The City of Calimesa Police Department (e.g., Riverside County Sheriff's Department) would be the primary law enforcement agency responsible for evacuations within the City's jurisdiction. As detailed in the City's EOP, RCSD would staff the Law Enforcement Branch, which manages the Evacuation & Reentry Unit. Riverside County Sheriff's Department Operations Center (DOC) will coordinate evacuation and re-entry activities and overall Riverside County Sheriff's Department emergency response. During any evacuation event that exceeds normal Riverside County Sheriff's Department capacity, the County's Operational Area (OA) Emergency Operations Center (EOC) will be activated. In the event the EOC is activated, the EOC Law Enforcement Branch will activate the Evacuation Re-Entry Unit to coordinate the countywide evacuation and re-entry functions. Incident information and resource needs will be communicated from the Sheriff's DOC to the OA EOC Law Enforcement Branch.

The County Sheriff's DOC works closely with other organizations including RCFD and CFD, with the DOC being in charge of coordinating RCFD activities. Additionally, the Law Enforcement branch will link the OA EOC to many resources including the Sheriff's DOC, IC for incidents under the management of law enforcement services, as appropriate, Evacuation teams, Shelters, Transportation agencies, and other Supporting agencies.

Every evacuation scenario will include some level of unique challenges, constraints, and fluid conditions that require interpretation, fast decision making, and alternatives. For example, one roadway incident that results in blockage of evacuating vehicles may require short-term or long-term changes to the evacuation process. Risk is considered high when evacuees are evacuating late, and fire encroachment is imminent. This hypothetical scenario highlights the importance of continuing to train responding agencies, model various scenarios, educate the public, provide contingency plans, and take a very conservative approach to evacuation decision timelines.

Equally as important, the evacuation procedures should be regularly updated with lessons learned from actual evacuation events, as they were following the 2022 Riverside County fires. The authors of this Wildfire Evacuation Plan recommend that occasional updates are provided, especially following lessons learned from actual incidents, as new technologies become available that would aid in the evacuation process, and as changing landscapes and development patterns occur within and adjacent to the Project site that may impact how evacuation is accomplished.

This Oak Valley North Project Wildfire Evacuation Plan is consistent with the City evacuation planning standards and can be integrated into a county or regional evacuation plan and other pre-plans when and if the area officials and stakeholders (CAL FIRE, RCFD, OES, Riverside Sheriff’s Department, and others) complete one.

As demonstrated during large and localized evacuations occurring throughout Riverside County historically, an important component to successful evacuation is early assessment of the situation and early notification via managed evacuation declarations. The City utilizes early warning and informational programs to help meet these important factors. Among the methods available to citizens for emergency information are Nixle, a mass communications hub platform that allows the City to provide secure, reliable, and relevant information to occupants in real-time, in addition to radio, television, social media/internet, neighborhood City patrol car or County Sheriff patrol car, and aerial public address notifications, and Reverse 9-1-1 or Alert RivCo. The County of Riverside instituted this regional notification system that is able to send telephone notifications to occupants and businesses within Riverside County impacted by, or in danger of being impacted by, an emergency or disaster. This system, called Alert RivCo, is used by emergency response personnel to notify homes and businesses at risk with information on the event and/or actions (such as evacuation, shelter-in-place, gas leak, missing person, etc.) they are advised to implement. The system utilizes the region’s 9-1-1 database, provided by the local telephone company(ies), and thus is able to contact landline telephones whether listed or unlisted. It is TTY/TDD capable.

Because the system uses the 9-1-1 database, only landline numbers are in the system. If you have a Voice over IP (VoIP) or cellular telephone and would like to be notified over that device, or if you would like an email notification, you must register those telephone numbers and/or email address for use by the system to receive voice, text, and email messages.

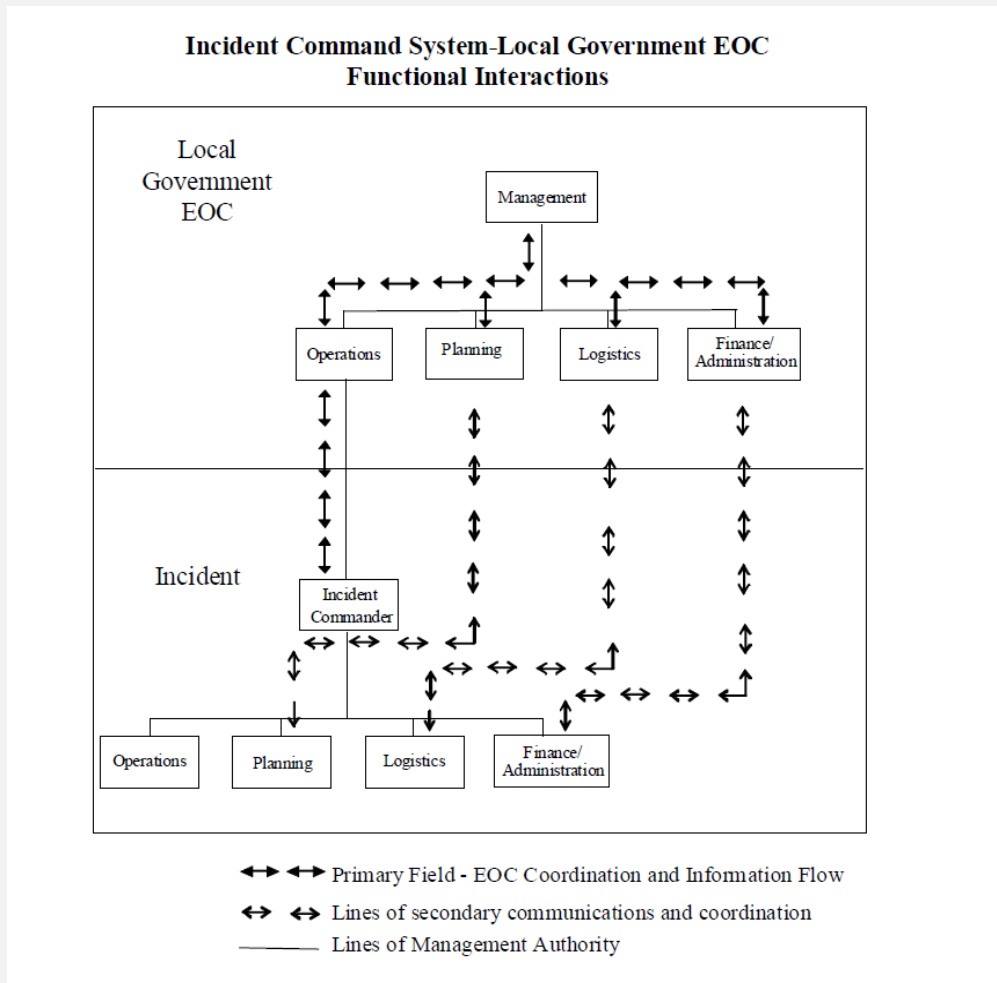


# 3 Riverside County Evacuation Planning

This Wildfire Evacuation Plan incorporates concepts and protocols practiced throughout the City and Riverside County. The City follows basic protocols set forth the County’s EOP and California Master Mutual Aid Agreement, which dictate who is responsible for an evacuation effort and how regional resources will be requested and coordinated.

First responders are responsible for determining initial protective actions before EOCs and emergency management personnel have an opportunity to convene and gain situational awareness. Initial protective actions are shared/communicated to local EOCs and necessary support agencies as soon as possible to ensure an effective, coordinated evacuation. Exhibit 1 summarizes the functional interactions of local government EOCs under the Incident Command System.

**Exhibit 1.** Incident Command System Local Government EOC Functional Interactions.



The Riverside County Sheriff's Department (RCSD) is the lead agency for executing evacuations of the unincorporated areas of Riverside County. In the incorporated cities, local law enforcement (or the Sheriff in contracted cities) will be the lead agency for executing evacuations. The RCSD, as part of Unified Command, assesses and evaluates the need for evacuations, and orders evacuations according to established procedures. During an evacuation effort, the EOC Law Enforcement Branch Director supports the development of alert and warning messages and provides intelligence regarding road closures and evacuations, this position is staffed by the RCSD. The RCSD will be assisted by other law enforcement and support agencies. Law enforcement agencies, highway/road/street departments, and public and private transportation providers will conduct evacuation operations as directed by the OA EOC. Procurement, regulation, and allocation of resources will be accomplished by those designated. Evacuation operations will be conducted by the following agencies:

- Riverside Emergency Animal Rescue System (REARS)
- Riverside County Emergency Management Department (EMD)
- Riverside University Health System-Public Health (RUHS-PH)
- Riverside University Health System - Behavioral Health (RUHS-BH)
- Riverside County Department of Environmental Health (DEH)
- Riverside County Office on Aging
- Riverside County Agricultural Commissioner's Office
- Cal OES Law Enforcement Mutual Aid Region VI
- American Red Cross (ARC)
- Volunteers Active in Disasters (VOAD)
- California Highway Patrol (CHP)
- Transportation agencies
- Other County and state agencies, as needed
- The following overview contains information from the Riverside County EOP Emergency Support Annex 16

## 3.1 PACE Evacuation Planning

PACE evacuation planning is based on a military concept focused on mitigating risk by developing a strong primary evacuation plan along with three back up plans. If the Primary plan is compromised, the Alternate plan would be triggered. If the Alternate is considered not functional or not safe, the Contingency Plan is implemented. If that does not mitigate the risk, then the evacuation reverts to the Emergency plan. PACE Planning is a simple and effective tool used to accomplish evacuations with flexibility and redundant contingencies.

Emergency plan. The PACE Evacuation Plan must be maintained, reviewed, and updated at least every 2 years. The plan provides the following:

- (1) Based on and includes a documented, facility-based and community-based risk assessment, utilizing hazard analysis approach.
- (2) Include strategies for addressing emergency events identified by the risk assessment.
- (3) Address participant population, including, but not limited to, the type of services the PACE organization has the ability to provide in an emergency; and continuity of operations, including delegations of authority.
- (4) Include a process for cooperation and collaboration with emergency preparedness officials' efforts to maintain an integrated response during a disaster or emergency situation.

**Primary:** This is the overall preferred plan of action to use based on the most likely and most damaging scenario resulting from hazard analysis.

**Alternate:** The Alternate plan should be as viable as your Primary plan. That isn't always the case, but that should be the goal whenever possible. Alternate plans are needed because unforeseen circumstances arise during emergency evacuations.

Developing the Alternate plan includes analyzing the most likely problems that could cause your primary plan to fail and then come up with a plan that fits with your situation that won't be affected by those problems. Whenever possible, come up with a few to several vulnerabilities in your primary plan and find an alternate that's just as good but covers all those bases.

**Contingency:** The contingency evacuation plan is the action that will be implemented if you cannot implement either the Primary or the Contingency action due to compromised safety. The contingency is not always (or is not usually) as preferred as the others, but is a viable option that doesn't rely on the same actions as the Primary and Alternate.

**Emergency:** This is the action that is implemented if all three of the previous actions fail. In some respects, it is a last resort that is the least preferred option, but is a viable and safe option, nonetheless. The goal is to utilize an Emergency plan that's independent from reliance on the types of actions in the first three options, is a flexible plan, has the highest probability of succeeding, and offers a reliable option with little potential for compromise.

An emergency plan may not be the most convenient or preferred plan and may include components that are uncomfortable to visitors, but it should be as foolproof as possible.

The Oak Valley North Project approach to the PACE model is summarized in Table 1.

**Table 1. PACE Evacuation Plan for Oak Valley North Project**

- 
- 1. Primary:** Project will evacuate via the primary evacuation route(s) early after receiving evacuation notice utilizing the primary evacuation route(s) as directed by law enforcement/emergency managers.

---

  - 2. Alternate:** Project will follow evacuation instructions which may include an alternate plan to utilize secondary routes or to relocate to nearby urban areas based on congested traffic conditions. Notifications that this alternate plan is being implemented will be provided via the notification systems or on-site emergency personnel, media and social media.

---

  - 3. Contingency:** Due to primary and alternate options being compromised or undesirable, the contingency plan of evacuating smaller, highest vulnerability populations will be implemented. For the Project, this may include evacuating until direction is provided to cease evacuation and initiate on-site sheltering of a smaller on-site population.

---

  - 4. Emergency:** When the wildfire or other emergency dictates that off-site evacuation is not advised by the primary or alternate evacuation routes, and conditions are such that open air exposure would be unhealthy or unsafe, the Oak Valley North population will be directed to shelter in place. Sheltering in place is possible due to the ignition resistant construction materials and irrigated landscape that creates a fire hardened development. Sheltering in place may also be the preferred option for other emergencies, e.g., active shooter, earthquake. Persons sheltering in place are advised to remain aware of the situation and move out of the building to a designated safe zone if directed to do so or otherwise necessitated.

---

## 3.2 Evacuation Objectives

RCSD is the lead agency for evacuations of areas within the city, including the proposed Oak Valley North Project. The RCSD, as part of a Unified Incident Command System, assesses and evaluates the need for evacuations, and orders evacuations according to established procedures. Additionally, as part of the Unified Incident Command System, the RCSD identifies available and appropriate evacuation routes and coordinate evacuation traffic management with Caltrans, CHP, other supporting agencies, and all impacted jurisdictions.

The decision whether to evacuate or shelter-in-place must be carefully considered with the timing and nature of the incident. This decision is made by first responders in the field by the established Incident Command (IC) or Unified Command (UC). An evacuation effort involves an organized and supervised effort to relocate people from an area of danger to a safe location. Tactical decisions, such as detailed evacuation areas, specific routes, road closures and temporary evacuation points are decided in the field by IC or UC based upon the dynamics of the incident.

Per the County EOP, the responsibilities of the RCSD Evacuation and Re-Entry unit are as follows:

- Responsible for an orderly, systematic evacuation of City occupants due to an extreme emergency
- Ensure that all items under the Americans with Disabilities Act are covered for evacuations/movement operations
- Ensure public safety for incarcerated evacuees
- Develop an evacuation and or re-entry plan

The initial actions of the RCSD Evacuation and Re-entry unit during emergency evacuation operations are to:

- Receive briefing from the Law Enforcement Director
- Establish the lead time needed prior to evacuation/re-entry
- Develop an evacuation/re-entry plan with the following priorities in mind:
  - Public safety
  - Medical and health services
  - Delivery of essential provisions and other necessary resources
- Coordinate with the Public Works Branch, the Utilities Branch, the American Red Cross, Schools Branch, local transit company, and other necessary staff to develop a cohesive evacuation plan
- Develop evacuation routes and request the Public Information Officer to begin drafting an evacuation notice for the public with specific instructions and routing information as well as information for evacuating special needs populations
- Arrange with Public Works Director for barricades and inform them of where the barricades are to be placed
- Ensure that the following occurs:
  - Provide appropriate evacuation/re-entry information to emergency responders
  - Provide appropriate evacuation/re-entry information to the evacuees
  - Arrange for transportation, if necessary
- Provide security for evacuated areas and sheltering of evacuees
- Arrange for evacuation of the elderly and infirm or others with special needs
- Coordinate with the American Red Cross and Beaumont Unified School District regarding sheltering needs

- Identify potential problem areas along evacuation/re-entry routes( i.e., weight restrictions, narrow bridges, road sections susceptible to secondary effects of an incident, etc.)
- Estimate the number of people to be evacuated/re-enter and explain transportation policy (i.e., movement, control, use of public and private vehicles, etc.)
- Make appropriate arrangements to transport emergency workers
- Designate areas along movement routes where evacuees can obtain fuel, water, medical aid, vehicle maintenance, information, and comfort facilities
- Identify areas for parking and vehicle security in reception areas

The intermediate actions of the RCSD Evacuation and Re-entry unit during emergency evacuation operations are to:

- Ensure that the Emergency Alert System (EAS) broadcasts the evacuation/re-entry order, transportation routes, assembly points for those needing transportation, and shelter sites
- Coordinate with the Care and Shelter Director, the American Red Cross and Logistics Section to ensure adequate supplies at all shelter and mass care sites
- Ensure that all barricades are up and located as identified in the evacuation/re-entry plan developed for the incident.
- Notify all command posts and the Operational Area of the evacuation/re-entry.
- Deploy additional Law Enforcement Officers and/or Cadets to canvass the evacuation area to provide a verbal notification of evacuation for those who may not have heard the EAS announcements

If County EOC is managing the incident, the following are the responsibilities of the RCSD Evacuation and Re-Entry unit, per the County’s EOP Emergency Support Function 16:

- Establish evacuation strategy for impacted area(s)
- Coordinate evacuation alert and warning to allow people maximum time to evacuate
- Coordinate evacuation transportation routes with local and state agencies
- Ensure shelter locations and evacuation routes are aligned
- Coordinate with the OA EOC Logistics Section to obtain required supplies, equipment, and personnel for evacuation
- Coordinate evacuation transportation for people with disabilities an access and functional needs
- Coordinate with local transportation systems to provide assets for transportation
- Coordinate the location for evacuation assembly points
- Ensure communications are available between key evacuation locations and evacuation vehicles
- Coordinate animal evacuation resources
- Coordinate with Hazardous Materials Team to determine evacuation versus shelter-in-place criteria
- Coordinate with other local authorities, and the Regional Emergency Operations Center as necessary, to ensure that the public, including people with disabilities and AFN, is aware of the timeline, stages, and major routes and means of evacuation
- Coordinate public safety and security resources will be required to support the evacuation
- Coordinate with specialty vehicles (e.g., Para-transit like vehicles) that will be required to support the evacuation

- Begin planning for evacuee re-entry strategy, which includes all the tasks listed above. The overall objectives of the RCSD Evacuation and Re-entry unit during emergency evacuation operations are to:
  - Expedite the movement of persons from hazardous areas
  - Institute access control measures to prevent unauthorized persons from entering vacated, or partially vacated areas
  - Provide for evacuation to appropriate transportation points, evacuation points, and shelters
  - Provide adequate means of transportation for persons with disabilities, the elderly, other persons with access and functional needs, and persons without vehicles
  - Provide for the procurement, allocation, and use of necessary transportation and law enforcement resources by means of mutual aid or other agreements
  - Control evacuation traffic
  - Account for the needs of individuals with household pets and service animals prior to, during, and following a major disaster or emergency
  - Provide initial notification, ongoing, and re-entry communications to the public through the Joint Information Center (JIC)
  - Assure the safe re-entry of the evacuated persons

### 3.3 Evacuation Coordination Process

If the emergency only impacts the City, RCSD will make the decision to evacuate:

- Based on the information gathered, local jurisdictions will generally make the determination on whether to evacuate communities as the need arises, on a case-by-case scenario basis
- The decision to evacuate will depend entirely upon the nature, scope, and severity of the emergency; the number of people affected; and what actions are necessary to protect the public
- Local jurisdictions may activate their EOC and conduct evacuations according to procedures outline in their EOP
- The OA EOC may make recommendations on whether a community should evacuate and may help coordinate the evacuation effort
- The Evacuation Annex is automatically activated when an incident occurs requiring an evacuation effort that impacts two or more jurisdictions within the OA

If the emergency impacts multiple jurisdictions within the OA:

- All impacted jurisdictions may activate the EOCs and the OA EOC will be activated, including the OA EOC JIC
- The OA EOC will begin obtaining situational awareness, understanding the severity of the incident
- The OA EOC will coordinate with fire, law enforcement, public health, and other relevant support agencies to obtain recommendations on protective actions
- The OA EOC will coordinate with jurisdictional EOCs, emergency management personnel and other public safety personnel; the Policy Group within the EOC will coordinate with jurisdictions leaders across the OA to identify command decisions, including:
  - Gaining regional situational awareness
  - Determining response status

- Reviewing status of initial protective actions
- Considering additional protective actions
- Evaluating public information needs
- Determining next steps
- Establishing a regular schedule for internal and external updates
- The OA EOC JIC will coordinate emergency public information to citizens in accordance with procedures established within the Joint Information System (JIS) annex of the OA EOP
- The OA EOC may support coordinating the evacuation response according to the OA EOP, including:
  - Providing transportation for those who need assistance through the activation of emergency transportation services agreements
  - Providing support for individuals with disabilities and others with access and functional needs during the evacuation process, which may include, but is not limited to, providing assistance with wayfinding, supervision, and language interpretation
  - Coordinating and communicate with the private sector, community-based organizations, and faith-based organizations to utilize services and resources available to support the response
  - Coordinating the provision of accessible care and shelter services

## 3.4 Evacuation Response Operations

An evacuation of any area requires significant coordination among numerous public, private, and community/non-profit organizations. Wildfire evacuations will typically allow time for responders to conduct evacuation notification in advance of an immediate threat to life safety, giving occupants time to gather belongings and make arrangements for evacuation. On the other hand, other threats, including wildfires igniting nearby, may occur with little or no notice and certain evacuation response operations will not be feasible (for example, establishing contra flow requires between 24 to 72 hours to be implemented; a no-notice event will not allow for contra flow to be established). Evacuation assistance of specific segments of the population may also not be feasible.

### 3.4.1 Evacuation Points and Shelters

When the RCSD or Incident Command (IC) implements an evacuation order, they coordinate with the responding fire and rescue agency, the EOC, and others, to decide on locations to use as a Temporary Evacuation Point (TEP). The RCSD will provide emergency alerts through the Alert RivCo platform to direct evacuees to the established TEPs or shelters. These evacuation points will serve as temporary safe zones for evacuees and will provide basic needs such as food, water, and restrooms. Possible shelters and assembly areas that can provide at least short-term refuge and that would be designated by emergency managers during an evacuation near the Project include:

- Summerwind Trails School
- Mesa View Middle School
- Other refuge sites are available within developed communities primarily to the north or southeast of the Project site

If there are occupants unable to evacuate or in need of transportation assistance to get to a TEP or shelter, the RCSD or IC may establish transportation points to collect and transport people without transportation resources to evacuation points. These transportation points should be large, well-known sites such as shopping centers, libraries, and schools. Transportation should be accessible to all populations, including people with disabilities and other access and functional needs.

### 3.4.2 Pet Evacuations

The Pets Evacuation and Transportation Standards Act of 2006 amends the Stafford Act, and requires evacuation plans to take into account the needs of individuals with household pets and service animals, prior to, during, and following a major disaster or emergency.

The Riverside County Department of Animal Services (DAS) has plans in place to transport and shelter pets in a disaster under ESF 20 of the OA EOP. Domestic animals in need of housing will be accepted at and/or transported to animal shelters used by DAS; these may include County animal shelters and/or partner agency shelters, such as Animal Friends of the Valley. DAS will provide provisions for service animals at human shelters to include food, water, relief area identification and any other provisions needed to support the animal. Depending on the severity of the imminent or actual event, it may be necessary to prepare for and operate additional animal shelters. If ARC shelters are open for human evacuees, a determination will be made regarding the feasibility of co-locating animals at shelters. In most cases, humans and animals (not including service animals) cannot be co-located at the same shelter site due to concerns with allergies, bites, etc. Service animals are permitted at human shelters at all times and in every circumstance. If colocation is an option, animal response teams will be dispatched to ARC shelter sites and arrangements will be made to obtain emergency supplies and any specialized equipment needed to care for the animals.

If co-location is not an option, or if the animal is not a service animal, existing animal shelter sites will be utilized as noted above, DAS will provide for the pick-up and transport of animals from human shelter sites to animal shelter sites. Animals at shelter sites will be provided for with shelter, food, water and other necessary provisions. DAS has a professional system they use to identify and re-unify animals with their owners.

### 3.4.3 Shelter-in-Place (County EOP Discussion)

As stated in the County EOP, sheltering-in-place advises people to stay secure at their current location. This tactic shall only be used if an evacuation will cause a higher potential for loss of life. Consideration should be given to assigning incident personnel to monitor the safety of citizens remaining in place. The concept of shelter-in-place is an available option in those instances where physical evacuation is impractical. This procedure may be effective for residential dwellings in the immediately impacted areas, or for large facilities that house a high percentage of non-ambulatory persons (e.g., hospitals and convalescent homes). Sheltering-in-place attempts to provide a safe haven within the impacted area.

The decision on whether to evacuate or shelter-in-place is carefully considered with the timing and nature of the incident (County of Riverside 2019). Sheltering-in-place is the preferred method of protection for people that are not directly impacted or in the direct path of a hazard. This will reduce congestion and transportation demand on the major transportation routes for those that have been directed to evacuate by police or fire personnel. The commercial and residential communities adjacent to the proposed Project includes warehouses and homes built in the 2000s and are in varying states of ignition resistance. Unlike most new master planned communities that



incorporate ignition-resistant construction and provide defensibility throughout (like Oak Valley North will), responding fire and law enforcement personnel may not be able to direct existing occupants of neighboring developments to temporarily refuge in their homes or on site; however, it would be possible for occupants of Oak Valley North Project. Developments that are not built to the ignition-resistant standards can be retrofitted to increase their ability to withstand wildfire and ember storms by focusing on roofs, windows, walls, vents, appendages and defensible space. Attention to these components of a home's fire protection system is recommended for existing home and business owners within the Project Area. The structures within the Project site would conform to the ignition-resistant building codes codified in Chapter 7A of the California Building Code, would be ignition-resistant, defensible and designed to require minimal firefighting resources for protection, which enables this contingency option when it is considered safer than evacuation.

INTENTIONALLY LEFT BLANK

---

## 4 Evacuation Road Network

As evidenced by historical mass evacuations in Riverside County and throughout Southern California, even with roadways that are designed to the code requirements, it may not be possible, or even the best response, to move large numbers of persons at the same time as part of a mass-evacuation. Instead, informed, phased evacuations enable more streamlined evacuations where those at highest risk are moved first. Road infrastructure throughout the United States, and including Riverside County, is not designed to accommodate a short-notice, mass evacuation without some level of congestion (FEMA 2008). The need for evacuation plans, pre-planning, and tiered or targeted and staggered evacuations becomes very important for improving evacuation effectiveness. Among the most important factors for successful evacuations in urban settings is control of intersections downstream of the evacuation area. If intersections are controlled by law enforcement, barricades, signal control, and other means, potential backups and slowed evacuations can be minimized. Multiple evacuation points enable more evacuees the ability to evacuate with less impact on roadways.

Wildfires that occur on non-extreme weather days behave in a much less aggressive manner and pose fewer dangers to life and property because they include less aggressive fire behavior and are easier to control. However, there can be onshore or offshore wind conditions that can lead to aggressive fire behavior. Terrain and fuel are typically the wildfire drivers. During these non-extreme weather days, vegetation is much more difficult to ignite and does not spread fire as rapidly. In these situations, firefighters have a very high success rate of controlling fires and keeping them under 10 acres. The historical fire record shows that most vegetation fires occur during normal, onshore weather conditions and that such fires account for only a proportionally small amount of the land area burned. Conversely, a small number of wildfires that occur during extreme fire weather account for most of the land area burned. These data highlight that the most dangerous fire conditions are those related to a fire that moves rapidly due to high winds and low humidity, whereas under normal conditions fires are likely to be controlled with no evacuation or possibly limited extent, focused evacuations.

While it is possible that a fire driven by onshore wind (i.e., from the southwest) could require evacuation of the Project, such an event would be highly unusual. Moreover, due to the reduced fire behavior during normal weather periods, the evacuation would not be expected to be a large-scale evacuation. Instead, most of the Project area population would be anticipated to remain at their locations and within their communities, with a more targeted evacuation being ordered, if needed.

If a wildfire ignited closer to the Project site during weather that facilitates rapid fire spread, a different evacuation approach would need to be considered. Because it is preferred to evacuate long before a wildfire is near, and in fact, history indicates that most human fatalities from wildfires are due to late evacuations when evacuees are overtaken on roads, it is prudent to consider a contingency option. For example, if a wildfire is anticipated to encroach upon the Project area in a timeframe that is shorter than would be required to evacuate all occupants, then options available to responding fire and law enforcement personnel should include 1) partial relocation where occupants are temporarily relocated to nearby shelter sites or areas, or 2) temporary shelter in place where occupants are instructed to remain in protected on-site structures or at a designated site, while firefighters perform their structure protection function.

As described further in the Project's Fire Protection Plan (Dudek 2023), the Project site is located within an area that is subject to wildfires and based on the adjacent land uses and open space in the vicinity, the wildfire potential is considered high. The fire intensity would be expected to be moderate within the post-Project's footprint due to

the design characteristics of the plant exhibits and high to very high within the open space areas that occur adjacent to the Project site. This on-site, reduced fire behavior along with specific protection features, would be expected to facilitate evacuations as well as potential on-site sheltering within designated safe shelter structures, if considered safer than a short-notice evacuation. Although not a designated shelter-in-place site, Project structures include the same level of ignition resistance (e.g., enhanced construction materials) and landscape maintenance (e.g., annual FMZ inspection), are defensible against the anticipated wildfire exposure, and are designed to require minimal resources for protection, which enables this contingency option.

The Project roads and adjacent road circulation system will be able to effectively handle average daily trips generated by the Project. However, as evidenced by mass evacuations in Riverside and elsewhere, even with roadways that are designed to the code requirements, it may not be possible, or even necessary to move large numbers of persons at the same time. Road infrastructure throughout the United States, and including in Calimesa, is not designed to accommodate a short-notice, mass evacuation (FEMA 2008). The need for evacuation plans, pre-planning, and tiered or targeted and staggered evacuations becomes very important for improving evacuation effectiveness.

Among the most important factors for successful evacuations in populated settings is control of intersections downstream of the evacuation area. If intersections are controlled by law enforcement, barricades, signal control, firefighters or other means, potential backups and slowed evacuations can be minimized. Another important aspect of successful evacuation is a managed and phased evacuation declaration. Evacuating in phases, based on vulnerability, location, or other factors, enables the subsequent traffic surges on major roadway to be smoothed over a longer time frame and can be planned to result in traffic levels that flow better than when mass evacuations include large evacuation areas at the same time. This WEP defers to Law Enforcement and EOC to appropriately phase evacuations and to consider the vulnerability of communities when making decisions. For example, newer development in the area, including the Project, will offer its occupants a high level of fire safety on site, along with options for firefighter safety zones and temporary on-site refuge as a contingency, as discussed further in this WEP.

### Fire Access Road Maintenance

Maintenance is an important component for the long-term reliability of all Project roadways. Maintenance obligations including routine road surface and roadside vegetation maintenance for on-site roadways outside of the public right of way at the Oak Valley North Project will be the responsibility of the Owner/Property Manager.

## 4.1 Evacuation Assumptions and Scenarios

This evacuation analysis was performed for the Project to determine how long it would take for employees, and guests/visitors of the Project and the surrounding communities to evacuate to nearby urban areas/freeway access in case of a fire emergency. Current evacuation practice typically targets the scope of the evacuation only to the area in immediate danger and placing a larger area on standby for evacuation. This practice allows for better evacuation operations, reduces gridlock, and reserves sufficient travel way for emergency vehicles. It is assumed that first responders or law enforcement will direct traffic at all major downstream intersections during the evacuation process.

During the evacuation process, which can proceed aided by the roadside fuel modification zones and unexposed corridors, wildfire spread and encroachment may be slowed by fire-fighting efforts that would likely include fixed wing and helicopter fire-fighting assets. Hand crews would also be deployed toward containment. None of the evacuation scenarios assumed contraflow lanes, as these lanes are reserved for first responders, law enforcement, and fire fighters in case of unforeseen circumstances.

Since the Project is located amidst residential zones on most sides, this examination assumes an evacuation directive during an AM peak hour when the majority of employees have arrived on site, background AM commute traffic is present, and a moderate number of occupants are at home. The number of evacuating vehicles from the Project's site was calculated based on the average parking generation rate from the Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition, and assumes that these are the trips to be evacuated.

### **AM Peak Hour Evacuation: Full Operation, Commute Traffic, Moderate Amount of Occupants Are Home**

Intersecting Metric presumes that the evacuation would transpire during an AM peak hour, a time when the Project is operational and occupants in nearby communities are home, meaning all residential vehicles would be required to evacuate. It was assumed that employees would be evacuating the Project site using their personal vehicles or the vehicle they traveled to the site in if their personal vehicle was not on site. Therefore, passenger car equivalent rates were applied to the ITE rates to account for a mixed flow of vehicles. For the sake of the analysis, 100% of the employees were anticipated to evacuate. Therefore, the number of vehicles incorporated in the ensuing analysis is conservative. In an actual evacuation scenario, the total number of vehicles needing to evacuate may actually be less. Additional assumptions during wildfire are as follows:

1. The Operation Area commander would prioritize land uses located adjacent to the Wildland Urban interface area or area with immediate risk, depending on the location of the fire.
2. Based upon review of 20 years of fire history in the area, it was found that only one fire burned into the Project site, and that was long before the area was developed. However, for a conservative analysis, it is assumed that all of the areas shown in Figure 3 would evacuate at the same time.
3. The analysis also operates under the assumption that the traffic to be evacuated would utilize local thoroughfares like Calimesa Boulevard, Singleton Road, Cherry Valley Boulevard, and Interstate 10 to evacuate. It is deemed to have reached a safe location once they arrive north of Sandalwood Drive or south of the Cherry Valley Boulevard/I-10 interchange.

### **Primary Evacuation Routes**

Intersecting Metrics assumed that traffic evacuating from both the Project and nearby communities/land uses would use the closest evacuation routes to leave the area. Evacuation routes were selected based upon review of the Project's site, available evacuation routes, and the quickest way to leave areas located adjacent to the Wildland Urban Interface. This assumption selects a reasonable evacuation route for the assumed extreme weather scenario. Detailed evacuation analysis information is provided in the attachments of Appendix C, Evacuation Modeling Results.

No contraflow lanes were assumed to provide access for first responders and law enforcement. Two-way travel was assumed, with evacuating vehicles traveling outbound to the Safe Zone. It is assumed that first responders or law enforcement will direct traffic at all major intersections during the evacuation process. Should evacuation managers determine that contraflow is preferred or necessary, evacuation capacity would increase while evacuation times would decrease.

## Safe Zone

Based on Dudek’s review of the area’s fire history, fires have halted along areas adjacent to wildland fuels and have not historically progressed into the more densely urbanized, irrigated, and hardscaped areas. Specifically, none of the historical fires encroached beyond the periphery areas within the wildland urban interface area of the City of Calimesa. Thus, it is assumed that evacuees are considered to reach a safe area once they are within the more densely urban areas such as the area north of Sandalwood Drive or south of the Cherry Valley Boulevard/I10 interchange.

## Evacuation Scenarios

A total of six evacuation scenarios were analyzed:

- **Scenario 1 – Existing Land Uses with Fire from East:** This scenario estimates the evacuation time of the existing residential areas adjacent to the Proposed Project. Under this scenario, it is assumed that the wind driven fire is approaching from the east and evacuees are traveling north or southbound to Yucaipa or Beaumont.
- **Scenario 2 – Existing Land Uses with Fire from West:** This scenario estimates the evacuation time of the existing residential areas adjacent to the Proposed Project. Under this scenario, it is assumed that the wind driven fire is approaching from the west and evacuees are traveling north or southbound to Yucaipa or Beaumont.
- **Scenario 3 – Existing Land Uses with Project with Fire from East:** This scenario is similar to Scenario 1, with the addition of the proposed Project traffic.
- **Scenario 4 – Existing Land Uses with Project with Fire from West:** This scenario is similar to Scenario 2, with the addition of the proposed Project traffic.
- **Scenario 5 – Existing Land Uses with Project and Future Roadway Improvements with Fire from East:** This scenario is similar to Scenario 3, with the addition of future roadway improvements.
- **Scenario 6 – Existing Land Uses with Project and Future Roadway Improvements with Fire from West:** This scenario is similar to Scenario 4, with the addition of future roadway improvements.

## Evacuating Vehicles

The number of evacuating vehicles was calculated using the following assumptions:

- **Residential land uses:** Residential units x average vehicle ownership (2.17 vehicles per household)
- **Church:** Assumed employees (10 vehicles total)
- **Project:** Calculated based on ITE parking generation rate (See Attachment B of Appendix C)

Of the two-possible scenarios, meaning either the multifamily residential option or the church option, the multifamily option is expected to present the worst-case scenario for evacuation traffic and was therefore utilized for the evacuation analysis.

Average vehicle ownership, residential units, and evacuating vehicles calculations are provided in Attachment B of Appendix C. Table 2 displays the number of vehicles evacuating under each scenario.

**Table 2. Evacuating Vehicles**

Scenario	Evacuating Vehicles		
	Adjacent Neighborhoods	Proposed Project	Total
Fire Driven from East	2,861	1,133	3,994
Fire Driven from West	3,344		4,477

## 4.2 Potential for Project Evacuation Impact on Existing Conditions

The potential occurrence of a simultaneous, large evacuation event including evacuation of a large area of existing populations is minimal, but possible. In this case, the existing populations for potential evacuation in the area would be associated with a variety of populations including residential, recreational and other uses. To analyze the evacuation events, Intersecting Metrics conducted simulations using Synchro/SimTraffic (Version 11) by Trafficware Ltd., a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions. In simulations, roadway capacity is accounted for and each vehicle in the traffic system is individually tracked through the model and comprehensive measures of effectiveness, such as average vehicle speed and queueing, are collected on every vehicle. This software includes 10 types of drivers’ behaviors during an evacuation to be replicated. A total of 10 simulations were conducted to yield a reasonable sample size to determine the performance of the study area roadways and impacts during evacuation scenarios. To be conservative, Intersecting Metrics assumed a worst-case scenario in which all vehicles belonging to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population. Detailed evacuation analysis information is provided in Attachment C of Appendix C.

Based upon review of previous fires and evacuation orders, evacuation modeling considered traffic evacuating from both the Project and nearby developments. A summary of the evacuation time for each scenario is provided below, and shown in Tables 3a and 3b.

- **Scenario 1:** It would take approximately 1 hour and 33 minutes to evacuate the existing land uses when a fire is approaching from the east.
- **Scenario 2:** It would take approximately 1 hour and 22 minutes to evacuate the existing land uses when a fire is approaching from the west.
- **Scenario 3:** It would take approximately 2 hours and 13 minutes to evacuate the existing land uses with the Project when a fire is approaching from the east. The Project contributes to a 40-minute increase in evacuation time.
- **Scenario 4:** It would take approximately 1 hour and 37 minutes to evacuate the existing land uses with the Project when a fire is approaching from the west. The Project contributes to a 15-minute increase in evacuation time.

- **Scenario 5:** It would take approximately 2 hours and 01 minutes to evacuate the existing land uses with the Project once future roadway improvements are implemented when a fire is approaching from the east. The future roadway improvements reduce the Project’s impact from a 40-minute increase in evacuation time to a 27-minute increase over existing conditions.
- **Scenario 6:** It would take approximately 1 hour and 35 minutes to evacuate the existing land uses with the Project once future roadway improvements are implemented when a fire is approaching from the west. The future roadway improvements reduce the Project’s impact from a 15-minute increase in evacuation time to a 13-minute increase over existing conditions.

**Table 3a. Evacuation Time Summary**

Scenario	Total Evacuation Traffic		Evacuation Travel Time (Min)		
	Existing Land Uses	Existing Land Uses w/ Project	Existing Land Uses	Existing Land Uses w/ Project	Delta
Fire Driven from East	2,861	3,994	1 hour 33 minutes	2 hours 13 minutes	39.33
Fire Driven from West	3,344	4,477	1 hour 22 minutes	1 hour 37 minutes	14.72

**Table 3b. Evacuation Time Summary with Roadway Improvements**

Scenario	Total Evacuation Traffic		Evacuation Travel Time (Min)		
	Existing Land Uses	Existing Land Uses w/ Project	Existing Land Uses	Existing Land Uses w/ Project and improvements	Delta
Fire Driven from East	2,861	3,994	1 hour 33 minutes	2 hours 01 minutes	27.47
Fire Driven from West	3,344	4,477	1 hour 22 minutes	1 hour 35 minutes	13.02

It is important to note that there are currently no threshold of significance for evacuation travel time that have been developed by the City of Calimesa or under CEQA generally. Public safety, not time, is generally the guiding consideration for evaluating impacts related to emergency evacuation. This Wildfire Evacuation Plan empowers emergency managers with necessary information to implement evacuation measures described herein such as:

- Phased Evacuations
- Traffic Control
- Finding Refuge in Fire-Resistant Buildings



The Project also creates improvements in the evacuation area by:

- Converting fuels to hardscapes and fuel modification zones
- Reducing fuels along roadways
- Improving Infrastructure

The 10 evacuation simulations that were conducted assume that all project area occupants attempt to evacuate at the same time. In a real emergency, evacuations are expected to be phased by Emergency Managers allowing more efficient use of roadways than can be modeled. Technological advancements and improved evacuation strategies learned from prior wildfire evacuation events have resulted in a system that is many times more capable of managing evacuations. With the technology in use today in the City and County, evacuations are more strategic and surgical than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation. Mass evacuation scenarios where large populations are all directed to leave simultaneously, resulting in traffic delays, are thereby avoided, and those populations most at risk safely evacuate.

The evacuation simulations do not account for Law Enforcement controlling intersections and directing traffic as is described in Emergency Support Function 13 of the Riverside County EOP (County of Riverside, 2019). Traffic control would result in prioritization of the most at risk residents and increase efficiency of the evacuation, thereby reducing evacuation time. Safely undertaking large-scale evacuations may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, occupants' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

The Project would provide emergency managers the alternative option of recommending occupants temporarily seeking refuge on site in fire-resistant buildings or within the wide, converted landscapes and hardscapes that would not readily facilitate wildfire spread. For example, in addition to the roadway improvements that will lessen the Project impact, the Project eliminates current fuels by converting them into warehouse, paved areas, and fire conscious landscaping. The Project itself is protected from an eastern fire by a trailer parking area that provides a fuel break measuring a few hundred feet, setting the Project back well beyond expected flame lengths. This allows the Project population the potential to shelter in place.

It is also important to note the positive impact the project would have in improving areas that are presently open space with combustible fuels by converting them to hardscapes and fuel modification zones. Based on the evacuation simulations above, evacuation traffic generated by the Project would increase the evacuation travel time by up to 40 minutes for Scenario 3, which assumes a wind driven fire from the east with existing land uses and the Project. It is important to note that the scenario does not take into account intersection and roadway improvements along the Project's frontages and driveways as indicated in the Oak Valley North Specific Plan Traffic Analysis by Urban Crossroads (2023).

The Project also has a substantial impact on protecting roadways that are presently surrounded by open space, providing existing occupants with safer evacuation routes that will no longer be susceptible to being burned over. This would provide emergency managers with a safer alternative to risking a late evacuation. By contrast, the examples of Southern California evacuations that have included loss of life have been the result of occupants who did not evacuate when directed, and then attempted a late evacuation with travel through long distances of exposed travel ways as

wildfire were overtaking the area. These examples occurred in fire environments that were more aggressive and included less maintenance than would occur at the Project area. Further, with proper and effective evacuation managers and traffic control personnel, evacuation flow is anticipated to be able to be effectively managed.

This information presented in this report will be provided to emergency managers for use in pre-planning scenarios to better inform in the field decisions made pursuant to adopted Emergency Operations Plans, meaning that the fact that the evacuation times were modeled and closed will assist emergency personnel to ensure that impacts will not be significant by adequately protecting public safety. Emergency personnel who issue an evacuation order may take into account these time estimates in determining when and where to issue evacuation orders. In a real evacuation scenario, emergency managers may use alternative actions/options to further expedite evacuation. Such actions may include providing additional lead time in issuing evacuation orders, providing alternative signal control at downstream intersections, utilizing additional off-site routes or directing traffic to roadways with additional capacity, implementing contra-flow lanes, issuing “shelter-in-place”<sup>1</sup> orders when determined to be safer than evacuation, or considering the possibility of a delayed evacuation where parts of the population could be directed to remain on site until the fire burns out in the sparse fuels around the evacuation route. These options require “in the field” determinations of when evacuations are needed and how they are phased to maximize efficiency. Overall, safe evacuation of the Project and surrounding community is possible in all modeled scenarios.

The Project provides several features that would enhance orderly and safe evacuation, but that are not reflected in the average evacuation time results above. These features include evacuation preparedness, fuel modification along Project roadways, structural hardening of Project structures, improved roadway capacities, temporary refuge areas and “shelter-in-place” options. These evacuation enhancements would reduce the potential for evacuation friction or interruption; however, such enhancements cannot be well depicted by the traffic evacuation model.

## 4.2.1 Mass Evacuation Vehicle Traffic

Mass evacuation events have become less common as wildfire evacuation technology and capabilities have improved dramatically in the last 15 years. Wildfire evacuations are managed to move smaller populations in a successive phasing to minimize traffic surges. Populated areas are evacuated in phases based on proximity to the event and risk levels. For example, it is anticipated that wildfire evacuations of the Project area will likely include the relocation of residential populations that are closest to open space, along with employees and visitors of the Project first, and then additional populations based on exposure to the wildfire in successive fashion rather than mass evacuating the entire Calimesa area. The Project is built to ignition resistant standards and represent fire-safe fuel breaks that provide emergency managers many options. The result of this type of evacuation is that employees and visitors that may be in locations that would be closest to a wildfire burning in open space areas are temporarily moved from the vicinity and vehicle congestion on evacuation routes is minimized, enabling a more efficient evacuation. Under this evacuation approach, the evacuation would include a much smaller population and would be implemented in a surgical way. The evacuation time would be even lower and would have very little impact on the existing communities.

**Phased Evacuation** The purpose of a phased evacuation is to reduce congestion and transportation demand on designated evacuation routes by controlling access to evacuation routes in stages and sections. This strategy can also be used to prioritize the evacuation of specific populations that are in proximity to the immediate danger. A

---

<sup>1</sup> Shelter-in-place involves the use of a structure, including homes, to temporarily separate individuals from a hazard or threat, and is implemented when a hazard or threat is imminent or occurring and a safe evacuation is not feasible.

phased evacuation effort will need to be enforced by law enforcement agencies and coordinated with the EOC and affected jurisdictions.

The Department of Homeland Security (2019) provides supporting data for why jurisdictions have moved to the surgical evacuation approach that leverages the power of situation awareness to support decision making. According to their Planning Considerations: Evacuation and Shelter in Place document, they indicate that delineated zones provide benefits to the agencies and community members. Evacuation and shelter-in-place zones promote phased, zone-based evacuation targeted to the most vulnerable areas, which allows jurisdictions to prioritize evacuation orders to the most vulnerable zones first and limit the need to evacuate large areas not under the threat. Zones help:

- Jurisdictions to understand transportation network throughput and capacity, critical transportation and resource needs, estimated evacuation clearance times, and shelter demand
- Planners to develop planning factors and assumptions to inform goals and objectives
- Community members to understand protective actions to take during an emergency
- Shelters to limit traffic congestion and select locations suitable for the evacuated population

The amount of time needed to evacuate the Project would vary by the type of incident, the number of evacuation routes utilized, the amount of mobilization time, actual areas at risk, and other factors. It has also been established herein that the targeted approach would minimize the size of the area being evacuated and use a phased approach, which may further reduce the evacuation time estimates.

There is no evacuation timeframe threshold that Projects must meet in order to avoid a CEQA impact or to be consistent with codes, regulations or policies. Regardless, the Project has provided a comprehensive evacuation evaluation, and the evacuation time results are comparable to similar sized populations under a mass evacuation.

Further, any additional time does not necessarily generate a greater safety risk. Emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Further, peak occupancy conditions like those assumed in the modeling typically do not occur as all occupants are not typically at home while maximum occupancy at industrial, commercial and office uses is also occurring. Further, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event. Additionally, the Project is designed to allow people to shelter-in-place or take temporary refuge within the Project site, which could reduce evacuating traffic from the site.

The potential occurrence of a large evacuation event including evacuation of existing populations is minimal, but possible. In this case, the existing populations for the Project would be existing residential and mixed uses to the north, east, and west. During a large wildfire moving from north to south or east to west, it is most likely, that evacuations would be directed to the I-10 freeway, depending on the fire location and movement. The vehicle capacity estimates utilized for this evacuation plan are based the current Highway Capacity Manual methodology for calculating adjusted saturation flow rates and are discounted for various assumed traffic-related slowing, such as higher volume and downstream bottlenecks; therefore, the discounted vehicle capacity includes capability to absorb additional vehicles.

In an actual evacuation scenario, a phased evacuation would be implemented where orders are given to evacuate based on vulnerability, location, and/or other factors, which enables the subsequent traffic surges on major roadways to be smoothed over a longer time frame and improve traffic flow. A phased strategy can also be used to prioritize the evacuation of certain communities that are in proximity to the immediate danger. The limitations of the model used for this analysis are such that it cannot accurately reflect phased evacuation conditions; hence, a worst-case mass evacuation scenario was assumed.

This WEP assumes that law enforcement personnel are controlling downstream intersections to maintain traffic flow out of the area. If traffic flow is not maintained, then the estimated evacuation times would be expected to increase, potentially substantially, as is the case in any urban area. Additionally, this analysis assumes that all existing populations within the Project area and the Project are evacuating simultaneously.

## 4.3 Evacuation Route Determination

Typically, fire and law enforcement officials will identify evacuation points before evacuation routes are announced to the public. Evacuation routes are determined based on the location and extent of the incident and its spread rate and direction and include as many pre-designated transportation routes as possible. However, field conditions and shifting fire behavior may result in real-time changes to predetermined routes. Having additional evacuation route options is considered critical in these conditions. Evacuees are considered to reach a safe area once they are within the more densely urban areas such as the area north or south of the Project.

---

## 5 Wildfire/Evacuation Awareness

The Oak Valley North Project should be active in its outreach to its business owners and employees regarding fire safety and general evacuation procedures. There are aspects of fire safety and evacuation that require a significant level of awareness by business owners and employees in order to reduce and/or avoid problems with an effective evacuation. Mitigating potential impediments to successful evacuations requires focused and repeated information through a strong educational outreach program. The Oak Valley North Project should engage occupants and coordinate with local fire agencies for fire safety awareness through a variety of methods.

This Wildfire Evacuation Plan will be accessible on the Project's website. It is strongly recommended that an annual reminder notice be provided to each employee encouraging them to review this WEP and be familiar with community evacuation protocols. Additionally, it is also recommended that the Developer or Property Management Company coordinate with local fire agencies to hold an annual fire safety and evacuation preparedness informational meeting for employees. The meeting should be attended by representatives of appropriate fire agencies and important fire and evacuation information should be reviewed.

The focus of the "Ready, Set, Go!" program is on public awareness and preparedness, especially for those living and/or working in wildland-urban interface (WUI) areas. The program is designed to incorporate the local fire protection agency as part of the training and education process in order to ensure that evacuation preparedness information is disseminated to those subject to the potential impact from a wildfire. There are three components to the program:

- **"READY" – Preparing for the Fire Threat:** Take personal responsibility and prepare long before the threat of a wildfire so you and your home are ready when a wildfire occurs. Employees should assemble an emergency kit for their car. Confirm you are registered for Reverse 911, and Alert RivCo. Make sure all employees understand the plan, procedures and escape routes.
- **"SET" – Situational Awareness When a Fire Starts:** If a wildfire occurs and there is potential for it to threaten the Project site and surrounding communities, be ready to evacuate. Stay aware of the latest news from local media and your local fire department for updated information on the fire. If you are uncomfortable, leave the area.
- **"GO!" – Leave Early!** Leaving early, well before a wildfire is threatening the Project area, provides you with the least delay and results in a situation where, if a majority of neighboring developments also leave early, firefighters are now able to better maneuver, protect and defend structures, evacuate other occupants who couldn't leave early, and focus on citizen safety.

"Ready, Set, Go!" is predicated on the fact that being unprepared and attempting to flee an impending fire late (such as when the fire is physically close to your community) is dangerous and exacerbates an already confusing situation. This Wildfire Evacuation Plan provides key information that can be integrated into the individual evacuation plans, including the best available routes to use in the event of an emergency evacuation.

Situational awareness requires a reliable information source. The City of Calimesa utilizes Alert RivCo for its Community Emergency Notification System, and all employees should be encouraged to register for emergency alerts. Alert RivCo has the capability to send emergency notifications over both land lines as well as to cell phones and via text messages. It is up to individual employees to register their cell phones for Alert RivCo. The registration of cell phones can be done online at <https://rivcoready.org/alert-rivco>. Additionally, the Riverside EMD operates

the Reverse 911 notification system that provides a recorded message over land line telephone systems relating to evacuation notices. In addition, the Riverside County Emergency Alert System (EAS) is county-wide and broadcasts emergency information via six radio stations: KFI 640 AM, KFWB 980 AM, KNX 1070 AM, KFRG 95.1 FM, KVCR 91.9 and KXFG 92.9 FM.

As part of the Project, the Owner(s)/Property Manager will be responsible for providing access to this Wildfire Evacuation Plan, including materials from the “Ready, Set, Go!” Program. As part of the approval of the Oak Valley North Project, it shall be binding on Owner(s)/Property Manager to actively participate as a partner with the CFD to assist with the coordination and distribution of fire safety information they develop to employees.

---

# 6 Evacuation Procedures

## 6.1 Relocation/Evacuation

It is estimated that the conservatively calculated minimum amount of time needed to move the exiting and Project populations to urbanized and/or designated evacuation areas may require approximately up to 2 hours and 13 minutes under varying constraints that may occur during an evacuation. This does not include additional allowances for the time needed to detect and report a fire, for fire response and on-site intelligence, for phone, patrols, and aerial based notifications, and for notifying special needs citizens.

Wolshon and Marchive (2007) simulated traffic flow conditions in a computer derived WUI under a range of evacuation notice lead times and housing densities. To safely evacuate more people, they recommended that emergency managers (1) provide more lead time to evacuees and (2) control traffic levels during evacuations so that fewer vehicles are trying to exit at the same time.

Wildfire emergency response procedures will vary depending on the type of wildfire and the available time in which decision makers (IC, BPD, CFD, CAL FIRE, RCSD, and/or EMD) can assess the situation and determine the best course of action. Based on the Oak Valley North Project and surrounding communities, its road network, and the related fire environment, the first and primary type of evacuation envisioned is an orderly, pre-planned evacuation process where people are evacuated to more urban areas further from an encroaching wildfire (likely to urban areas west) well before fire threatens. This type of evacuation must include a conservative approach to evacuating (i.e., when ignitions occur and weather is such that fires may spread rapidly, evacuations should be triggered on a conservative threshold that includes time allowances for unforeseen, but possible, events that would slow the evacuation process).

The second type of evacuation is considered by many to offer the highest level of life protection to the public, but it can result in evacuees being placed in harm's way if the time available for evacuation is insufficient (Cova et al. 2011). An example of this type of evacuation, which is highly undesirable from a public safety perspective, is an evacuation that occurs when fire ignites close to vulnerable communities. This type of situation is inherently dangerous because there is generally a higher threat to persons who are in a vehicle on a road when fire is burning in the immediate area than in a well-defended, ignition-resistant home. Conditions may become so poor that the vehicle drives off the road or crashes into another vehicle, and flames and heat overcome the occupants. A vehicle offers little shelter from a wildfire if the vehicle is situated near burning vegetation or catches fire itself. This type of evacuation must be considered a very undesirable situation by law and fire officials in all but the rarest situations where late evacuation may be safer than seeking temporary refuge in a structure (such as when there are no nearby structures, the structure[s] is/are already on fire, or when there is no other form of refuge). Temporary refuge would be possible within the Oak Valley North Project structures, but structures within surrounding communities, as previously discussed, are less desirable due to their higher vulnerability to ignition.

The third potential type of evacuation is a hybrid of the first two. In cases where evacuation is in process and changing conditions result in a situation that is considered unsafe to continue evacuation, it may be advisable to direct evacuees to pre-planned temporary refuge locations, including their own home if it is ignition-resistant and defensible, such as those within Oak Valley North Project. As with the second type of evacuation discussed above, this situation is considered highly undesirable, but the evacuation pre-planning must consider these potential scenarios and prepare decision makers at the IC level and at the field level for enacting a contingency to evacuation when conditions dictate.

Indications from past fires and related evacuations, in Riverside County and throughout Southern California, which have experienced increasingly more frequent and larger fires, are that evacuations are largely successful, even with a generally unprepared populace. It then stands to reason that an informed and prepared populace would minimize the potential evacuation issues and related risk to levels considered acceptable from a community perspective.

Evacuation orders or notifications are often triggered based on established and pre-determined model buffers, which are based on topography, fuel, moisture content of the fuels and wind direction. Evacuations are initiated when a wildfire reaches or crosses one of these pre-determined buffers. Evacuations can also be very fluid. The IC, law enforcement and EMD would jointly enact evacuations based on fire behavior.

## 6.2 Project Evacuation Baseline

For purposes of this Wildfire Evacuation Plan, the first and most logical choice for all of the occupants within the boundaries of Oak Valley North Project is to adhere to the principles and practices of the “Ready, Set, Go!” Program previously mentioned in this document. As part of this program, it is important that educational and training programs, organized by Owner(s)/Property Manager, are available to all employees. In addition, it is imperative that the “Ready, Set, Go!” program information be reviewed on a routine basis along with the accompanying maps illustrating evacuation routes, temporary evacuation points and pre-identified evacuation points. It must be kept in mind that conditions may arise that will dictate a different evacuation route than the normal roads used on a daily basis.

Occupants are urged to evacuate as soon as they are notified to do so or earlier if they feel uncomfortable. Directions on evacuation routes will be provided in most cases, but when not provided, employees of the Project will proceed according to known available routes away from the encroaching fire as detailed in the Quick Reference section of this WEP. Occupants are cautioned not to rely on navigation aid apps, which may inadvertently lead them toward an oncoming fire. Depending on the type of emergency and the resulting evacuation, it could take approximately up to 2 hours and 13 minutes to complete an evacuation of the Project Area, based on road capacities and competing use of the roads by occupants from other areas.

**Note:** This Wildfire Evacuation Plan will require adjustment and continued coordination by the Owner(s) and/or Developer and/or Property Manager and fire/law enforcement agencies during each of the construction phases. With each phase, the evacuation routes may be subject to changes with the addition of both primary and secondary evacuation routes.

## 6.3 Civilian and Firefighter Evacuation Contingency

As of this document’s preparation, no community in California has been directed to shelter-in- place during a wildland fire. This is not to say that people have not successfully sheltered-in-place during wildfire, where there are numerous examples of people sheltering in their homes, in hardened structures, in community buildings, in swimming pools, and in cleared or ignition-resistant landscape open air areas. The preference will always be early evacuation following the “Ready, Set, Go!” model, but there exists the potential for unforeseen civilian evacuation issues, and having a contingency plan will provide direction in these situations that may result in saved lives.



Potential problems during wildfire evacuation from the Project area include:

- Inadequate time to safely evacuate
- Fire evacuations during rush hour traffic or when large events are occurring
- Blocked traffic due to accidents or fallen tree(s) or power pole(s)
- The need to move individuals who are unable to evacuate

It is recommended that local law enforcement and fire agencies conduct concerted pre-planning efforts focusing on evacuation contingency planning for civilian populations when it is considered safer to temporarily seek a safer refuge than evacuation. Oak Valley North' structures would allow for the possibility of temporary sheltering while structures in surrounding communities would not typically be considered ignition-resistant and therefore, not appropriate for temporary refuge.

### 6.3.1 Safety

The International Fire Service Training Association (IFTSA) defines "safety zones" as areas mostly devoid of fuel, which are large enough to assure that flames and/or dangerous levels of radiant heat will not reach the personnel occupying them (IFTSA 1997). Areas of bare ground, burned over areas, paved areas, and bodies of water can all be used as safety zones. The size of the area needed for a safety zone is determined by fuel types, its location on slopes and its relation to topographic features (chutes and saddles) as well as observed fire behavior. Safety zones should never be located in topographic saddles, chutes, or gullies. High winds, steep slopes, or heavy fuel loads may increase the area needed for a safety zone.

The National Wildland Fire Coordinating Groups (NWFCG), Glossary of Wildland Fire Terminology provides the following definitions for safety zones:

**Safety Zone.** An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuel breaks; they are greatly enlarged areas, which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity.

According to NWFCG, safety zone(s):

- Must be survivable without a fire shelter
- Can include moving back into a clean burn
- May take advantage of natural features (rock areas, water, meadows)
- Can include constructed sites (clear-cuts, roads, helispots)
- Are scouted for size and hazards
- Consider the topographic location (larger if upslope)
- Should be larger if downwind
- Should not include heavy fuels
- May need to be adjusted based on site-specific fire behavior

The definition for a safety zone includes provisions for separation distance between the firefighter and the flames of at least four times the maximum continuous flame height. Distance separation is the radius from the center of the safety zone to the nearest fuels.

The urbanized areas nearby the Project site offer the best possibility for a safety zone for firefighter use. The Oak Valley North Project will also include the ability for firefighters to seek safety zones within the ignition-resistant landscapes, but identification of other potential safety zones will require additional focused study by CFD and other fire and law enforcement agencies.

### 6.3.2 Temporary Firefighter Refuge Areas

Firescope California (Firefighting Resources of Southern California Organized for Potential Emergencies) was formed by legislative action to form a partnership between all facets of local, rural, and metropolitan fire departments, CAL FIRE and federal fire agencies. Firescope defines a contingency plan when it is not possible to retreat to a safety zone. This contingency includes establishment of firefighter temporary refuge areas (TRAs), which are defined as:

A preplanned area where firefighters can immediately take refuge for temporary shelter and short-term relief without using a fire shelter in the event that emergency egress to an established safety zone is compromised.

Examples of a TRA may include the lee side of a structure, inside of a structure, large lawn or parking areas, or cab of a fire engine, amongst others. Differences between a TRA and a Safety Zone is that TRAs are closer to the immediate firefighting area, are considered a contingency to being able to get to a safety zone, do not include a requirement for a large area set back four times the flame lengths of adjacent fuels, and cannot be feasibly pre-planned until firefighters arrive on-scene and size up the situation.

Firescope appropriately notes that although safety zones and viable escape routes shall always be identified in the WUI environment, they may not be immediately available should the fire behavior increase unexpectedly. Often a TRA is more accessible in the WUI environment. A TRA will provide temporary shelter and short-term relief from an approaching fire without the use of a fire shelter and allow the responders to develop an alternate plan to safely survive the increase in fire behavior.

The major difference between a TRA and a safety zone is that a TRA requires another planned tactical action (i.e., TRAs cannot be considered the final action, but must include self-defense and a move out of the area when the fire threat subsides). A TRA should be available and identified on site at a defended structure. TRAs are NOT a substitute for a safety zone. TRA pre-planning is difficult, at best because they are very site- and fire behavior-specific. For the existing uses, TRAs would likely include navigating into any of the within the more densely developed areas where firefighters would be separated from the unmaintained wildland fuels by wide areas including site-wide maintained landscapes, ignition-resistant structures, and wide roads that offer numerous opportunities for TRA.

The entire Project site would be developed and paved surfaces, such as the parking areas, are considered potential TRAs. This is an important concept because it offers last-resort, temporary refuge of firefighters, and in a worst-case condition, occupants. This approach would be consistent with Firescope California (2013), which indicates that firefighters must determine if a safe evacuation is appropriate and if not, to identify safe refuge for those who cannot be evacuated, including civilians.

Each of the Project site's structures that can be considered for TRA include the following features:

- Ignition-resistant construction
- Annual landscape inspections by 3rd party inspectors
- Wide roadways with fire hydrants
- Maintained landscapes and roadside fuel modification
- Ember-resistant vents
- Interior fire sprinklers

Because there is the possibility that evacuation of the Project and surrounding communities may be less safe than temporarily refuging on site, such as during a fast-moving, wind-driven fire that ignites nearby, including temporary refuge within some properly designed, constructed and maintained structures on site is considered a contingency plan for the Oak Valley North Project. This concept is considered a component of the "Ready, Set, Go!" model as it provides a broader level of "readiness" should the ability to execute an early evacuation be negated by fire, road congestion, or other unforeseen issues.

**Note:** This approach would be considered a last-resort contingency during wildfire with the primary focus being on early evacuation. The decision for evacuation or temporarily refuging on site will be made by responding law enforcement and/or fire personnel.

## 6.4 Social Aspects of Wildfire Evacuation

Orderly movement of people is the result of planning, training, education, and awareness, all of which are promoted in Riverside County. Evacuation has been the standard term used for emergency movement of people and implies imminent or threatening danger. The term in this Wildfire Evacuation Plan, and under the "Ready, Set, Go!" concept, indicates that there is a perceived threat to persons and movement out of the area is necessary, but will occur according to a pre-planned and practiced protocol, reducing the potential for panic.

Citizen reactions may vary during an evacuation event, although several studies indicate that orderly movement during wildfire and other emergencies is not typically unmanageable. Evacuation can be made even less problematic through diligent public education and emergency personnel training and familiarity. Social science research literature indicates that reactions to warnings follow certain behavior patterns that are defined by people's perceptions (Aguirre 1994; Drabek 1991; Fitzpatrick and Mileti 1994; Gordon 2006; Collins 2004) and are not unpredictable. In summary, warnings received from credible sources by people who are aware (or have been made aware) of the potential risk, have the effect of an orderly decision process that typically results in successful evacuation. This success is heightened when evacuations are not foreign to occupants (Quarantelli and Dynes 1977; Lindell and Perry 2004) as will occur within the Project area. Further, in all but the rarest circumstances, evacuees will be receiving information from credible sources during an evacuation. It would be anticipated that law enforcement and/or fire personnel would be on site to help direct traffic and would be viewed by evacuees as knowledgeable and credible. The importance of training these personnel cannot be overstated and annual education and training regarding fire safety and evacuation events will be essential for successful future evacuations.

## 6.4.1 Evacuation of Special Populations

Vogt (1990, 1991) defines special populations as those groups of people who, because of their special situations or needs, require different planning strategies from those of the general population. Special needs populations in Oak Valley North Project include the hearing or visually impaired, foreign speaking, elderly, infirmed, and temporary visitors such as customers or day workers.

## 6.4.2 Re-Entry Procedures

An important component of evacuations is the citizen re-entry process. The Evacuation & Reentry Unit under Law Enforcement Branch is responsible for the coordination of re-entry of evacuated populations as detailed in the City's EOP. If the evacuation required coordination with the County, the County's EOP Re-Entry Protocol establishes guidance and procedures to ensure a coordinated, safe, and orderly re-entry into impacted communities following an incident.

In the event the City's EOC is activated, the EOC Law Enforcement Branch will activate the Evacuation & Re-Entry Unit to coordinate the evacuation and re-entry functions. The EOC Law Enforcement Branch will serve as the primary agency re-entry activities with support from other agencies including RCSD, Riverside EMD, Cal OES Law Enforcement Mutual Aid Region VI, ARC, VOAD, CHP, and more. In most cases, the EOC will remain activated until full re-entry is complete. In the event that the EOC has been deactivated, the IC or the Liaison Officer of the Incident Management Team will initiate re-entry procedures.

The IC will designate a Re-Entry Coordinator and the Operations Section Chief of the EOC will coordinate with and support the Re-Entry Coordinator. The Re-Entry Coordinator is responsible for coordinating the re-entry procedures with all involved agencies and ensuring effective communication.

These re-entry procedures are similar to those established in the County's EOP and would apply if the County was managing re-entry in coordination with the City.

The impacted areas must be thoroughly investigated to ensure it is safe for occupants to return and normal operations have been restored.

The public will be notified of the re-entry status through emergency broadcast radio, television, press releases, internet, 211, Alert RivCo, community briefings, and informational updates at shelters. Once evacuees are permitted to return, it is important that procedures are established to properly identify occupants and critical support personnel, as well as ensure the legitimacy of contractors, insurance adjustors, and other personnel. Re-entry points should be staffed by law enforcement personnel.

---

## 7 Implementing Conditions

1. Oak Valley North will designate a Fire Safety Coordinator(s) to oversee implementation of this WEP and overall fire coordination with CFD and RCSD.
2. The Fire Safety Coordinator(s) will coordinate an annual fire evacuation drill/fire exercise to ensure proper safety measures have been implemented, facility awareness and preparation of a facility-wide **“Ready, Set, Go!”** plan. The Fire Safety Coordinator will also organize employee training and awareness through various practices:
  - i. New hire fire awareness and evacuation training
  - ii. Ongoing staff training
  - iii. Facility sweeps by trained staff
  - iv. Strategically placed fire safety and evacuation/sheltering protocol information, as determined by the Fire Safety Coordinator
3. The Oak Valley North Project will include a proactive facility wildfire education program utilizing a multi-pronged approach to fire safety following the **“Ready, Set, Go!”** approach to wildfire evacuation, to include, but not limited to:
  - v. Annual wildfire and evacuation safety awareness meeting in coordination with local fire agencies
  - vi. Annual reminder notices will be provided to each employee encouraging them to review this WEP and be familiar with evacuation protocols
  - vii. The Project website will host a webpage dedicated to wildfire and evacuation education and awareness, which should include a copy of this Wildfire Evacuation Plan and the resources provided herein
4. The Project includes a contingency plan for the rare occurrence that evacuation is not safe that includes employees sheltering in place within on-site structures.

INTENTIONALLY LEFT BLANK

---

## 8 Limitations

This Wildfire Evacuation Plan incorporates concepts and protocols consistent with industry standards and has been developed based on City of Calimesa and Riverside County wildfire and evacuation standards per the City's EOP and the County's EOP documents and is specifically intended as a guide for evacuations for the Oak Valley North Project. This Wildfire Evacuation Plan provides basic evacuation information that will familiarize employees of the Project with the evacuation route options that may be available to them during an emergency. However, because emergencies requiring evacuation have many variables and must be evaluated on a case-by-case basis, real-time law enforcement and fire personnel/agencies' decision-making and direction during an emergency requiring evacuation would supersede this WEP.

This WEP analyzes the existing community's evacuation times currently and with the proposed Oak Valley North Project. The estimated evacuation times are based on several assumptions as detailed in this WEP. However, actual evacuation times may be faster or slower than the estimates, depending on the type of emergency, the extent of the evacuation, the time of day, and other factors. A collective, community-wide evacuation of existing populations and the proposed population from the Project would include congested roads in its existing condition that are improved, but still congested, with the Oak Valley North Project. Congested roads are normal in any urban setting when a large evacuation is declared unless it is managed and evacuation areas are staggered to reduce the potential traffic surges that can significantly impact evacuations. Therefore, there would likely still be congestion and delays.

This Wildfire Evacuation Plan promotes the "Ready, Set, Go!" model, adopted by RCFD, CAL FIRE, and many fire agencies statewide. The goal is to raise agency and citizen awareness of potential evacuation issues and get a majority of the public "Ready" by taking a proactive stance on preparedness, and evacuation planning efforts. The Oak Valley North populace will be "Set" by closely monitoring the situation whenever fire weather occurs and/or when wildland fire occurs and elevating pre-planned protocol activities and situation awareness. Lastly, officials will implement the plan and mandate that populations "Go" by executing pre-planned evacuation procedures in a conservative manner (i.e., evacuation will occur based on conservative decision points, as proposed in this evacuation plan or when directed by fire and law enforcement personnel, whichever is more conservative). The preferred alternative will always be early evacuation. However, there may be instances when evacuation is not possible, is not considered safe, or is not an option based on changing conditions. For example, should a fire occur and make evacuation from the Project area ill advised, a contingency plan for employees should be available. This contingency would include moving people to pre-designated TRAs until it is safe to evacuate, or the threat has been mitigated.

Ultimately, it is the intent of this Wildfire Evacuation Plan to guide the implementation of evacuation procedures such that the process of evacuating people from the Oak Valley North Project is facilitated in an efficient manner and according to a pre-defined evacuation protocol as well as providing a contingency option of temporarily refuging on site if evacuation is considered less safe. The Project's employees should be aware of this Wildfire Evacuation Plan and components of it shall be posted on the Project's website. It is also recommended that the Owner(s)/Property Manager provide reminders to employees on at least an annual basis. This educational outreach will result in a populace that understands the potential for evacuations and the routes and options that may be presented to them.

During extreme fire weather conditions, there are no guarantees that a given structure will not burn or that evacuations will be successful all the time. Wildfires may occur in the area that could damage property or harm persons. However, successful implementation of the procedures outlined in this Wildfire Evacuation Plan will provide for an informed populace regarding evacuations.

This WEP does not provide a guarantee that all persons will be safe at all times because of the procedures discussed. There are many variables that may influence overall safety. This WEP provides a summary for implementation of standard evacuation protocols and public outreach, which should result in reduced wildfire related risk and hazard. Even then, fire can compromise the procedures through various, unpredictable ways. The goal is to reduce the likelihood that the system is compromised through implementation of the elements of this WEP and regular occurring program maintenance and updates.

It is recommended that the evacuation process is carried out with a conservative approach to fire safety. This approach must include embracing a “Ready, Set, Go!” stance on evacuation. Accordingly, evacuation of the wildfire areas should occur as soon as they receive notice to evacuate, which may vary depending on many environmental and other factors. Fire is a dynamic and somewhat unpredictable occurrence, and it is important for anyone living at the wildland-urban interface to educate themselves on practices that will improve safety.

## Limitations

The underlying planning principle for fire preparedness, given the dynamic nature of a fire, is to demonstrate the availability of multiple route alternatives and response strategies to permit emergency professionals to manage their response according to the specific circumstances. The Study Area provides ample route and response alternatives. Emergency responders will coordinate the safest possible evacuation based on the dynamic circumstances of the actual event, including the appropriate phasing of the evacuation, and utilization of the most appropriate ingress and egress routes for area occupants and emergency responders.

The breadth of route alternatives and response strategies available to emergency professionals to manage a potential fire in this region cannot and should not be evaluated using the Intersecting Metrics’ Evacuation Analysis – Technical Memorandum alone. A comprehensive view of Project fire safety is gained by understanding this memo, the Project’s Wildfire Evacuation Plan, along with the standard protocols and “in-the-field” decision making of emergency responders.

This Wildfire Evacuation Plan presents a reasonable vehicle travel time estimate based on professional judgments made by Intersecting Metrics (IM) with input from Dudek. Changing any number of these assumptions can lengthen or shorten the average vehicle travel time.

For instance, a situation could arise in which professionals *may* choose to utilize additional roadways for evacuation not utilized in the Dudek/IM analysis, and *may also* choose to send more vehicle trips to certain evacuation routes, and *may also* choose to guide vehicle trips to more or different route permutations relative to what has been modeled in this the Dudek/IM analysis.



The net result of changing the variables selected could yield an average evacuation travel time shorter or longer than the results detailed in the Dudek/IM analysis. Many factors can shorten or lengthen the vehicle time from the results shown herein. For example:

1. Changing the possible evacuation routes selected would affect the results. For instance, utilizing roads for ingress and/or egress that are not utilized in this analysis could shorten vehicle travel times relative to the results shown herein.
2. Increasing or decreasing the number of path permutations and percentage of the population utilizing each route that leads out of the immediate area could shorten or lengthen vehicle travel time relative to the results shown herein.
3. Emergency professionals electing to reserve certain road lanes for emergency vehicle ingress for portions of time could affect the travel time relative to the results shown herein.
4. Assuming evacuees utilize fewer or more vehicles to evacuate from the Project or surrounding communities relative to the Vehicle Utilization Rate selected in the analysis would shorten or lengthen vehicle travel time relative to the results shown herein.
5. Changing the mix of vehicle trips allocated to each evacuation route could shorten or lengthen vehicle travel time relative to the results shown herein.
6. Assuming different road capacity adjustment factors could shorten or lengthen the vehicle travel time relative to the results shown herein.
7. Assuming fewer people are at home when the evacuation notice is given would reduce the number of vehicle trips and shorten vehicle travel time relative to the results shown herein. For instance, an evacuation during daytime hours would typically result in fewer outbound trips than assumed in this analysis.
8. Assuming some portion of vehicle trips are made in advance of the evacuation notice would reduce the number of vehicle trips relative to the results shown herein.
9. Assuming less staff are in the Study Area when evacuation notice is given (most likely in a night-time evacuation event), could reduce the number for vehicle trips relative to the results shown herein.

The evacuation time analysis is necessarily limited in scope given the numerous variables inherent in a wildfire and evacuation event. However, as discussed above, it is not anticipated that the Project will significantly impact evacuation of the proposed or existing surrounding communities based on evacuation times and other qualitative considerations.

INTENTIONALLY LEFT BLANK

---

## 9 References

- Aguirre, D.B. 1994. Planning warning evacuation, and search and rescue: A review of the social science research literature. College Station, TX. Texas A&M University, Hazard Reduction Recovery Center.
- CAL FIRE (California Department of Forestry and Fire Protection). 2008. "Fire and Resource Assessment Program." Accessed August 2023. <https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program>
- Calimesa. 2019. *Emergency Operations Plan Part 1 – Basic Plan*. Calimesa, California: City of Calimesa. August 2019.
- Collins, S. L. 2004. Evaluation of Evacuation Planning in Wildland-Urban Interface Environments: Executive Analysis of Fire Service Operations in Emergency Management. Applied Research project submitted to the National Fire Academy as part of the Executive Fire Officer Program. 44 pp.
- County of Riverside. 2018. Local Hazard Mitigation Plan. Accessed 9/22/2023 from <https://rivcoready.org/about-emd/plans>.
- County of Riverside. 2019. Emergency Operations Plan. Accessed 9/22/2023 from <https://rivcoready.org/about-emd/plans>.
- Cova, T.J., P.E. Dennison, and F.A. Drews. 2011. "Modeling evacuate versus shelter-in-place decisions in wildfires." *Sustainability*, 3(10): 1662-1687. Published, 09/30/2011. <http://www.mdpi.com/2071-1050/3/10/1662/>.
- Department of Homeland Security. 2019. *Planning Considerations: Evacuation and Shelter in Place*. Accessed September 2023. <https://www.fema.gov/sites/default/files/2020-07/planning-considerations-evacuation-and-shelter-in-place.pdf>.
- Drabek, T.E. 1991. "Anticipating organizational evacuations: disaster planning by managers of tourist-oriented private firms." *International Journal of Mass Emergencies and Disasters*. 9, (2), 219–245.
- Dudek. 2023. *Fire Protection Plan for Oak Valley North*. Riverside, California: Dudek. September 22, 2023.
- FEMA (Federal Emergency Management Agency). 2008. Mass Evacuation Incident Annex. Federal Emergency Management Agency. 20 pp. Firescope 2013. International Fire Chiefs Association. "Ready, Set, Go!" website link: <http://wildlandfirersg.org/>.
- Firescope California. 2013. International Fire Chiefs Association. "Ready, Set, Go!" <http://wildlandfirersg.org/>.
- Fitzpatrick, C. and D.S. Mileti. 1994. "Public Risk Communication." In *Disasters, Collective Behavior, and Social Organization*. Dynes R. R. and Tierney, K.J. (Eds). 1994. Newark University of Delaware Press, 71–98.
- Gordon, R. 2006. "Acute Responses to Emergencies: findings and observations of 20 years in the field." *The Australian Journal of Emergency Management*, Vol. 21, No. 1, February 2006. 23 pp.
- IFTSA. 1997. *Fundamentals of Wildland Fire Fighting*, 3rd Edition.

- Lindell, M.K. and R.W. Perry. 2004. *Communicating Environmental Risk in Multiethnic Communities*. Thousand Oaks, California: Sage Publications.
- Office of the Attorney General. 2022. *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act*. Accessed 9/22/2023 from <https://oag.ca.gov/system/files/attachments/press-docs/2022.10.10%20-%20Wildfire%20Guidance.pdf>
- Quarantelli, E.L. and R.R. Dynnes. 1977. "Response to social crisis and disasters." *Annual Review of Sociology*. 3, 23–49.
- Urban Crossroads. 2023. *Oak Valley North Specific Plan Traffic Analysis*. Costa Mesa, California: Urban Crossroads. September 5, 2023.
- Vogt, B. 1990. *Evacuation Of Institutionalized And Specialized Populations*, ORNL/SUB-7685/1 & T23. Oak Ridge, TN: Oak Ridge National Laboratory.
- Vogt, B. 1991. "Issues in nursing home evacuations." *International Journal of Mass Emergencies and Disasters*, 9, 247–265.
- Wolshon B. and E. Marchive. 2007. "Planning in the Urban Wildland Interface: Moving Residential Subdivision Traffic During Wildfires." *ASCE J. Urban Plann. Dev. – Special Emergency Transportation Issue*. 133(1) 73–81.

---

# **Appendix A-1**

## Wildfire Safety Checklist



# CALIFORNIA WILDFIRE HOME SAFETY CHECKLIST

## • HOW COMMON ARE CALIFORNIA WILDFIRES? •

At least 6,284 wildfires occurred in California in 2018, according to the California Department of Forestry and Fire Protection (CAL FIRE). These fires burned approximately 876,147 acres of land.

## • WHAT TO DO BEFORE A CALIFORNIA WILDFIRE •



### Separate your home from flammable materials

Create at least 30 feet of space between your home and flammable vegetation and materials.



### Trim trees and shrubs

Ensure trees and shrubs do not come into contact with electrical wires or hang over your home's chimney.



### Clean your home's roof

Remove pine needles, leaves and other debris from your home's roof.



### Store combustible materials properly

Store combustible or flammable materials in approved containers.



### Pick up battery-operated flashlights and radios

Keep battery-operated flashlights and radios with additional fresh batteries in a safe, easy-to-access location in your home.

## • WHAT TO DO DURING A CALIFORNIA WILDFIRE •



### Stay up to date

Use a TV or radio to receive wildfire emergency updates.



### Set up hoses and water

If possible, fill buckets with water and set up hoses outside your home.



### Turn on the house lights

Activate the lights in each room of your home.



### Remove flammable drapes or curtains

Take down flammable drapes or curtains in your home.



### Get ready to evacuate

Prepare all family members and pets to evacuate your home.

## • WHAT TO DO AFTER A CALIFORNIA WILDFIRE •



### Contact local fire officials

Check in with local fire officials to find out if it is safe to return home.



### Look for hot spots

Check the ground for smoldering stumps and other hot spots and use buckets of water on these spots as needed.



### Examine your home's exterior

Look for sparks and embers across your home's roof and exterior areas.



### Evaluate your home's interior

Keep an eye out for hidden burning in each room of your home.

# 9-1-1

### Call 911

Contact 911 if you identify any potential dangers.

## How much do you know about wildfires?

True or False:

1. An average of 7 million acres of US woodland burn every year.
2. 1 in 5 wildfires are caused by humans.
3. Wildfires move faster downhill.
4. Some species of trees and shrubs require fire to reproduce.
5. The 'fuel' (trees, plants, etc.) you see burning isn't really on fire.
6. There are three broad types of fire spread: Subterranean, Surface and Crown fires.
7. Only YOU can prevent wildfires.



1. True: Across the US, including Alaska, approximately 7 million acres of federal, tribal, state and private land burns annually.
2. False: More than 4 out of 5 wildfires are caused by humans.
3. False: Fire moves faster uphill. The steeper the slope, the faster the fire travels.
4. True: Species such as Ceanothus and many types of closed-cone coniferous trees require heat to germinate.
5. True: The fuel itself is not on fire, but rather, is being converted into a gas. It's the gas produced by the fuel that is actually burning.
6. False: The three types of fire spread are: Ground - organic material in the soil is burning; Surface - leaf litter, fallen braches, etc. on the ground are burning; Crown - the top layer of foliage from trees is burning.
7. True:!





---

## **Appendix A-2**

### “Ready, Set, Go!” Wildland Fire Action Guide



**WILDFIRE IS COMING.  
ARE YOU READY?**

# **WILDFIRE ACTION PLAN**



# BE PREPARED

**Wildfires are a fact of life in California. It's not a question of if they will occur, but when. Catastrophic wildfires are increasing in our state, encroaching further into populated areas. It is extremely important that Californians be prepared when wildfire strikes.**

By preparing your home and property for wildfire, and knowing what to do if evacuation is necessary, you can dramatically increase your safety and the survivability of your home. It is your responsibility to prepare yourself, your family, and your home for when wildfire strikes.

This guide illustrates the importance of creating and maintaining Defensible Space and hardening your home by retrofitting it with ignition-resistant or noncombustible materials to protect against the threat of flying embers, direct flame contact, and radiant heat exposure. It also provides information about the preparations and precautions to make in order to evacuate early and safely.

If you need more information about preparing for wildfire or any other disaster, contact your nearest fire station or visit us at [ReadyforWildfire.org](http://ReadyforWildfire.org).



These counties receive funding from the state to provide fire protection and prevention services to State Responsibility Area lands within their boundaries.





# CONTENTS

## GET READY

Hardening Your Home	4
Defensible Space	6
Fire Smart Landscaping	9

## GET SET

Create a Wildfire Action Plan	12
The Six Ps	13
Emergency Supply Kit	14
Be Prepared for Power Outages	15
Family Communication Plan	16
Insurance Preparedness	17

## GO!

Pre-Evacuation Steps	20
Evacuation Steps	21
When to Evacuate	21
Animal Evacuation	22
What to Do if Trapped	23
Returning Home After a Wildfire	24



# GET REAL!

There are three ways your home can be exposed to wildfire: through flying embers, direct flame contact, and radiant heat exposure.

Embers are the main cause of homes igniting during a wildfire. Wind can blow embers up to a mile ahead of a wildfire. These flying embers can directly ignite materials on, or attached to, a home. They can also ignite vegetation or combustible materials near the home, resulting in a subsequent fire that spreads to the home through direct flame contact or radiant heat.

Direct flame contact to the home can be the result of nearby vegetation or combustible materials catching on fire due to embers, or from the wildfire burning unchecked directly to the building.

Radiant heat exposure occurs when there are materials, vegetation, or other combustibles, that are burning close to the home—for a long enough period of time—and generate enough heat to directly ignite a combustible component of the home.

Getting ready for wildfire begins with two very important efforts: **Home Hardening** and **Defensible Space**. Hardening your home is retrofitting it with fire-resistant materials. Defensible Space is creating and maintaining a buffer between buildings and vegetation to slow wildfire. While not a guarantee that your home will survive a wildfire, these efforts give it the best chance.

# HARDENING YOUR HOME

Now is the time to retrofit your home—before a wildfire strikes. California Building Code Chapter 7A requires specific construction materials and methods for the building of new homes in wildfire-prone areas. These same materials and methods are also the minimum standards recommended when retrofitting a home. Retrofitting prepares your home for the exposure it will experience during a wildfire. Here's what you can do to harden your home:

## ROOF

Your roof is the most vulnerable part of your home. Homes with wood shake or shingle roofs are at high risk of being destroyed in a wildfire.

- Replace wood shake or shingle roofs with a Class A fire-rated roof, using materials such as composition, metal, or tile.
- Inspect your roof and maintain it by removing debris and plugging gaps.

## VENTS

Vents on homes create openings for flying embers.

- Avoid storing combustible items near attic or crawl space vents.
- Inspect vents to ensure they are in good condition with no tears or large openings.
- Cover all vent openings with 1/16 inch to 1/8 inch corrosion-resistant metal mesh screen.
- Consider replacing screened vents with ember and flame-resistant vents.

## EAVES AND SOFFITS

Eaves and soffits are a point of entry for flying embers from fires up to a mile away or flames from nearby vegetation or other material burning.

- Plug or caulk gaps greater than 1/8 inch in size with durable caulk.
- Enclose eaves with ignition-resistant or noncombustible materials if possible.

## WINDOWS

Heat from a wildfire can cause windows to break before the home ignites, allowing embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual or multi-paned windows with at least one pane being tempered glass.
- Consider limiting the size and number of windows that face large areas of vegetation.
- Install metal mesh screens on openable windows to increase ember resistance and reduce radiant heat exposure.



## DECKS

Surfaces within 10 feet of the building should be built with ignition-resistant, noncombustible, or other approved materials.

- Remove all combustible items from underneath deck.
- Limit combustible items on top of deck. Bring these items inside the home or move them away from the home when wildfire threatens.

## EXTERIOR WALLS

Wood products such as boards, panels, or shingles are common siding materials. However, they are combustible and not good choices for wildfire prone areas.

- Use noncombustible materials such as stucco, metal, or fiber cement, or use ignition-resistant siding.
- Be sure to extend materials from the foundation to the roof.
- Plug or caulk gaps and joints with openings greater than 1/8 inch.

## RAIN GUTTERS

Screen or enclose rain gutters with noncombustible corrosion-resistant materials to prevent accumulation of plant debris.

## PATIO COVERS

Consider using noncombustible material within eight feet of buildings.

## CHIMNEYS

Cover chimney or stovepipe outlet with a noncombustible corrosion-resistant metal mesh screen with openings between 3/8 inch and 1/2 inch in size. Close the fireplace flue during fire season when the fireplace is not in use.

## FENCES

Construct fences using noncombustible materials within eight feet of your home.

## GARAGES

Install weather stripping to eliminate gaps around garage doors. Add a battery back-up to automatic garage door openers so the garage can easily be opened if the power is out.

## DRIVEWAYS

Ensure that access to your home complies with local fire codes.

## WATER SUPPLY

Have multiple garden hoses long enough to reach all areas of your house.

# ADDITIONAL HOME FIRE SAFETY RESOURCES



## HOME HARDENING INFORMATION GUIDE

[ReadyforWildfire.org](https://www.readyforwildfire.org)



## CALIFORNIA BUILDING CODE CHAPTER 7A

[codes.iccsafe.org](https://www.codes.iccsafe.org)



## WILDFIRE HOME RETROFIT GUIDE

[ReadyforWildfire.org](https://www.readyforwildfire.org)



## BUILDING MATERIALS LISTING

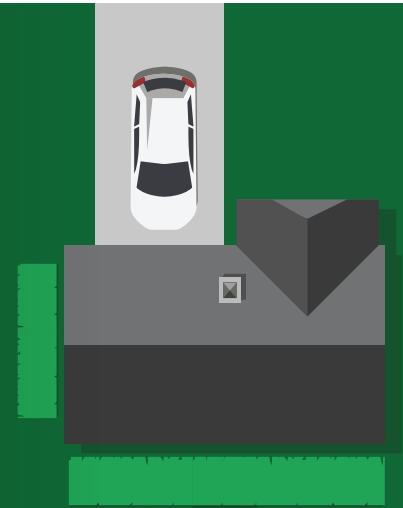
[osfm.fire.ca.gov](https://osfm.fire.ca.gov)

# DEFENSIBLE SPACE

Creating and maintaining Defensible Space is essential to reducing the impact of wildfire on your home and property. Defensible Space is the buffer created between a building on your property and the plants, brush, trees, or other combustible items in the near vicinity. This buffer helps to keep wildfire away from your home by reducing the fire's intensity and slowing or halting the spread of wildfire. The less there is to burn near your home, the less exposure your home will have to wildfire. Creating this space also provides protection for the firefighters defending your home.

## CREATING AND MAINTAINING YOUR DEFENSIBLE SPACE

Within the 100-foot perimeter of a home, there is a need for more intense reduction of wildfire fuels. Start at the home and work your way out 100 feet or to your property line, whichever is closer.



## KNOW THE LAW - BE FIRE SMART

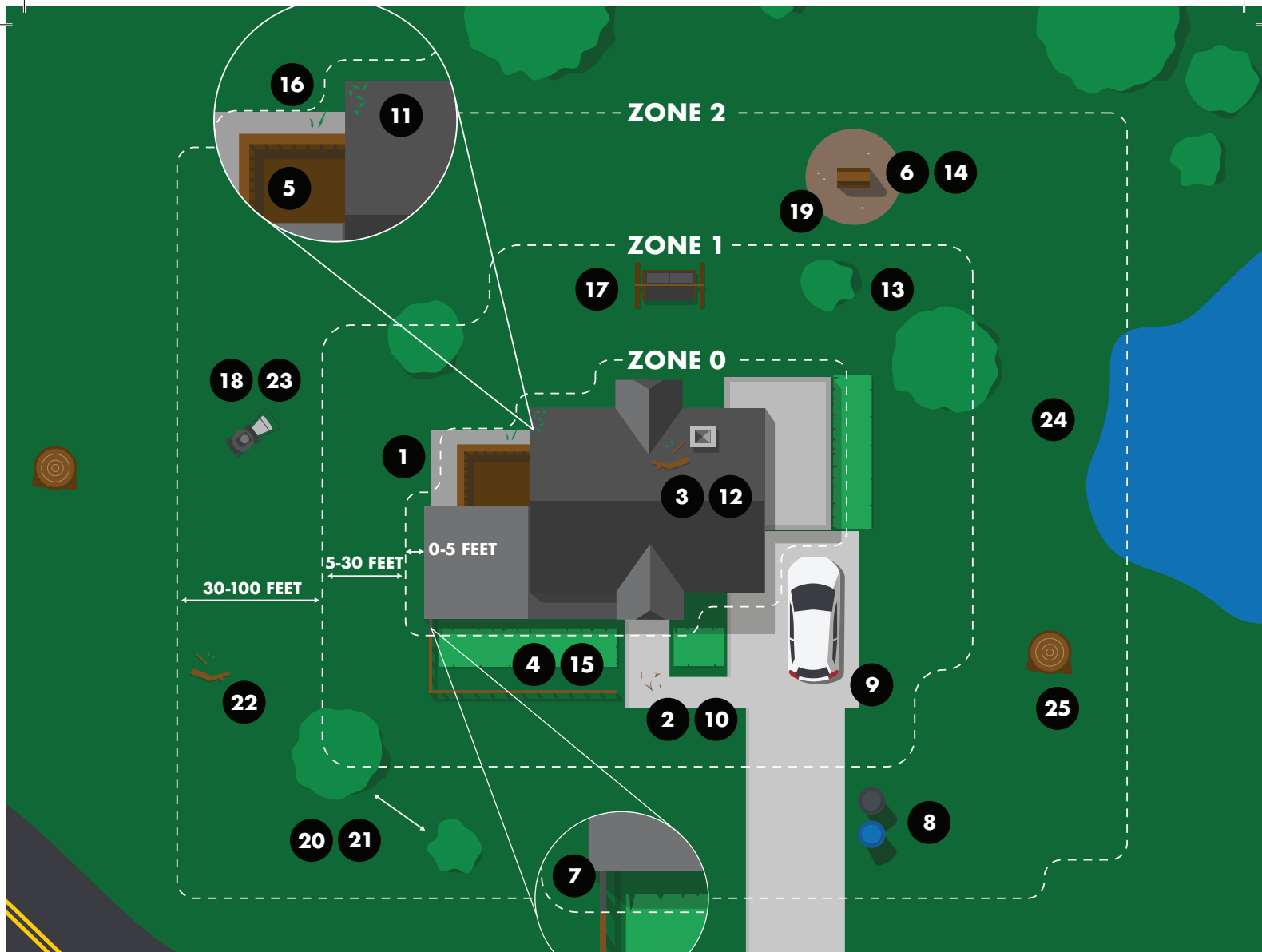
One hundred feet of Defensible Space is required under the Public Resources Code (PRC) 4291. Zones 1 and 2 currently make up the 100 feet of Defensible Space required by law. Assembly Bill 3074, passed into law in 2020, requires an ignition-resistant Zone 0 for Defensible Space.

Many local government agencies have ordinances for Defensible Space. These local ordinances will often be more stringent than the state of California's minimum requirement in PRC 4291. Check with your local fire department or fire protection district for any additional Defensible Space requirements. [fire.ca.gov/dspace](https://www.fire.ca.gov/dspace)



### Zone 0 extends from zero to five feet from buildings, structures, decks, etc.

1. Use hardscape like gravel, pavers, concrete, and other noncombustible mulch materials. No combustible bark or mulch.
2. Remove all dead and dying weeds, grass, branches, and vegetative debris. Check your roofs, gutters, decks, porches, stairways, etc.
3. Remove all branches within 10 feet of any chimney or stovepipe outlet.
4. Limit plants in this area to low growing, nonwoody, properly watered, and maintained plants.
5. Limit combustible items (outdoor furniture, planters, etc.) on top of decks.
6. Relocate firewood and lumber to Zone 2.
7. Replace within Zone 0 combustible fencing, gates, and arbors attached to the home with noncombustible alternatives.



8. Relocate garbage and recycling containers outside this zone.

9. Relocate boats, RVs, vehicles, and other combustible items outside this zone.

**Zone 1 extends five to 30 feet from buildings, decks, and other structures.**

10. Remove all dead plants, grass, and weeds (vegetation).

11. Remove dead or dry leaves and pine needles from your yard, roof, and rain gutters.

12. Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney or stovepipe outlet.

13. Trim trees regularly to keep branches a minimum of 10 feet from other trees.

14. Relocate exposed wood piles outside of Zone 1.

15. Remove or prune flammable plants and shrubs near windows.

16. Remove vegetation and items that could catch fire from around and under decks.

17. Create a separation between trees, shrubs, and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.

**Zone 2 extends from 30 feet to 100 feet from buildings, structures, decks, etc.**

18. Cut or mow annual grasses to a maximum height of four inches.

19. All exposed wood piles must have a minimum of 10 feet clearance around them, down to bare mineral soil, in all directions.

20. Create horizontal space between shrubs and trees. (See diagram on page 11)

21. Create vertical space between grass, shrubs, and trees. (See diagram on page 11)

22. Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of three inches.

**All zones**

23. Mow before 10 a.m., but never when it's windy or excessively dry.

24. Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.

25. Logs or stumps embedded in the soil must be removed in Zone 0. In Zones 1 and 2 they need to be removed or isolated from other vegetation.

It takes the combination of both Defensible Space and Home Hardening to give your home and property the best chance of surviving a wildfire. Below are examples of low-risk and high-risk scenarios:

## HIGH RISK

**UNENCLOSED EAVES**



## LOW RISK

**ENCLOSED EAVES**



**UNSCREENED VENTS**



**SCREENED VENTS**



**DEFENSIBLE SPACE  
NONCOMPLIANT**



**DEFENSIBLE SPACE COMPLIANT**



# FIRE SMART LANDSCAPING

While some plants are characterized as “fire-safe” or “fire-resistant,” all plants will burn under the right conditions, regardless of how they are classified. The environment the plant grows in, how it is maintained, and its placement and spacing near other vegetation and combustibles will generally have more influence on the flammability of the plant than how it is characterized. Taking these items into consideration is crucial to reduce the spread of wildfire to your home. Scan the QR code below for more information.

## FIRE SMART LANDSCAPING

[ReadyforWildfire.org/fire-smart-landscaping](https://ReadyforWildfire.org/fire-smart-landscaping)



## MINIMUM VERTICAL SPACING BETWEEN TREES AND SHRUBS

Eliminate opportunities for a vertical “fire ladder”:

- Remove branches beneath large trees for a six-foot minimum clearance.
- Create proper vertical spacing between shrubs and the lowest branches of trees. See adjacent diagrams.

## MINIMUM HORIZONTAL SPACING BETWEEN TREES AND SHRUBS

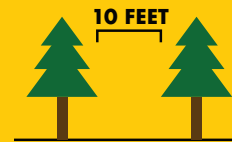
Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. See adjacent diagrams.

## DEAD TREE REMOVAL

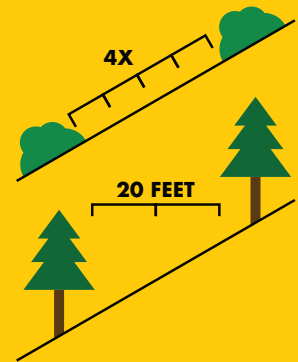
If you have dead or dying trees on your property, the entire tree needs to be removed to reduce wildfire risk. Scan the QR code below to learn about permit requirements.

## PERMIT REQUIREMENTS

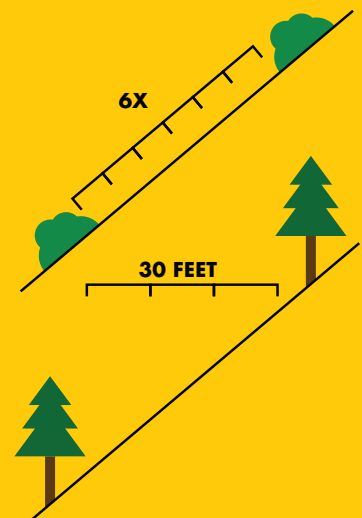
[ReadyforWildfire.org/dead-tree-removal](https://ReadyforWildfire.org/dead-tree-removal)



Flat to mild slope (<20%)



Mild to moderate slope (20%–40%)



Moderate to steep slope (>40%)



GET  
SET

It is important that you are prepared **before** wildfire strikes. In an emergency it is easy to become confused or panicked.

Getting Set requires three main preparation actions:

- Creating a Wildfire Action Plan
- Creating an Emergency Supply Kit
- Creating a Family Communication Plan

Preparing these items in advance will help keep you focused and able to act quickly when evacuation is anticipated or needed.

Use this guide to complete these actions to prepare in advance of wildfire.

## READY FOR WILDFIRE INCIDENT APP

Scan the QR code below to access accurate updates about active wildfires near you with our web-based Ready for Wildfire Incident App.



# CHECKLIST ACTION PLAN

## CREATE A WILDFIRE ACTION PLAN

Your Wildfire Action Plan must be prepared and familiar to all members of your household well in advance of a wildfire. Use the checklist below to help create your plan. Each family's plan will be different, depending on a variety of issues, needs, and situations.

### Create an evacuation plan that includes:

- A designated emergency meeting location outside the fire or hazard area. This is critical to determine who has safely evacuated from the affected area.
- Identification of several different escape routes from your home and community. Practice these routes often so everyone in your family is familiar with them in case of emergency. Go to page 18 to write down your evacuation routes.
- An evacuation plan for pets and large animals such as horses and other livestock.
- A Family Communication Plan that designates an out-of-area friend or relative as a point of contact to act as a single source of communication among family members in case of separation. It is easier to call or message one person and let them contact others than to try and call everyone when phone, cell, and internet systems can be overloaded or limited during a disaster and under a stressful situation. See page 18 for a Family Communication Plan form.





**Be prepared:**

- Have fire extinguishers on hand and make sure everyone in the family knows how to use them. Many fire extinguishers have expiration dates, so make sure to check yours.
- Ensure you and your family know where the home’s gas, electric, and water main shut-off controls are located and how to safely shut them down in an emergency.
- Assemble an Emergency Supply Kit for each person, as recommended by the American Red Cross. See Emergency Supply Kit on page 16 for details.

- Maintain a list of emergency contact numbers in your cell phone, posted near your home phone, and in your Emergency Supply Kit.
- Keep an extra Emergency Supply Kit in your car in case you cannot get to your home because of fire or other emergency.
- Have a portable radio or scanner, or follow the Ready for Wildfire App so you can stay updated on wildfires. Follow local law enforcement notifications for any evacuation information. Visit [incidents.ReadyforWildfire.org](http://incidents.ReadyforWildfire.org) or scan QR code on page 13 to view the incident app.
- Tell your neighbors about Ready, Set, Go! and your Wildfire Action Plan.

**THE SIX Ps**

**Remember the “Six Ps” and keep them ready in case immediate evacuation is required:**

- People and pets
- Papers, phone numbers, and important documents
- Prescriptions, vitamins, and eyeglasses
- Pictures and irreplaceable memorabilia
- Personal computer, hard drive, and disks
- “Plastic” (credit cards, ATM cards) and cash





## BE PREPARED FOR POWER OUTAGES

Power outages may occur before and during the threat of a wildfire. It's important to be prepared and know what actions to take when leaving your home during a power outage.

- Learn how to manually open your automatic garage doors or gates—this is extremely important!
- Be familiar with your home's utility shutoffs (electricity, water, and gas).
- Keep a flashlight and shoes near your bed in case you need to evacuate during the night.
- Keep your Emergency Supply Kit easily accessible so you can find it in the dark if you have to evacuate.
- Always keep at least a half tank of gas in your vehicles.
- If you have a power generator, be sure you know the safety guidelines of your model, including where to connect it, which electrical cords to use, and the electrical load rating. An improperly installed generator can electrocute you or an electric utility worker and can also be a fire hazard.
- Keep your cell phone charged.
- Keep a supply of bottled water.

## DURING A POWER OUTAGE

If the power goes out, follow these steps:

- Keep your refrigerator and freezer doors closed.
- Shut off the gas and other combustibles such as propane tanks.
- If wildfire is within your area, keep informed with a battery-powered radio or your cell phone.
- Stay at least 10 feet away from both overhead power lines and electrical facilities, and never approach or touch overhead power lines or any person or object in contact with the lines.





# SAVE THIS FAMILY COMMUNICATION PLAN

Fill out this form and place it in a location where it can easily be found by everyone in your household. Copy the form and keep it in your Emergency Supply Kit. This will allow all family members to have access to this key information in case you get separated.

## WHEN WE HAVE TO EVACUATE, WE WILL MEET AT:

---

## OUR OUT-OF-AREA EMERGENCY CONTACT PERSON IS:

Name: \_\_\_\_\_

Home Phone #: \_\_\_\_\_

Relationship: \_\_\_\_\_

E-mail: \_\_\_\_\_

Cell Phone #: \_\_\_\_\_

## OTHER IMPORTANT NUMBERS ARE:

Emergency 911: \_\_\_\_\_

Local Police: \_\_\_\_\_

Local Fire Department: \_\_\_\_\_

Other: \_\_\_\_\_

Other: \_\_\_\_\_

Other: \_\_\_\_\_

## OUR TWO EVACUATION ROUTES ARE (DESCRIBE BELOW):

_____	_____
_____	_____
_____	_____
_____	_____

# INSURANCE PREPAREDNESS

A home is generally your largest asset. Protect it.

Insurance is the critical back-up plan enabling you to rebuild your home after a wildfire. Follow these tips as part of your Ready, Set, Go! Wildfire Action Plan:

## **Conduct an annual insurance checkup**

- Call your agent or insurance company annually to discuss your policy limits and coverage. Make sure your policy reflects the correct square footage and features in your home. Consider purchasing building code upgrade coverage.

## **Know what your policy covers**

- Know if you have a replacement-cost policy that pays to replace all of your items at current market price, or if you have an actual cash value policy that takes depreciation into account and pays less for aged items.

## **Update your policy to cover home improvements**

- If you make home improvements, be sure to call your agent or company to update your coverage. Make sure your insurer knows about the changes, so that new countertops, floors, rooms, etc., are covered if you must rebuild.

## **Maintain insurance**

- If your home is paid off, be sure to maintain homeowner insurance. Without insurance, costs to repair or replace a home or structure is the responsibility of a homeowner.

## **Get renters insurance**

- Renters can lose everything in a fire and be left to start over. Many insurers bundle renters insurance coverage with an auto insurance policy at affordable prices.

## **Make a home inventory**

- Document the contents of your home before a wildfire occurs. Use your cell phone to video your belongings or a camera to take photos. Store the inventory list and photos at a location away from the property and/or in a cloud internet server. Include the cost of items and note important or expensive items. If possible, keep receipts for major purchases.
- Don't forget to include items inside the home, inside the garage, and outside of the home.



GO



Give your household the best chance of surviving a wildfire by being ready to go and evacuating early.

Being ready to go means following pre-evacuation steps, knowing when to evacuate, preparing possible evacuation routes, and knowing what to do if you become trapped.

Be safe and don't wait until it's too late! Use these checklists to help prepare you and your family to be ready to evacuate if wildfire strikes.

It is also important to learn what to expect after a wildfire and what you should do before returning home. The danger is not over after the flames are put out.

## **KNOW THE LAW—BE READY TO EVACUATE**

California law authorizes officers to restrict access to any area where a menace to public health or safety exists due to a calamity such as flood, storm, fire, earthquake, explosion, accident, or other disaster. Refusal to comply is a misdemeanor. (Penal Code 409.5)

# PRE-EVACUATION STEPS

When evacuation is anticipated, follow these checklists (if time allows):

## Outside

- Gather flammable items from the exterior of the house and bring them inside (patio furniture, children's toys, door mats, trash cans, etc.) or place them in your pool.
- Turn off propane tanks.
- Move propane BBQ appliances away from structures.
- Connect garden hoses to outside water valves or spigots for use by firefighters. Fill water buckets and place them around the house.
- Turn off sprinklers and running water; leaving them on can affect critical water pressure.
- Leave exterior lights on so your home is visible to firefighters in the smoke or darkness of night.
- Put your Emergency Supply Kit in your vehicle.
- Back your car into the driveway with vehicle loaded and all doors and windows closed. Carry your car keys with you.
- Have a ladder available and place it at the corner of the house for firefighters to quickly access your roof.

- Seal attic and ground vents with pre-cut fire-resistant boards or commercial seals.
- Monitor your property and the fire situation. Don't wait for an evacuation order if you feel threatened and need to leave.
- Check on neighbors and make sure they are preparing to leave.

## Inside the House

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades and curtains. Close metal shutters.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter or tank. Turn off pilot lights.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning or heater.

## Animals

- Locate your pets and keep them nearby.
- Prepare livestock for transport and consider moving them to a safe location early.





## EVACUATION STEPS

- Review your Evacuation Checklist.
- Ensure your Emergency Supply Kit is in your vehicle.
- Cover up to protect against heat and flying embers. Wear long pants, a long-sleeved shirt, heavy shoes/boots, cap/hat, a dry bandana for face cover, goggles, or glasses. Clothing made of 100% cotton is preferable.
- Locate your pets and take them with you.

## WHEN TO EVACUATE

Leave when evacuation is recommended by fire officials to avoid being caught in fire, smoke, or road congestion. You don't need to wait to be ordered by authorities to evacuate. In an intense wildfire, emergency personnel may not have time to knock on every door. If you feel you are in danger, the best course of action is to evacuate. If you are advised to leave, don't hesitate!

Officials will determine the areas to be evacuated and escape routes to use depending upon the fire's location, behavior, winds, terrain, etc.

Law enforcement agencies are typically responsible for enforcing an evacuation order. Follow their directions promptly.

You will be advised of potential evacuations as early as possible. You must take the initiative to stay informed and aware. Listen to your radio/TV for announcements from law enforcement and emergency personnel.

You may be directed to temporary assembly areas to await transfer to a safe location.

The terms "Warning" and "Order" are used to describe evacuation orders. However, local jurisdictions may use other terminology such as "Precautionary" and "Immediate Threat."

These terms are used to alert you to the significance of the danger. All evacuation instructions provided by officials should be followed immediately for your safety.



# ANIMAL EVACUATION

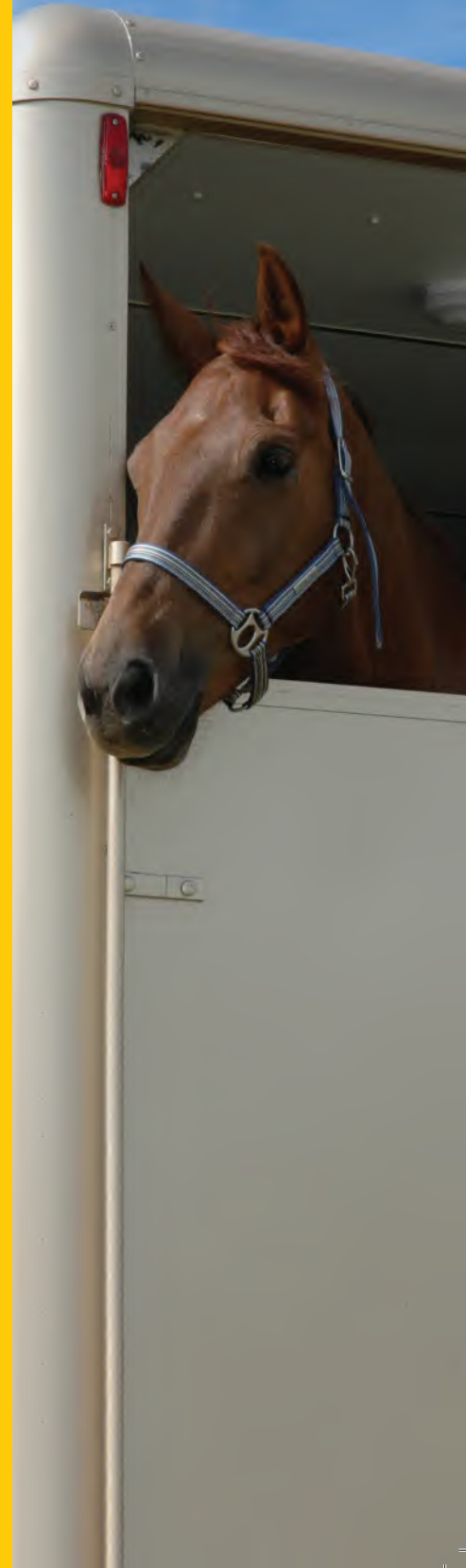
You've taken steps to help keep your family and home fire safe. Don't forget your pets and livestock. With some advanced planning, you can increase their chances of surviving a wildfire.

1. Clear Defensible Space around your barns, pastures, and property just as you do your home.
2. Contact your local fairgrounds, stockyards, equestrian centers, friends, etc. about their policies and ability to temporarily take livestock in an emergency.
3. Have vaccination/medical records, registration papers, and photographs of your animals (proof of ownership).
4. If you must leave your animals, leave them in a pre-selected, cleared area. If appropriate, leave enough hay for 48 to 72 hours.
  - Leave water for your animals. Do not rely on automatic watering systems, as a power outage could occur or the water system become compromised.
5. Arrange in advance for a neighbor to check on or transport your pets in case you are not home when disaster strikes.
  - Make sure your neighbors have your contact numbers (cell phone, work, home, etc.).
6. Make sure that each animal has its own pet carrier, as appropriate.
  - Birds, rodents, and reptiles should be transported in cages covered with a light sheet or cloth to minimize their fear.
7. Make sure your pets are always wearing properly fitted collars with personal identification, rabies and license tags.
8. Plan where you will take your pets and select an alternate prearranged location as well.
  - In the event of evacuation, pets may not be allowed inside human emergency shelters.
9. Prepare your livestock disaster preparedness kit.
10. Prepare your pet disaster preparedness kit.

Scan the QR code below to find what items to include in your livestock and pet disaster preparedness kit.

## LIVESTOCK AND PET DISASTER PREPAREDNESS KIT INSTRUCTIONS

[ReadyforWildfire.org/animal-evacuation](https://ReadyforWildfire.org/animal-evacuation)



# WHAT TO DO IF TRAPPED

## WHILE IN YOUR VEHICLE:

- Stay calm.
- Park your vehicle in an area clear of vegetation.
- Close all vehicle windows and vents. If possible, cover inside of windows with a wool or cotton blanket to minimize radiant heat.
- Cover yourself with a wool or cotton blanket or jacket.
- Lie on vehicle floor.
- Use your cell phone to contact officials—**Call 911**

## WHILE ON FOOT:

- Stay calm.
- Go to an area clear of vegetation, a ditch, or depression on level ground, if possible.
- Lie face down and cover up your body.
- If near a body of water—pool, creek, pond, lake, etc.—seek safety in the water or use it to keep distance away from the fire. Be careful not to be swept away by moving water or get too deep.
- Use your cell phone to contact officials—**Call 911**

## WHILE IN YOUR HOME:

- Stay calm and keep your family together.
- **Call 911** and inform authorities of your location.
- Fill sinks and tubs with cold water.
- Keep doors and windows closed but unlocked.
- Stay inside your house.
- Stay away from outside walls and windows.
- Turn on lights so emergency officials know you are inside.

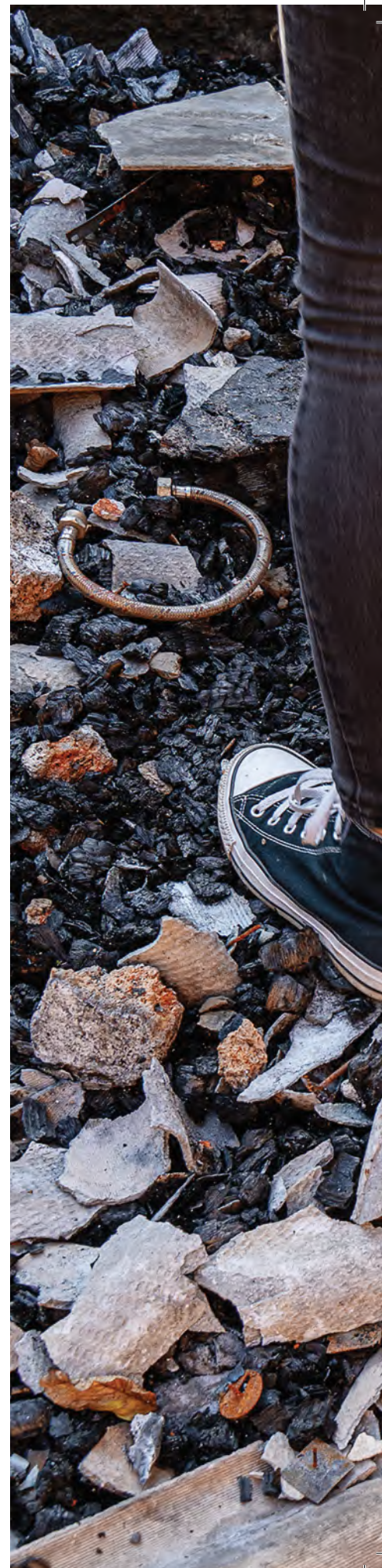
# RETURNING HOME AFTER A WILDFIRE

ALWAYS check with officials before attempting to return to your home after a wildfire. Once home, check for the following:

- **Call 911** if any danger is perceived.
- Before inspecting your home, first check for the smell of gas. Turn off power until you've completed your inspection. Use a battery-powered flashlight to inspect a damaged home.
- Check grounds for hot spots, smoldering stumps, and vegetation.
- Check the roof and exterior areas for sparks or embers.
- Check the attic and throughout your house for any hidden burning sparks or embers.
- Check for fire damage to your home, turn off all appliances, and make sure the meter is not damaged before turning on the main circuit breaker.
- Check the well or pump house to ensure it is in working order.
- Do not drink or use water from the faucet until emergency officials say it is okay.
- Discard any food that has been exposed to heat, smoke, or soot.
- Consult local experts on the best way to restore and plant your land with fire smart landscaping.

Be aware of the following dangers that exist after a wildfire:

- Flash floods are a very real and potentially deadly hazard when rain occurs in heavily burned areas after a wildfire. Stay away from burned forests, storm channels, and natural drainages.
- Use extreme caution around trees, power poles, and other tall objects or structures that may have lost stability during the fire.





[ReadyforWildfire.org](http://ReadyforWildfire.org)



---

# **Appendix B-1**

## Ready Business How To Guide







Ready Business.®

# HOW-TO GUIDE



Ready Business.  
**POWER  
OUTAGE**  
TOOLKIT



Ready Business.  
**HURRICANE**  
TOOLKIT



Ready Business.  
**INLAND  
FLOODING**  
TOOLKIT



Ready Business.  
**QUAKESMART**  
TOOLKIT



Ready Business.  
**SEVERE WIND  
TORNADO**  
TOOLKIT



# Table of Contents

- INTRODUCTION ..... 2**
  - Program Background..... 2
  - Purpose of the “How-To” Guide..... 5
  - Workshop Overview ..... 5
  - Workshop Implementation ..... 8
  
- 1 | PREPARE FOR A READY BUSINESS WORKSHOP ..... 9**
  
- 2 | DELIVER A READY BUSINESS WORKSHOP..... 14**
  
- 3 | CONDUCT READY BUSINESS WORKSHOP FOLLOW-UP ..... 14**
  - Appendix A | Sample Agenda..... 15
  - Appendix B | Description of Speaker/Presenter Roles..... 16
  - Appendix C | Invitation and Marketing Email Template ..... 17
  - Appendix D | Sample News Media Advisory ..... 19
  - Appendix E | Sample Attendee Email ..... 20
  - Appendix F | Sample Feedback Form ..... 22



# Introduction

## Program Background

The goal of the FEMA *Ready Business Program* is to help businesses and organizations develop effective preparedness and mitigation programs. The *Ready Business Program* accomplishes this goal by providing tools to create business continuity and Preparedness and Mitigation Project Plans with a focus on the impact of relevant, local hazards.

**THE READY BUSINESS PROGRAM COMBINES LEADING PRACTICES ALONG WITH PRESENTATIONS, PANEL DISCUSSIONS, AND A SCENARIO-BASED TABLETOP DISCUSSION TO MOVE ORGANIZATIONAL LEADERS THROUGH A STEP-BY-STEP PROCESS TO:**

✓	Identify Your Risk
✓	Develop a Plan
✓	Take Action
✓	Be Recognized and Inspire Others

The two components of the *Ready Business Program* are a series of hazard-specific *Ready Business Toolkits* and in-person *Ready Business Workshops*.

The first program component, the *Ready Business Toolkit* series, focuses on earthquakes, hurricanes, inland flooding, power outage, and severe wind/tornado events. Toolkits provide organizations with information needed to develop a business continuity plan and *Preparedness and Mitigation Project Plans*, and provide an application for recognition of participating organizations.

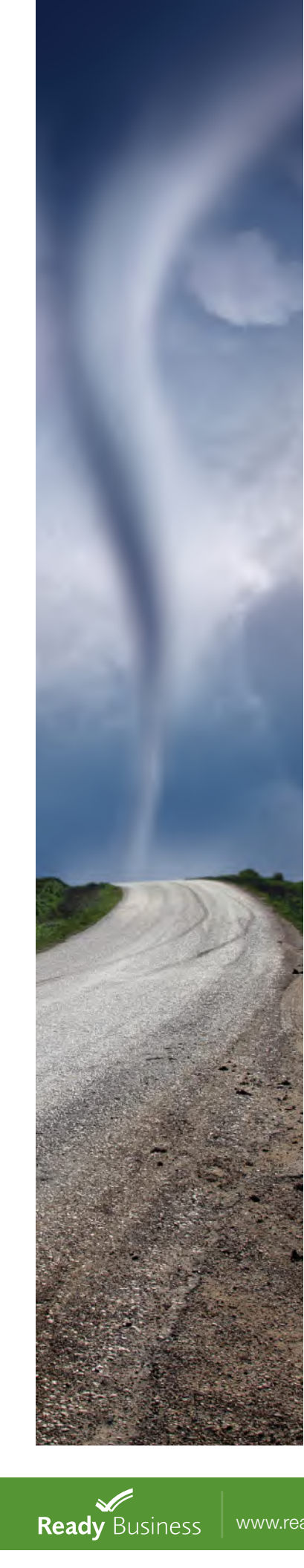
Toolkits are available for download [here](#) on the Federal Emergency Management Agency (FEMA) website.

The second program component is the *Ready Business Workshop*. Workshops provide participants with information from subject matter experts and facilitates collaboration with local leaders.

Fundamentals for a successful *Ready Business Workshop* include:

- A dedicated, integrated host committee
- Strong support from state, local, tribal, and territorial governments and regional management and associations
- Centrally located venue that allows for ease of attendance
- Meeting room layout that fosters interactive discussion
- Participation from local leadership to inspire attendees
- Knowledgeable and articulate disaster preparedness and mitigation subject matter experts
- Participation by a skilled, experienced, scenario-based discussion leader
- Broad-based business and organization participation





Benefits to planning and executing a *Ready Business Workshop* in your community include:

**Advancement and integration** of business continuity preparedness and mitigation planning into daily operations of the business community;

**Introduction of new organizations** to the benefits of the *Ready Business Program* and public-private partnerships to enhance disaster resilience; and

Organizations that possess, **understand, and leverage** available resources for disaster preparedness and mitigation.

“After participating in an earthquake version of the *Ready Business Workshop*, one attendee commented, “I have many opportunities to attend high-profile emergency conferences, but this workshop provided more practical, useful information than any of those other events.”

## Purpose of the “How-To” Guide

This “How-To” Guide is designed to support those that wish to organize and implement a *Ready Business Workshop* in their community. The protocol in this guide is based on a successful workshop model that has attracted more than 450 U.S. private and public sector participants, including small, medium, and large companies; nonprofit and faith-based organizations; and independent and public schools.

Once you select a *Ready Business Toolkit* as the basis for a workshop, this guide will assist you and your planning team by providing insight to the process to plan and execute a *Ready Business Workshop*. Depending on the needs of your community, you may wish to combine one or more hazards within a workshop. Past workshops have combined multiple hazards and addressed the interrelation between them. The guide provides recommendations from inception to post-workshop evaluation.

If you are interested in hosting a *Ready Business Workshop* and need technical assistance, please contact the *Ready Business Program* at [FEMA-Private-Sector@fema.dhs.gov](mailto:FEMA-Private-Sector@fema.dhs.gov) for more information.

## Introduction: Workshop Overview

The *Ready Business Workshop* contains five sections that align with the *Ready Business Toolkit*.

The first three sections outline the step-by-step process in the toolkit: *Identify Your Risk*, *Develop a Plan*, *Take Action*, and *Be Recognized and Inspire Others*. The next section, a scenario-based discussion which reinforces workshop topics through a simulated disaster response, is integrated into the workshop either during the *Identify Your Risk* step or after all the steps have been covered.

Finally, an optional *Partnership Showcase* may be organized and added to the workshop agenda to provide opportunities for service organizations, vendors, and community groups to network with participants and share preparedness and mitigation information.

### IDENTIFY YOUR RISK

This section of the workshop outlines the risk to the organization through two presentations.

1. The first presentation outlines the risk through science. Typically, a local disaster risk expert discusses the level of local risk for the hazard topic and recaps impacts of previous disasters that have occurred in the region.
2. The local risk presentation is followed by a business continuity presentation by an expert who covers the *Back-to-Business Self-Assessment* in the toolkit. The *Back-to-Business Self-Assessment* allows the participating business or organization leader to think through a scenario, answer questions, and record the insights regarding how the local disaster would impact their organization.

The answers to their questions will provide them the specific information needed to participate in the scenario-based discussion and move into the next section of the workshop, *Develop a Plan*. This questionnaire can be downloaded [here](#) and should be completed in advance of the workshop so that participants can fully participate in the discussions.

## DEVELOP A PLAN

An interactive panel will discuss the elements necessary to create a *Business Continuity Plan* or a *Preparedness and Mitigation Plan*.

During the *Develop a Plan* interactive panel, subject matter experts will review the toolkit and present information about each pertinent area. Depending on the hazard, the following areas will be included in the interactive panel:

<b>STAFF</b>	Planning and preparedness activities for the protection of staff.
<b>SURROUNDINGS</b>	Nonstructural elements outside the building that potentially pose a threat during an event.
<b>SPACE</b>	Nonstructural workplace surroundings on the interior of the building.
<b>SYSTEM</b>	Systems that support the operation of the building.
<b>STRUCTURE</b>	Architectural and structural elements of the building.
<b>SERVICE</b>	Opportunities for an organization to engage and serve the community following an event.

A dialogue between presenters and participants is encouraged, and time for questions is reserved at the end of each panel to ensure engagement.

## TAKE ACTION

This section of the workshop emphasizes that developing a plan is not enough and the organization needs to follow through by taking action and reviewing the process to gain recognition as a Ready Business.



## BE RECOGNIZED AND INSPIRE OTHERS

The *Ready Business Program* is intended to recognize and reward businesses and organizations that complete preparedness and mitigation actions to protect employees, customers, and business continuity. *Be Recognized and Inspire Others* highlights the benefits to organizations that become a Ready Business.

## SCENARIO-BASED DISCUSSION

The scenario-based discussion can occur at any point during the workshop. Ideally, it should be integrated in the *Identify Your Risk* section and use the already completed *Back-to-Business Self-Assessment* completed by the attendees. Another option is to have the scenario-based discussion as the final activity in the workshop and review all three steps of the *Ready Business Program*. In either form, a facilitator walks participants through a predetermined disaster scenario tailored to the local community and the risks it faces. A scenario-based exercise template is available for download [here](#) on the Federal Emergency Management Agency (FEMA) website.

The scenario-based discussion is typically led by an experienced exercise facilitator that is adept at involving all the organizations in the room and keeping the discussion moving forward. Please contact your local emergency management office to identify an exercise facilitator.

## PARTNERSHIP SHOWCASE

Organizers can consider adding tables or booth space to allow for businesses, organizations, and service providers to showcase information, network, and facilitate additional conversation between the hosts and attendees during breaks and lunch.

The *Partnership Showcase* should allow for planning committee members and key partners (often from the presenter's organizations) to display their information when relevant. Further, workshop organizers should carefully consider, evaluate, and possibly limit showcase participants to ensure the workshop focus remains consistent with preparedness, mitigation, and public-private partnerships.





# Workshop Implementation:

## 1

### PREPARE FOR A READY BUSINESS WORKSHOP

This section of the toolkit outlines the steps necessary to prepare for a *Ready Business Workshop*. This includes information regarding establishing partnerships, choosing a venue, developing the agenda, and selecting presenters. It is important to note that the examples provided are best practices and may be modified to fit the host community.

Templates to assist with the development of the workshop are available for each *Ready Business Toolkit* and may be downloaded [here](#) on the Federal Emergency Management Agency (FEMA) website. *Ready Business Workshop* downloads include:

- *Back-to-Business Self-Assessment*
- Sample Feedback Form
- Invitation and E-Invite Language
- Sample News Media Advisory
- Presentation Format for Each Hazard
- Programs for Each Hazard
- Sample Agenda
- Scenario-Based Discussion Template
- Workshop Signage Template

## 2

### DELIVER A READY BUSINESS WORKSHOP

This section of the toolkit provides logistics details for the day of the event, including reminders for the workshop host and strategies for ensuring that the scenario-based discussion is successful.

The majority of workshop preparation should be completed well in advance of the workshop day. However, organizers should be prepared to adjust and adapt to last minute changes due to weather, travel, or other contingencies.

## 3

### READY BUSINESS WORKSHOP FOLLOW-UP

This section of the toolkit provides suggestions on outreach and workshop follow-up. Examples include suggestions to share all presentations and the attendee list, as well as securing feedback for future improvements.

# 1 | Prepare For a Ready Business Workshop

Follow these steps to prepare for a *Ready Business Workshop*.

Identify a Workshop Planning Team Leader: \_\_\_\_\_

Record the date of the first Planning Team Meeting: \_\_\_\_\_

TASK	TASK	INFORMATION AND CONSIDERATIONS	ASSIGNED TO	
<b>Four Months in Advance</b>				
Identify, Recruit and Build a Team for Workshop Planning	One Month	<ul style="list-style-type: none"> <li>Partners should include FEMA Regional Public Information Officers (PIOs) and private-sector liaison, state and local emergency management officer or hazard mitigation officer, and area chamber of commerce representatives.</li> <li>Important to secure upfront commitments from partners to actively promote the workshop through eBlasts, newsletter articles, organizational calendars, and/or social media.</li> </ul>		
<b>Three Months in Advance</b>				
Convene Initial Meeting of the Planning Team	Ongoing	Schedule these meetings to occur every two weeks from this point until the workshop.		
Determine Workshop Date	Two Weeks	Cross-reference date against known conferences/workshops, holidays, and/or anniversaries of significant events.		
Develop a Budget	Two Weeks	<ul style="list-style-type: none"> <li>Consider the expense of the venue, bear in mind potential public venues like universities and libraries that may be free of cost.</li> <li>Consider the expense of stipends for subject matter experts to present.</li> <li>Consider lunch and break expenses (this could be done through a private partner contribution as well).</li> <li>Consider the expense of audio/visual needs.</li> <li>Consider the expense of parking fees for participants.</li> </ul>		

TASK	TASK DURATION	INFORMATION AND CONSIDERATIONS	ASSIGNED TO	COMPLETION DATE
<b>Three Months in Advance (cont.)</b>				
Secure Venue	Two Weeks	<ul style="list-style-type: none"> <li>• Consider exhibition space.</li> <li>• Locate space that accommodates up to 100 attendees.</li> <li>• Look for a venue that includes audio/visual equipment, so this will not become an additional expense for the workshop.</li> <li>• Ensure space allows for adequate room to conduct the scenario-based discussion.</li> <li>• Ensure space allows for people with disabilities and access and functional needs, for example accomodating those with wheelchairs, service animals, and providing an ASL interpreter for those who are deaf or hard of hearing.</li> </ul>		
<b>Ten to Twelve Weeks in Advance</b>				
Develop an Agenda and Secure Presenters	Four Weeks	<ul style="list-style-type: none"> <li>• Appendix A - Sample agenda can be used as the starting point.</li> <li>• Appendix B - Description of speaker/presenter roles.</li> <li>• Recruit/secure FEMA regional and local representatives along with technical speakers.</li> <li>• Confirm hands-on activities/exhibit space.</li> </ul>		
<b>Eight to Ten Weeks in Advance</b>				
Name the Table-Top Exercise Coordinator	One Day	<ul style="list-style-type: none"> <li>• Coordinator is responsible for developing a draft table-top exercise for review.</li> <li>• Reference the exercise template at (website for download).</li> </ul>		
Develop Online Registration System	One Day	<ul style="list-style-type: none"> <li>• Develop online registration portal to gather attendee information.</li> <li>• Develop confirmation email that includes instructions for completing <i>Back-To-Business Self-Assessment</i> before the workshop.</li> </ul>		
Start Marketing/Promotion	Ongoing	<ul style="list-style-type: none"> <li>• Develop and distribute invitation (Appendix C - Invitation and Marketing Email template).</li> <li>• Develop media advisory and news release (Attachment D - Sample News Media Advisory).</li> </ul>		

TASK	TASK DURATION	INFORMATION AND CONSIDERATIONS	ASSIGNED TO	COMPLETION DATE
<b>Eight to Ten Weeks in Advance (cont.)</b>				
Start Marketing/Promotion	Ongoing	<ul style="list-style-type: none"> <li>Start targeted outreach to local business/community calendar reporters.</li> <li>Contact local chambers of commerce and neighborhood business associations and ask them to promote the workshop to their membership.</li> <li>Request that partners engage in promotion and follow up individually with materials needed to promote and a reminder of who and when they promised to reach out to.</li> </ul>		
<b>Six Weeks in Advance</b>				
Review Table-Top Exercise with Coordinator	One Week	Coordinator to review table-top exercise during planning team meeting and then route for review.		
<b>Four Weeks in Advance</b>				
Finalize Table-Top Exercise	One Week	<ul style="list-style-type: none"> <li>Coordinator to review comments from the planning team and incorporate into exercise.</li> <li>Review the exercise with the planning committee.</li> <li>Finalize exercise and send to the workshop lead for incorporation into the presentation.</li> </ul>		
Order Audio Visual Support and Equipment	One Week	Baseline equipment should include projector, screen, podium microphone, table top microphone(s) for four-person panel, and two wireless microphones for audience questions.		
Reminder to Registered Attendees and Email Blast to Garner Registrations	Ongoing	<ul style="list-style-type: none"> <li>Feature information about one of the speakers/presentations.</li> <li>Include reminder to complete <i>Back-to-Business Self-Assessment</i>.</li> </ul>		
Media Pitching	One Week	Use media advisory to pitch by phone to local media as well as to promote workshop attendance.		
Meet with all Presenters to Discuss Material and Workshop Logistics	One Week	<ul style="list-style-type: none"> <li>Schedule meetings with each presenter to discuss their presentation and address logistical needs, such as headshot and bio.</li> <li>Inform presenters that their presentations will be shared following the workshop.</li> </ul>		

TASK	TASK DURATION	INFORMATION AND CONSIDERATIONS	ASSIGNED TO	COMPLETION DATE
Confirm Exhibitors (if Applicable)	Two Weeks	<ul style="list-style-type: none"> <li>Consider private-sector partners whose services and/or products are relevant to the hazards.</li> <li>Consider nonprofit organizations and government agencies relevant to response and recovery.</li> </ul>		
<b>Three Weeks in Advance</b>				
Receive Speaker Headshots and Bios for Program	Ongoing	<ul style="list-style-type: none"> <li>Begin development of the program.</li> <li>Download a sample workshop program <a href="#">here</a>.</li> </ul>		
Order Food and Beverage for the Workshop	One Week	<ul style="list-style-type: none"> <li>Ideal to secure private sponsorship of lunch.</li> <li>Consider food allergies and special food requests.</li> </ul>		
<b>Two Weeks in Advance</b>				
Complete Agenda and Program	Two Days	<ul style="list-style-type: none"> <li>Provide presenters with the agenda.</li> <li>Add the agenda to the workshop program.</li> <li>Send the completed agenda to the registered participants with a workshop reminder.</li> </ul>		
Print Program/ Workshop Guide	Two Days	Includes printing and assembly of workshop program guides.		
<b>One Week in Advance</b>				
Print Signage	One Day	Directional, podium, and partner signs.		
Ship Items to Venue	One Day	Send programs and all directional, podium, and partner signs to venue.		
Name Badges and Holders	One Day	Secure name badges and holders.		
Name Badge Template	One Day	Complete name badge template.		
Ship Workshop Materials	One Day	Shipping time frame dependent upon location of workshop.		
Pitch Media	Ongoing	Pitch media (all outlets and trades) to cover workshop.		

TASK	TASK DURATION	INFORMATION AND CONSIDERATIONS	ASSIGNED TO	COMPLETION DATE
<b>One Week in Advance (cont.)</b>				
Receive Speaker Presentations and Develop Master Presentation	Two Days	Use the appropriate presentation template for the workshop.		
Send Reminder to Registrants Regarding the Workshop and Completing the <i>Back-to-Business Self-Assessment</i>	One Day	<ul style="list-style-type: none"> <li>• Include address.</li> <li>• Include information regarding cancellation policy.</li> <li>• Include contact name for specific questions.</li> </ul>		
Food and Beverage for Workshop	One Day	<ul style="list-style-type: none"> <li>• Confirm final head count with catering provider.</li> </ul>		
<b>One Day Before Travel</b>				
Complete Name Badge Printing	One Day	Assemble name badges.		
Develop Tent Cards to Assign the Exhibitor Tables	One Day	Create tent cards.		
<b>One Day Before Workshop</b>				
Send Reminder Email to All Registered Attendees	One Day	<ul style="list-style-type: none"> <li>• Include address and lunch information in this email.</li> <li>• Include reminder to complete the <i>Back-to-Business Self-Assessment</i>.</li> </ul>		



## 2 | *Deliver a Ready Business Workshop*

There are two important items to manage on the day of the workshop: room setup and audio/visual equipment. For room setup, assign a planning team member to oversee the following during the workshop:

- Placement of signs to direct attendees to the proper room
- Location and ease of access to the registration table
  - » This should be located directly outside workshop room
  - » A sign in sheet and nametags should be available at the table
- Layout of the workshop room is conducive for presentations and scenario-based discussion
- Location of fire exits and restrooms are known
- Lunch space has been provided and is easily accessible

For the audio/visual setup, it is important to check the following:

- Computer systems with the projector attached
- Loaded and prepared presentation slides
- Sound and internet connection for any videos
- Microphones for the presenters

Additionally, as the workshop progresses throughout the day, organizers should monitor the workshop environment including basic logistics like room temperature, as well as ways to increase engagement and participation of attendees with the presenter or host.

---

## 3 | *Ready Business Workshop Follow-Up*

After the workshop is complete, it is important to follow up with the attendees. Post-event information for workshop attendees may include:

- Attendee roster
- Link to download the presentations and program
- Links to partner websites

Consider adding participants to a list serve with additional information and future events. Follow up 3-6 months after the event with workshop participants to evaluate actions taken.

Additionally, reviewing feedback forms and discussing recommendations with the planning team for future workshops is critical. A feedback form template is available for download [here](#) on the Federal Emergency Management Agency (FEMA) website.

Share this information with the FEMA Ready Campaign and Individual and Community Preparedness Division. Other FEMA regions hosting workshops in the future will benefit from this feedback.



## Valuable Websites

### **Prepathon**

[www.ready.gov/prepare](http://www.ready.gov/prepare)

### **Federal Alliance for Safe Homes (FLASH)**

[www.flash.org](http://www.flash.org)

### **Ready Business**

[www.ready.gov/business](http://www.ready.gov/business)

### **Ready Business Templates**

[www.flash.org/readybusiness](http://www.flash.org/readybusiness)



# Appendix A

## Sample Agenda

The following are full day and half-day sample agenda templates you may use to develop your workshop agenda. The panel will consist of only those elements contained in the hazard-specific toolkit. Appendix B provides detailed descriptions of speaker/presenter roles.

### Anywhere Ready Business Full-Day Workshop Agenda

**Date of Workshop**

**9:00 a.m. – 4:00 p.m.**

**Address**

8:30 a.m. – 9:00 a.m.	Registration
9:00 a.m. – 9:15 a.m.	Welcome
9:15 a.m. – 9:30 a.m.	Introduction to Ready Business – [Insert Toolkit Topic] <i>An overview of the Ready Business Program.</i>

### IDENTIFY YOUR RISK

9:30 a.m. – 10:00 a.m.	The Disaster Threat to Your Businesses <i>An explanation of the science and the risk of [Insert Hazard/s] in your area.</i>
------------------------	--

10:00 a.m. – 10:15 a.m.	Break
-------------------------	-------

10:15 a.m. – 12:15 p.m.	<i>Back-to-Business Self-Assessment Scenario-Based Discussion</i> <i>Learn about the impacts a/an [Insert Hazard/s] could have on your organization and fill out the initial Ready Business Back-to-Business Self-Assessment as the first step in your planning process.</i>
-------------------------	---

12:15 p.m. – 1:00 p.m.	Lunch
------------------------	-------

### DEVELOP A PLAN

1:00 p.m. – 2:00 p.m.	Ready Business Interactive Panel <i>Learn about the components of preparedness and mitigation that go into developing a Preparedness and Mitigation Plan.</i>
-----------------------	--

### TAKE ACTION & BE RECOGNIZED AND INSPIRE OTHERS

2:00 p.m. – 2:30 p.m.	Ready Business Application and Recognition <i>Learn how to have your business recognized for working towards a more resilient community.</i>
-----------------------	---

2:30 p.m. – 3:00 p.m.	A Service Story <i>A local business shares their disaster and recovery story.</i>
-----------------------	--

## Appendix A *(cont.)*

### Anywhere Ready Business Half-Day Workshop Agenda

**Date of Workshop**

**9:00 a.m. – 12:00 p.m.**

**Address**

8:30 a.m. – 9:00 a.m.	Registration
9:00 a.m. – 9:15 a.m.	Welcome
9:15 a.m. – 9:30 a.m.	Introduction to Ready Business – <i>[Insert Toolkit Topic]</i> <i>An overview of the Ready Business Program.</i>

#### **IDENTIFY YOUR RISK**

9:30 a.m. – 9:45 a.m.	The Disaster Threat to Your Businesses <i>An explanation of the science and the risk of [Insert Hazard/s] in your area.</i>
-----------------------	--

9:45 a.m. – 10:45 a.m.	Back-to-Business Self-Assessment Scenario-Based Discussion <i>Learn about the impacts a/an [Insert Hazard/s] could have on your organization and fill out the initial Ready Business Back-to-Business Self-Assessment as the first step in your planning process.</i>
------------------------	--

#### **DEVELOP A PLAN**

10:45 a.m. – 11:45 a.m.	Ready Business Interactive Panel <i>Learn about the components of preparedness and mitigation that go into developing a Preparedness and Mitigation Plan.</i>
-------------------------	--

#### **TAKE ACTION & BE RECOGNIZED AND INSPIRE OTHERS**

11:45 a.m. – 12:00 p.m.	Ready Business Application & Recognition <i>Learn how to have your business recognized for working towards a more resilient community.</i>
-------------------------	---

## Appendix B

### Description of Speaker/Presenter Roles

Speaker/Presenter Role	Description
Workshop Lead	The Workshop Lead is responsible for introductions and movement from one session to another throughout the day, and is typically a person from the Workshop Planning Team.
Welcome Speaker(s)	This speaker welcomes the attendees to the workshop and the area, and is usually a local leader or a member of the Workshop Planning Team.
Introduction to Ready Business	The Introduction presenter must be familiar with the <i>Ready Business Program</i> and history of the <i>Ready Business Workshops</i> .
The Disaster Threat to Your Business	This presenter is a subject matter expert that can speak to the science and the history of the disasters in that region.
<i>Back-to-Business Self-Assessment</i> Scenario-Based Discussion	This business continuity expert uses the scenario and questionnaire from the toolkit to assist business leaders with identifying risk to their businesses from disaster to help prioritize preparedness and mitigation actions.
Ready Business Interactive Panel	This panel is comprised of subject matter experts in the fields of preparedness, mitigation, and service before, during, and after a disaster. Ideally a separate speaker addresses each topic within the toolkit. Examples of presenters include academics, mitigation experts, and volunteers.
Ready Business Application and Recognition	This presenter must be familiar with the <i>Ready Business Program</i> and the steps to apply for recognition.
A Service Story	Presenter for this topic is from a business that survived a disaster and has a story to tell about their lessons learned and how they changed their habits moving forward.

# Appendix C

## Invitation and Marketing Email Template

### [Insert Year] WORKSHOP SERIES



#### JOIN US!

#### Get Ready®, [Insert Location].

##### *Identify Your Risk*

Learn about business continuity, disaster response, and the cost benefit of preparing for [hazard] and other business interruption.

##### *Develop a Plan*

Identify preparedness and mitigation actions needed to ensure safety and business continuity. Complete assessments and begin planning for retrofit projects.

##### *Take Action*

Learn how to perform preparedness and mitigation activities using Ready Business.

##### *Be Recognized and Inspire Others*

Gain recognition for preparing your organization for [Hazard].

#### WHAT

[Insert Workshop Type]

#### WHEN

[Insert Date]

[Insert Time]

#### WHERE

[Insert Workshop Location

Address

City, State Zip Code]

#### HOW

The Workshop is free, but registration is required. [Insert Registration Link.]

STRENGTHENING PARTNERSHIPS



FEMA



FLASH  
Strengthening Homes &  
Safeguarding Families

[Insert Co-  
Presenters/Sponsors]

## Appendix C *(cont.)*

### Invitation and Marketing Email Template

Dear First and Last Name,

Is your organization prepared for [Hazard]? [Insert sentence about hazard relevant to this location.]

Why is this important? The Small Business Administration (SBA) estimates that 40 percent of small businesses will not reopen after disaster, 25 percent more will close within one year, and 75 percent of businesses without continuity planning will fail within three years of a disaster. Businesses, large and small, are at risk—as are your employees, customers, and the community you serve.

The good news is that the actions to protect your business, employees, and customers are simple, scalable, and many are very low cost to implement. The [Location] *Ready Business Workshop* will provide you with actionable information to protect your people, property, and operations by assisting you to *Identify Your Risk, Develop a Plan, Take Action, and Be Recognized and Inspire Others*.

*The Ready Business Workshop* will provide:

- Experts to explain [Hazard] risks specific to [Location];
- Information explaining the level of support you can expect from your local emergency management agency if a large-scale disaster occurs;
- Preparedness actions you can take before, during, and after disasters; and
- Provide simple materials and helpful links to additional resources.

Maintaining business continuity is important for you, and when you are able to continue operations after a disaster, you will improve your community's ability to recover as well.

Regardless of your experience level in preparing for disasters, this FREE workshop is for you. Please join us!

# Appendix D

## Sample News Media Advisory

[Insert Organization Logo]

[Insert Media Point of Contact

Name

Title

Phone Number

Email Address]

[Insert Date]

### ***Ready Business Workshop Set for [Insert Location]***

*[Insert Toolkit Topic] Toolkit for Businesses Now Available*

**WHAT:** FEMA Individual and Community Preparedness Division, FEMA Region [Insert Region Number], [Insert Organization Name], and the Federal Alliance for Safe Homes, (FLASH)<sup>®</sup> welcome businesses and organizations to the *Ready Business – [Insert Toolkit Topic]* workshop in [Insert City, State]. With a focus on the *Ready Business – [Insert Toolkit Topic]* Toolkit, workshop participants will learn to identify their risks, develop a plan, take action, and be recognized and inspire others to mitigate potential impacts. The daylong workshop delivers modules focused on Staff, Surroundings, Space, Systems, Structure, and Service.

**WHO:** Featured presenters will include:

- [Insert Featured Speaker Name, Title, Organization]
- [Insert Featured Speaker Name, Title, Organization]
- [Insert Featured Speaker Name, Title, Organization]

**WHEN:** [Insert Workshop Date], 9:00 a.m. – 4:00 p.m.

**WHERE:** [Insert Location and Address of the Workshop]

**HOW:** The *Ready Business* workshop is free, but registration is required. Please click here [Hyperlink to Registration Page] to register, or contact [Insert Point of Contact and Hyperlink to Email Address] for more information.

## Appendix E

### Sample Attendee Email

Good Morning [Location] Attendees,

This is a reminder that the [Location] *Ready Business Workshop* is only a week away. Registration will begin at 8:30 a.m., and the Workshop will start promptly at 9 a.m. on [Insert Workshop Date] at the [Insert Workshop Location]. The address is:

[Insert Address of the Workshop]

The workshop will be located on the \_\_\_ floor in room \_\_\_\_. Parking will be complimentary and will be located\_\_\_\_\_.

A complimentary box lunch will be included for registered, full-day attendees.

If you have any questions, please call [Insert Point of Contact Phone Number and Hyperlink to Email Address].

# Appendix F

## Sample Feedback Form



[Insert Co-Presenters/Sponsors]

### PARTICIPANT FEEDBACK FORM [Insert Toolkit Topic] Ready Business Workshop [Insert Location]

Participant Name (optional): \_\_\_\_\_ Date: \_\_\_\_\_

Organization Name: \_\_\_\_\_

Location: \_\_\_\_\_

### Part I – Participant Evaluation

**Section I.** Please rate, on a scale of 1 to 5, your overall evaluation of the activities relative to the list provided below, with 1 indicating a rating of **Strongly Disagree** and 5 indicating a rating of **Strongly Agree**.

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	<u>Strongly Agree</u>
Introduction to Ready Business	1	2	3	4	5
The Disaster Threat to Your Businesses	1	2	3	4	5
<i>Back-to-Business Self-Assessment</i>	1	2	3	4	5
Ready Business Interactive Panel	1	2	3	4	5
Ready Business Application & Recognition	1	2	3	4	5
A Service Story	1	2	3	4	5
The workshop presentations were relevant to current issues.	1	2	3	4	5
Overall, the workshop was constructive and worthwhile.	1	2	3	4	5



# Appendix F (cont.)

## Sample Feedback Form

### Section II.

*In the space provided below, please answer yes or no to the following questions. Please provide a corresponding observation action to enhance the different aspects of the Ready Business Preparedness Workshop e.g., planning, policies, training, personnel, equipment, etc.*

- Did you receive the information that you expected today?

Yes or No

Observations:

---

---

- Are you more likely to develop a business continuity plan based on the information that you heard today? based on the information that y

Yes or No

Observations:

---

---

---

- Are you more likely to perform mitigation to protect your employees and property based on the information that you heard today?

Yes or No

Observations:

---

---

---

- Will the tools provided in the workshop be helpful in identifying risk, developing a plan, and taking action to perform mitigation?

Yes or No

**Appendix F** *(cont.)*  
Sample Feedback Form

**Observations:**

---

---

---

---

- **Are there additional topics or information that you would like included in the workshop? based on the information that y**

**Yes or No**

**Observations:**

---

---

---

---

**Part II – Participant Feedback**

**Section I. Observations and Recommended Actions**

*In the space provided below, please record strengths or areas of improvement you are considering as a result of the workshop. Please provide a corresponding recommended action to enhance or correct that observation e.g., planning, policies, training, personnel, equipment, etc.*

Observation:

---

---

---

Recommendation:

---

---

---

Recommendation:

---

---

# Appendix F (cont.)

## Sample Feedback Form

Observation:

---

---

---

Recommendation:

---

---

---

---

### Section II. Moving Forward. Identify Needs, Identify Resources.

*Are additional resources required to move forward with preparedness activities?*

---

---

---

---

---

### Section III. Additional Feedback

*Please provide us with any additional feedback regarding the workshop.*

---

---

---

---

---

---

---

---









**FEMA**



**FLASH**  
Strengthening Homes &  
Safeguarding Families

The Federal Alliance for Safe Homes, Inc. (FLASH)® has prepared the *Ready Business Toolkit* for informational and educational purposes only. Although the information and recommendations are presented in good faith and believed to be correct, the author makes no representations or warranties, express or implied, regarding the information.

Users are advised to seek the assistance of a licensed professional engineer or design professional with any questions about this material as it may apply to their circumstances. If the User is dissatisfied with any information in this toolkit or with any of these Terms and Conditions of Use, the User's sole and exclusive remedy is to discontinue using the *Ready Business Toolkit*.





---

# **Appendix B-2**

## Business Emergency Response Plan



Company Name

---

Address

---

Telephone

---

Contact Name

Title

---

Last Revision Date

---

## Policy and Organizational Statements

Identify the goals and objectives for the emergency response plan.

Define what your emergency response team is expected to do during an emergency (e.g., evacuate employees and visitors, provide first aid, etc.)

Identify any regulations covered by your plan (e.g., OSHA, fire code, etc.)

## Evacuation Plan

Evacuation may be required if there is a fire in the building or other hazard. The evacuation team will direct the evacuation of the building and account for all employees outside at a safe location.

Employees will be warned to evacuate the building using the following system:	
Employees should assemble at the following location for accounting by the evacuation team:	

(Post a map showing the location(s) in a conspicuous location for all employees to see.)

Person who will bring the employee roster and visitor log to the evacuation assembly area to account for all evacuees. The evacuation team leader will be informed if anyone is missing or injured.	
---	--

Evacuation Team	Name / Location
Evacuation Team Leader	
Floor Wardens (one for each floor)	
Searchers (one per floor)	
Stairwell and Elevator Monitors	
Aides for Persons with Disabilities	
Assembly Area Monitors (account for evacuees at the assembly area and inform incident commander if anyone is missing or injured)	

## Severe Weather/Tornado Sheltering Plan

If a tornado warning is issued, broadcast a warning throughout all buildings instructing everyone to move to shelter.

Shelter-In-Place Team Assignments	Name / Location
Team Leader	
Person to monitor weather sources for updated emergency instructions and broadcast warning if issued by weather services	
Persons to direct personnel outside to enter the building	
Persons to direct employees to designated tornado shelter(s)	

### Tornado Warning System & Tornado Shelter Locations

Location of tornado warning system controls	
Location of tornado shelters	

## Shelter-In-Place Plan

If warned to "shelter-in-place" from an outside airborne hazard, a warning should be broadcast and all employees should move to shelter.

Shelter-In-Place Team Assignments	Name / Location
Team Leader	
Direct personnel outside to enter the building; then close exterior doors	
Shutdown ventilation system and close air intakes	
Move employees to interior spaces above the first floor (if possible)	
Person to monitor news sources for updated emergency instructions	
Assembly Area Monitors (to account for evacuees at the assembly area)	

### Shelter-In-Place Shutdown of Ventilation System

Location of controls to shutdown ventilation system:	
Location of air handling units, fan rooms, or air intakes:	

**Lockdown Plan**

Persons trained to use the warning system to warn persons to "lockdown"

Name	Location

---

**Instructions for Broadcasting Warnings**

---

Where to Access the Warning System  
(e.g., telephone, public address system, etc.)

---

Instructions for using the system

## Medical Emergency Plan

If a medical emergency is reported, dial 9-1-1 and request an ambulance. Provide the following information:

- Number and location of victim(s)
- Nature of injury or illness
- Hazards involved
- Nearest entrance (emergency access point)

Alert trained employees (members of the medical response team) to respond to the victim's location and bring a first aid kit or AED.

### Personnel Trained to Administer First Aid, CPR, or use Automated External Defibrillator (AED)

Name	Location / Telephone

### Locations of First Aid Kits and Automated External Defibrillator(s)

Locations of First Aid Kits and "Universal Precautions" kit (used to prevent exposure to body fluids)	
Locations of Automated External Defibrillator(s) (AEDs)	

## Procedures

- Only trained responders should provide first aid assistance.
- Do not move the victim unless the victim's location is unsafe.
- Control access to the scene.
- Take "universal precautions" to prevent contact with body fluids and exposure to bloodborne pathogens.
- Meet the ambulance at the nearest entrance or emergency access point; direct them to victim(s).

## Fire Emergency Plan

If a fire is reported, pull the fire alarm, (if available and not already activated) to warn occupants to evacuate. Then Dial 911 to alert Fire Department. Provide the following information:

- Business name and street address
- Nature of fire
- Fire location (building and floor or)
- Type of fire alarm (detector, pull station, sprinkler waterflow)
- Location of fire alarm (building and floor)
- Name of person reporting fire
- Telephone number for return call

Evacuation team to direct evacuation of employees and visitors.

### Procedures

- Evacuate building occupants along evacuation routes to primary assembly areas outside.
- Redirect building occupants to stairs and exits away from the fire.
- Prohibit use of elevators.
- Evacuation team to account for all employees and visitors at the assembly area.
- Meet Fire Department Incident Commander (IC). Inform the IC if everyone has been accounted for and if there are any injuries. Provide an update on the nature of the emergency and actions taken. Provide building floor plans, keys and other assistance as requested.
- Assign personnel to verify that fire protection systems are operating normally and to operate building utility and protection systems as directed by the fire department.

## Property Conservation

Identify preparations before a forecast event such as severe weather.

Identify how you will assess damage; salvage undamaged goods; and cleanup the building following an incident.

Identify the contractors, equipment, and materials that would be needed. Update the resource table at the end of this plan.



## Annexes

### Hazard or Threat-specific

---

**Instructions:** Review the following list of hazards and identify those hazards that are foreseeable. Review the links to information provided within the Ready Business website to develop specific emergency procedures.

#### Natural hazards (geological, meteorological, and biological)

##### Geological hazards

- Earthquake
- Tsunami
- Volcano
- Landslide, mudslide, subsidence

##### Meteorological Hazards

- Flood, flash flood, tidal surge
- Water control structure/dam/levee failure
- Drought
- Snow, ice, hail, sleet, arctic freeze
- Windstorm, tropical cyclone, hurricane, tornado, dust storm
- Extreme temperatures (heat, cold)
- Lightning strikes (Wildland fire following)

##### Biological hazards

- Foodborne illnesses
- Pandemic/Infectious/communicable disease (Avian flu, H1N1, etc.)

##### Technology caused event

- Utility interruption or failure (telecommunications, electrical power, water, gas, steam, HVAC, pollution control system, sewerage system, other critical infrastructure)

#### Human-caused events (accidental and intentional)

##### Accidental

- Hazardous material spill or release
- Nuclear Power Plant Incident (if located in proximity to a Nuclear power plant)
- Explosion/Fire
- Transportation accident
- Building/structure collapse
- Entrapment and or rescue (machinery, confined space, high angle, water)
- Transportation Incidents (Motor Vehicle, Railroad, Watercraft, Aircraft, Pipeline)

##### Intentional

- Robbery
- Lost Person, Child Abduction, Kidnap, Extortion, Hostage Incident, Workplace violence
- Demonstrations, Civil disturbance
- Bomb threat, Suspicious package
- Terrorism



## Public Emergency Services & Contractors

Emergency Service	Name	Emergency Telephone	Business Telephone
Fire Department			
Emergency Medical Services			
Police Department			
Emergency Management Agency			
Hospital			
Public Health Department			
State Environmental Authority			
National Response Center (EPA)			
Electrician			
Plumber			
Fire Protection Contractor			
Elevator Service			
Hazardous Materials Cleanup			
Cleanup / Disaster Restoration			

## Warning, Notification & Communications Systems

The following systems are used to warn employees to take protective action (e.g., evacuate, move to tornado shelter, shelter-in-place, or lockdown) and provide them with information. The Communications capabilities enable members of our emergency team to communicate with each other and others.

	System	Location/Control Panel or Access Point
<b>Warning System</b>	Fire Alarm	
	Public Address	
	Other (describe)	
<b>Notification System</b>	Electronic	
	Telephone call tree	
<b>Communications Capabilities</b>	Telephone	
	Two-way radio	

## Fire Protection Systems

Document the fire protection systems including the types of systems, location, area, or hazard protected, and instructions.

System Type	Location	Access Point / Instructions
Sprinkler System	Control Valve	
	Control Valve	
	Control Valve	
Fire Pump		
Special Extinguishing Systems	Computer Room	
	Kitchen	
	Manufacturing Area	

## Revision History

Revision No.	Date	Description of Changes	Authorization

## Plan Distribution & Access

The Plan will be distributed to members of the emergency response team and department heads. A master copy of the document should be maintained by the emergency response team leader. The plan will be available for review by all employees.

Provide print copies of this plan within the room designated as the emergency operations center (EOC). Multiple copies should be stored within the facility EOC to ensure that team members can quickly review roles, responsibilities, tasks, and reference information when the team is activated.

An electronic copy of this Plan should be stored on a secure and accessible website that would allow team member access if company servers are down.

Electronic copies should also be stored on a secured USB flash drive for printing on demand.

---

# **Appendix C**

## Evacuation Modeling Results





## MEMORANDUM

**To:** Michael Huff and Austin Ott, Dudek  
**From:** Dale Aquino, Intersecting Metrics  
**Date:** January 18, 2024  
**Regarding:** **Oak Valley North – Fire Evacuation Analysis**

The purpose of this technical memorandum (memo) is to analyze and document the travel time required for an emergency fire evacuation of the Oak Valley North development (Proposed Project) and surrounding neighborhoods in Calimesa and Beaumont in the County of Riverside.

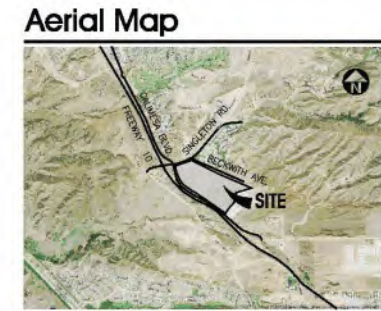
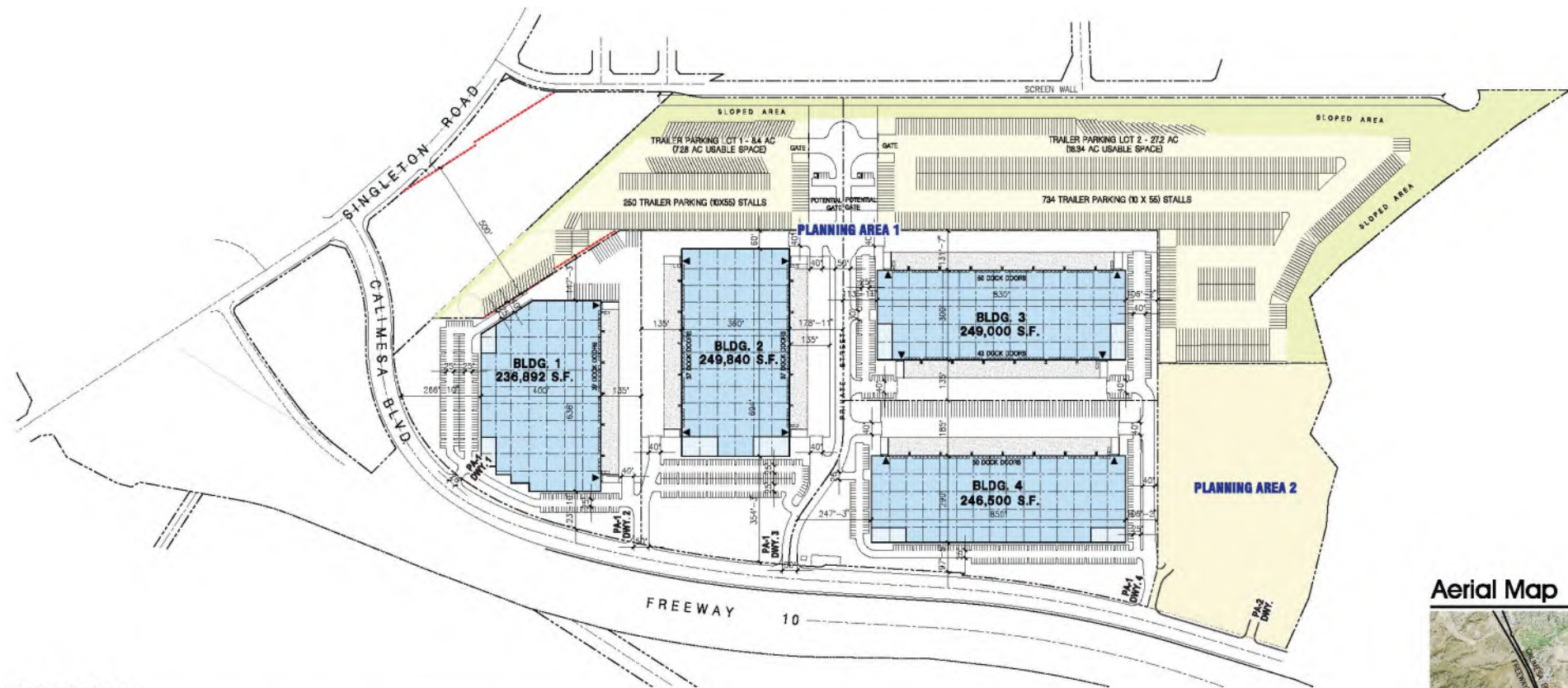
### 1.0 Background

The Proposed Project is located on currently vacant land that is bordered by Interstate 10 (I-10) on the west, Beckwith Avenue on the east, vacant land on the north, and residential units from the Rancho Calimesa Mobile Home Park on the south. The Proposed Project will develop approximately 982,232 square feet (s.f.) of High-Cube Warehouse, a 25.62 acre truck/trailer parking lot, and either a 223 multi-family residential units or a 1,200-seat church. Vehicular access will be provided via five (5) new driveways that will connect to Calimesa Boulevard. **Figure 1** displays the project site plan.

### 2.0 Fire Emergency Evacuation

An evacuation analysis was performed for the Proposed Project to quantify the time it would take for employees and patrons of the Proposed Project, as well as residents from the adjacent residential communities, to evacuate to nearby urban areas in the event of an evacuation due to a wildfire. The analysis performed was based on traffic simulation models developed using existing travel data, roadway network, signal controls, and calibrated aggressive driver behaviors.

Due to the native vegetation areas on both the east and west sides of the study area, the analysis assumes two separate evacuation scenarios where fires could be driven from the east or west directions. The first scenario assumes a Santa Ana-wind driven fire from the north and/or east of the study area and travels in the westbound and southbound direction. The second scenario assumes a fire driven from the south and/or west and travels in the eastbound and southbound direction. These fire conditions are the ones most likely to require evacuation and one that creates the most risk to property and human life. The evacuation scenarios were modeled for both the east and west fire scenarios, which analyzes an exodus of residents and patrons from the Proposed Project and residents of nearby neighborhoods. The neighborhoods analyzed in the evacuation analysis include adjacent areas identified in moderate, high, and very high Cal Fire's Fire Hazard Severity Zones (FHSV) and neighborhoods immediately adjacent to I-10. **Figures 2 & 3** display the evacuation neighborhoods and evacuation routes for each analysis scenario.



**Tabulation**

	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	TRAILER LOT 1	TRAILER LOT 2	TOTAL
<b>SITE AREA</b>							
in s.f.	572,474	758,600	595,052	812,188	436,908	1,163,535	4,136,797 s.f.
in acres	13.1	17.4	13.7	14.1	10.03	26.71	95.0 ac
<b>NET USABLE SITE AREA</b>							
in s.f.					317,116	798,890	1,116,006 s.f.
in acres					7.28	18.34	25.6 ac
<b>BUILDING AREA</b>							
Office	20,000	20,000	20,000	20,000			80,000 s.f.
Warehouse	216,892	229,840	229,000	226,500			902,232 s.f.
<b>TOTAL</b>	<b>236,892</b>	<b>249,840</b>	<b>249,000</b>	<b>246,500</b>			<b>982,232 s.f.</b>
<b>COVERAGE</b>	41.4%	32.9%	41.8%	40.3%			23.7%
<b>AUTO PARKING PROVIDED</b>							
Office: 1/250 s.f.	80	80	80	80			320 stalls
Whse: 1st 40K @ 1/1,000 s.f.	40	40	40	40			160 stalls
Whse: Above 40K @ 1/3,000 s.f.	59	64	63	63			249 stalls
<b>TOTAL</b>	<b>179</b>	<b>184</b>	<b>183</b>	<b>183</b>			<b>729 stalls</b>
<b>AUTO PARKING PROVIDED</b>							
Standard (9' x 19')	121	119	107	101	4	4	456 stalls
Accessible Stalls (9' x 19')	7	7	6	6	0	0	26 stalls
Accessible Stalls - Van (12' x 19')	2	2	1	1	1	1	8 stalls
EV Capable (Chargers + Supply Equip) 20% of Total	44	43	39	37	0	0	163 stalls
Ev Chargers Installed 25% of Total EV Capable	11	11	10	10			
Clean Air/EV/Carpool/Van Pool Vehicles	33	33	28	28	0	0	122 stalls
<b>TOTAL</b>	<b>218</b>	<b>215</b>	<b>191</b>	<b>193</b>	<b>5</b>	<b>5</b>	<b>775 stalls</b>
<b>TRAILER PARKING PROVIDED</b>							
Trailer (10' x 55')	31	0	0	79	250	734	1,094 stalls

**ZONING ORDINANCE FOR CITY**  
 Zoning Designation - Business Park (BP) & Light Industrial (L)

**MAXIMUM BUILDING HEIGHT ALLOWED**  
 Height - 50'

**MAXIMUM FLOOR AREA RATIO**  
 FAR - 40

**SETBACKS**

Setbacks	Landscape	Landscape	Landscape
Collector/Local St. - 15'	10'	10'	10'
Major & Secondary St. - 20'	10'	10'	10'
Side / Rear - none, adjoins R zone 30'	30' + 10'	30' + 10'	30' + 10'

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.



**Legend**

- POTENTIAL OFFICE
- WAREHOUSE
- DRIVE THRU DOOR



Oak Valley North

Figure 1  
Proposed Project Site Plan



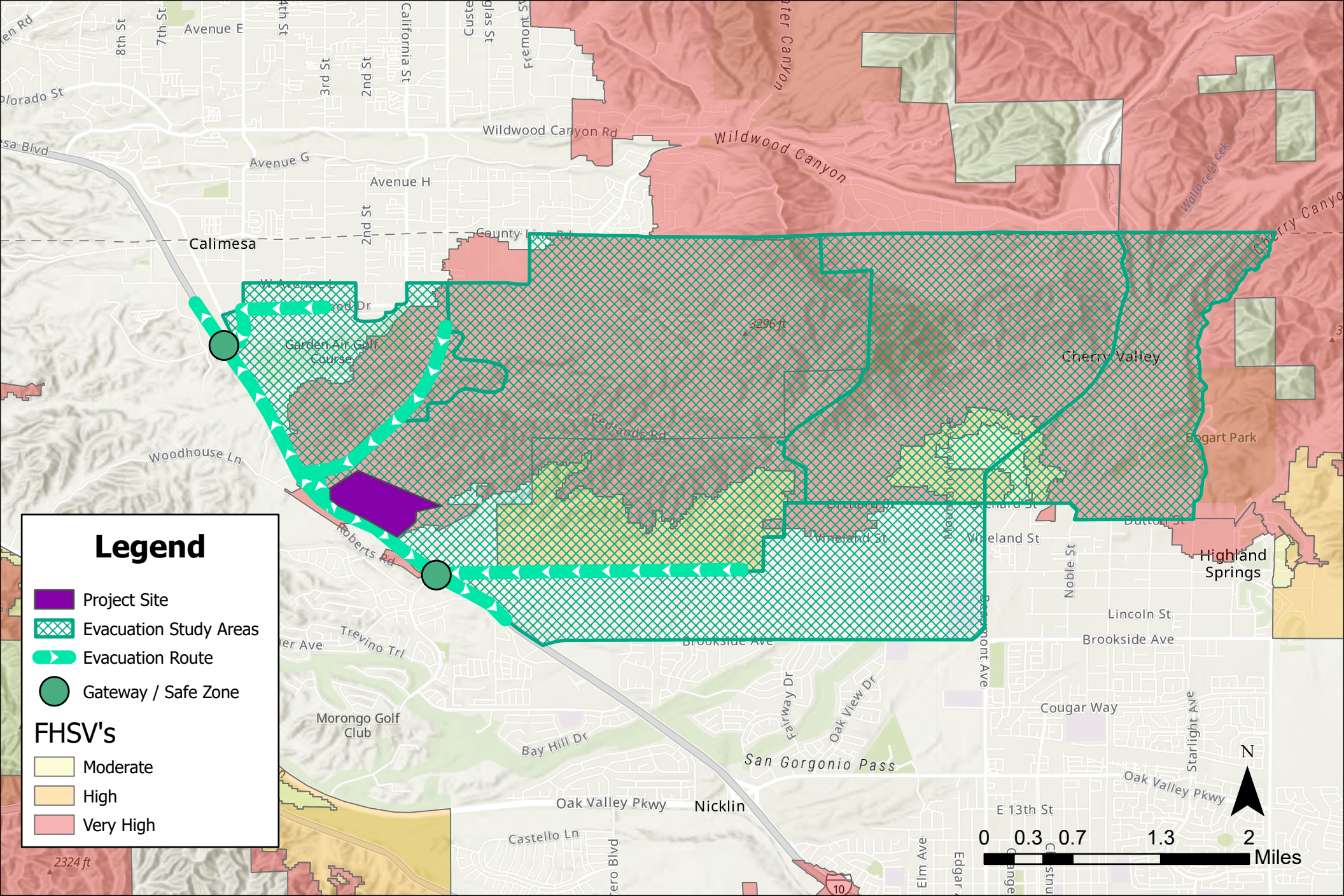


Figure 2  
**Evacuation Areas and Routes (Fire from the East)**

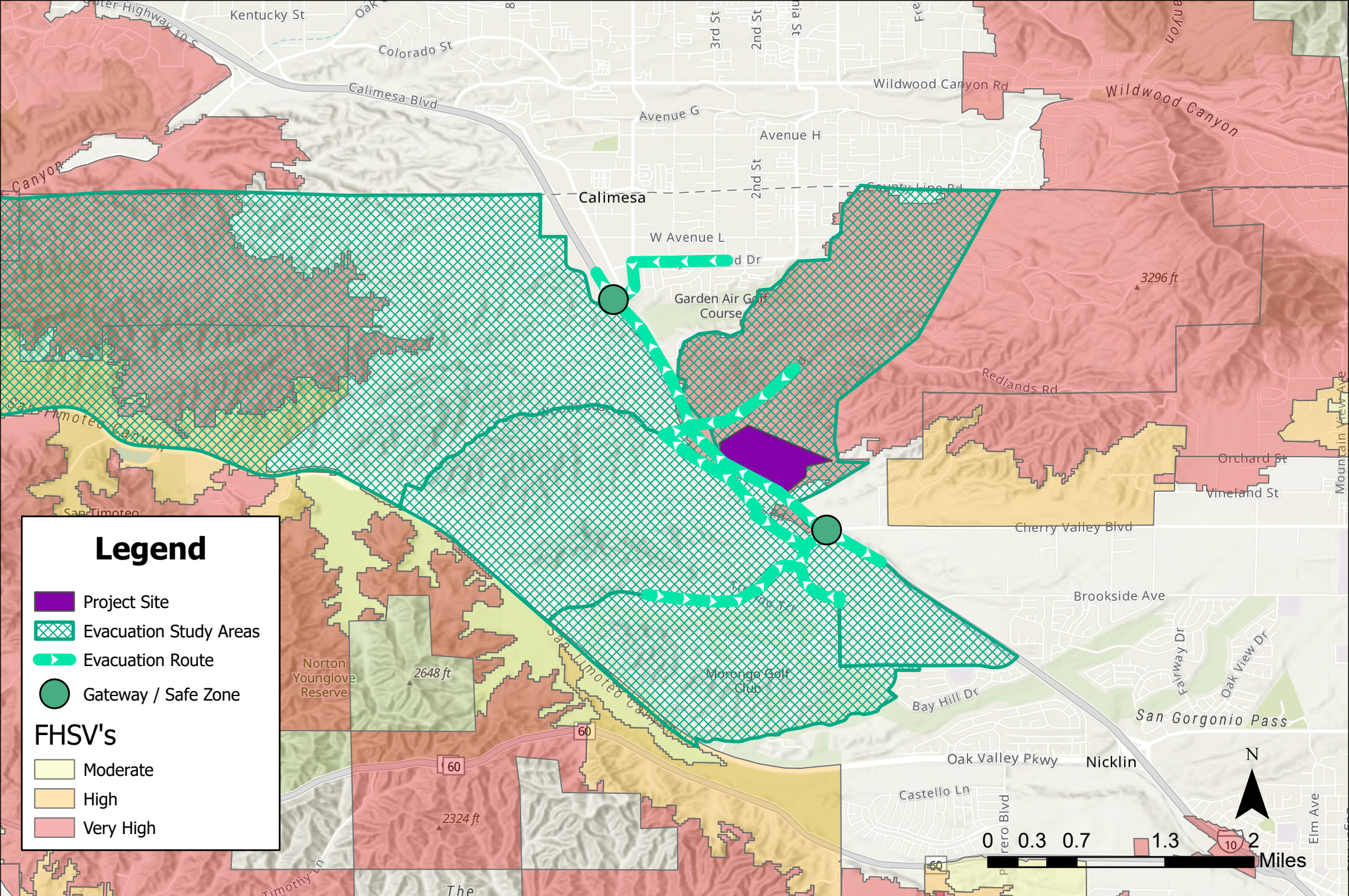


Figure 3

Evacuation Areas and Routes (Fire from the West)



These analyses scenarios were conducted during AM peak hour conditions, which includes majority of the employees from the Proposed Project arriving to the site, background AM commute traffic, and a moderate number of residents at home. The analysis represents a worst-case scenario as it assumes all traffic would be released onto the roadway network at once; however, Riverside County utilizes robust emergency evacuation protocols and best practices that include preemptive warning and phased evacuation protocols to help efficiently and effectively evacuate residents without overwhelming the transportation network.

Large open space vegetated areas surround the south, east, and west sides of the study area, and the greater regional area of north Riverside County and east San Bernardino County. The roadway network was evaluated to determine the best routes for fire response equipment and possible evacuation routes for relocating people to designated safety areas. Consequently, given the surrounding vegetation and the movement of the wind-driven fires, the evacuees of the residents in the study area as well as employees and patrons of the Proposed Project are assumed to travel to the I-10 interchanges at Sandalwood Drive, Singleton Road, or Cherry Valley Boulevard to access more urbanized areas not identified as FHSV's, such as Yucaipa or Beaumont.

The following analysis is intended to present representative evacuation scenarios using the best available information, conservative assumptions, and the best available modeling technology.

## **Analysis Scenarios**

The evacuation analysis includes the following four (4) scenarios that considered traffic from the Proposed Project and evacuees from the adjacent neighborhoods:

- **Existing Land Uses with Fire Driven from East** – This scenario estimates the evacuation time of the existing residential areas adjacent to the Proposed Project. Under this scenario, it is assumed that the wind fire is driven from the east and evacuees are traveling north or southbound to Yucaipa or Beaumont, respectively, for refuge.
- **Existing Land Uses with Fire Driven from West** – This scenario estimates the evacuation time of the existing residential areas adjacent to the Proposed Project. Under this scenario, it is assumed that the wind fire is driven from the west and evacuees are traveling north or southbound to Yucaipa or Beaumont, respectively, for refuge.
- **Existing Land Uses with Project With Fire Driven from East** – This scenario estimates the evacuation time of the Proposed Project and existing residential areas adjacent to the project. Under this scenario, it is assumed that the wind fire is driven from the east and evacuees are traveling north or southbound to Yucaipa or Beaumont, respectively, for refuge.
- **Existing Land Uses with Project With Fire Driven from West** – This scenario estimates the evacuation time of the Proposed Project and existing residential areas adjacent to the project. Under this scenario, it is assumed that the wind fire is driven from the west and traveling north or southbound to Yucaipa or Beaumont, respectively, for refuge.



## **Analysis Methodology**

The evacuation analysis was conducted using Synchro/SimTraffic microsimulation software package (Version 11) by Trafficware Ltd. It considers lane utilization, turn pocket storage lengths, upstream and downstream queue spillbacks, and coordinated signal timings on intersection and roadway operations. Intersection delay/level of service results are based on the SimTraffic results, which are calculated from the simulated vehicles tracked throughout the network. A total of 10 simulation runs were conducted to obtain a reasonable sample size, and the results of those runs were averaged to obtain the evacuation travel time.

The following assumptions were coded into the Synchro/SimTraffic network:

### **Simulation Area**

The simulation area used for this modeling includes the existing land uses and roadway network (except the I-10 freeway mainlines) bounded by Roberts Road to the west, Sandalwood Drive to the north, Singleton Canyon Road to the east, and Cherry Valley Boulevard to the south. The I-10 interchanges at Sandalwood Drive and Cherry Valley Boulevard are the primary egress gateways out of the evacuation network and all major intersections in between those gateways and the Proposed Project were included in the model.

The residential neighborhoods included in the evacuation analysis are neighborhoods adjacent to the project site, in close proximity to native fuels, and are identified as FHSV's, which are most likely to be threatened during a wildfire. These neighborhoods include the Rancho Calimesa Mobile Home Park and Singleton Heights immediately adjacent to the project site, residents in Fairways/Sun Cal west of the Cherry Valley Boulevard and I-10, and residents from Cherry Valley and Downtown Calimesa,

### **Vehicle Volumes**

The base intersection volumes were developed using existing traffic counts collected in May 2022, the number of vehicles in the evacuating area, and the trip generation of the Proposed Project using Institute of Transportation Engineers (ITE) Trip Generation rates. Count worksheets are included in **Attachment A**.

### Evacuating Vehicles

The number of vehicles departing the evacuation area was based on the American Community Services (ACS) 2021 data for nine census block groups<sup>1</sup> in the study area. A portion of residents in a few of the census block groups were not assumed to enter the study area based on their closer proximity to other interchanges. Therefore, the data for the tracts on the south and far east neighborhoods in the study area were modified to include only the number of residents assumed to travel to the I-10 and Cherry Valley Boulevard interchange.

Since the analysis was conducted for the AM peak hour, the ACS vehicle ownership data was adjusted to reflect AM peak hour conditions, which was calculated using the AM peak hour parking demand percentages from the *Institute of Transportation Engineers (ITE) Parking Generation Manual, 5<sup>th</sup> Edition*. Per the ITE parking demand percentages, the parking demand for residential units is approximately 70

---

<sup>1</sup> ACS 2021 vehicle and household data obtained for 60650438091, 60650438023, 60650438241, 60650438244, 60650438243, 60650438231, 60650438232, 60650438233, 60650438242 census block groups.



percent during the AM peak hour. This ratio was applied to the ACS vehicle ownership data to yield AM peak hour residential evacuation traffic volumes.

The Proposed Project’s evacuation vehicles were calculated using the ITE parking rate for General Light Industrial to represent the High-Cube Warehouse, which identifies the total number of personal vehicles that will be on-site. It was assumed that employees would be evacuating the site using their personal vehicle or the truck they traveled in if their personal vehicle was not on site. Consequently, ITE Passenger Car Equivalent (PCE) rates were applied to the ITE parking rates to account for a mixed flow of vehicle fleet evacuating the site. Furthermore, the Proposed Project will include a truck/trailer parking lot that will be used to drop off loaded trailers being changed from one tractor to another. The drop lot can also be used to park empty trailers that are not currently in use. This truck/trailer lot is anticipated to be a supporting use to the High-Cube Warehouse, so no separate evacuation trips were developed for it. Per ITE’s parking demand percentages, 100 percent of employees were anticipated to evacuate during the AM peak hour.

Additionally, the Proposed Project’s multi-family residential unit’s evacuation volumes was calculated using the average vehicle ownership per household of the census tracts in the study area (2.17 vehicles per household) multiplied by the number of dwelling units. Lastly, the Proposed Project could also plan to develop a 1,200-seat church in lieu of the multi-family residential units. The church services would primarily be on Sunday’s; therefore, this use was not included in the evacuation analysis, except for several church employees that may be working on site during the AM peak hour. However, it’s important to note that the church is likely to serve the surrounding neighborhoods, which are included in the evacuation volumes, as discussed above. Thus, most if not all of the church congregation should be captured in an evacuation scenario that is more conservative as it is during the AM peak hour with commute traffic instead of a Sunday morning with lower background traffic volumes. The evacuation volumes development summary sheets are provided in **Attachment B**.

**Table 1** displays the number of vehicles evacuating under each scenario.

**Table 1 Evacuating Vehicles**

Scenario	Evacuating Vehicles		
	Adjacent Neighborhoods	Proposed Project	Total
Fire Driven from East	2,861	1,133	<b>3,994</b>
Fire Driven from West	3,344		<b>4,477</b>

**Roadway Network Assumptions**

Certain roadway network modifications were assumed in the model to represent potential traffic mitigation for roadways with available capacity and/or deployed traffic personnel directing traffic at key intersections. The following three (3) intersection modifications were assumed under all study scenarios:

Intersection Modifications

- *Calimesa Boulevard / Singleton Road* – Modeled defacto northbound and westbound right-turn lanes
- *Calimesa Boulevard / Sandalwood Drive* – Modeled defacto northbound right-turn lane



- *Calimesa Boulevard / Cherry Boulevard Road* – Modeled defacto southbound right-turn lane

Additionally, the Proposed Project plans to enhance the roadway infrastructure along the project's frontage by adding additional capacity on Calimesa Boulevard. The following roadway and intersection improvements were analyzed under Existing With Project scenarios:

#### Roadway Modifications

- *Calimesa Boulevard between PA-1 Driveway and PA-2 Driveway* – Added an additional northbound through lane.

#### Intersection Modifications

- *Calimesa Boulevard / All Project Driveways (5)* – Added a separate left-turn lane with a minimum of 150-feet of storage.

### **Traffic Signals**

It is assumed that under emergency evacuation conditions, traffic signals would revert to special timing plans and/or traffic personnel will be deployed at key intersections to help regulate traffic flow for primary evacuation approaches. As such, all signalized study intersections were optimized giving ample green time to the major traffic direction movements and to represent optimal signal control along the evacuation corridors. Additionally, the pedestrian calls were removed as pedestrian crossings are assumed to be nulled during a fire evacuation.

### **Driver Behavior**

The simulation models were calibrated to imitate aggressive drivers during an evacuation scenario. The SimTraffic software includes 10 different type of drivers in a simulation, ranging from conservative to aggressive drivers. The model was coded to include primarily aggressive drivers, with drivers travelling with faster reaction times and shorter headways. Vehicle speeds would be limited by presumed congested conditions.

### **Evacuation Routes**

Evacuees are anticipated to be considered in a "safe zone" once they are a reasonable distance away from open space and traveling towards a dense urbanized areas. For this analysis, the I-10 interchanges at Sandalwood Drive and Cherry Valley Boulevard were considered to be gateways or safe zones for evacuees to seek refuge from the wildfire. The evacuation areas are anticipated to utilize the following roadway facilities as evacuation routes:

*Calimesa Boulevard* – Calimesa Boulevard is a two-lane undivided roadway that connects Oak Glen Road to Cherry Valley Boulevard. Within the study area, it runs in the north-south direction and has a posted speed limit of 35 miles per hour (mph). The *City of Calimesa General Plan Circulation Element* (Circulation Element) classifies Calimesa Boulevard as a Major Arterial. Vehicles evacuating the Proposed Project and study area will travel on Calimesa Boulevard either to access the Singleton Drive and I-10 partial interchange, or continue north or south to access the full interchanges at Sandalwood Drive and Cherry Valley Boulevard, respectively.

*Sandalwood Drive* – Sandalwood Drive is a two-lane undivided roadway that connects Mustang Way to 5<sup>th</sup> Street. Within the study area, it runs in the east-west direction with a posted speed limit of 30



mph, and is classified as a Major Arterial in the City's Circulation Element. Vehicles evacuating the study area will travel westbound on Sandalwood Drive to access the I-10 interchange.

*Singleton Drive* – Singleton Drive is a two-lane undivided roadway, within the study area, which connects Roberts Road to Bryant Street. Northwest of the study area, Singleton Drive widens to a four-lane roadway divided by a center-left-turn-lane. Regional access is provided via its partial I-10 interchange that only provides an I-10 eastbound on-ramp and westbound off-ramp. The City's Circulation Element classifies the segment of Singleton Drive within the study area as a Major Arterial. Vehicles evacuating the study area will travel westbound on Singleton Drive to access its partial I-10 interchange.

*Cherry Valley Boulevard* – Cherry Valley Boulevard varies between a two-to-four lane roadway within the study area. The segment south of I-10 is divided and provides four-travel lanes with a posted speed limit of 45 mph. North of Roberts Drive approaching the I-10 interchange, Cherry Valley Boulevard narrows to a two-lane undivided roadway. The City's Circulation Element classifies Cherry Valley Boulevard as an Urban Arterial for the four-lane segment and as a Major Arterial for the two-lane segment. Vehicles evacuating the study area will travel northbound or westbound on Cherry Boulevard to access its I-10 interchange.

## Evacuation Results

Based on the analysis methodology described in the previous section, **Table 2** summarizes the evacuation time for each analysis scenario. The evacuation time does not depict the evacuation time for each population modeled, but rather the time needed to evacuate all populations modeled. Populations located in closer proximity to the safe zone will safely evacuate sooner than the calculated evacuation time. Detailed evacuation travel time analysis information is provided in **Attachment C**.

**Table 2 Evacuation Travel Time**

Scenario	Total Evacuation Traffic		Evacuation Travel Time (Min)		
	Existing Land Uses	Existing Land Uses w/ Project	Existing Land Uses	Existing Land Uses w/ Project	Delta
Fire Driven from East	2,861	3,994	93.91 (1 hr & 33 mins)	133.24 (2 hrs & 13 mins)	39.33
Fire Driven from West	3,344	4,477	82.84 (1 hr & 22 mins)	97.57 (1 hr & 37 mins)	14.72

As shown in Table 2, for a wildfire driven from the east, it is anticipated to take the Proposed Project and adjacent residential neighborhoods 133.24 minutes to evacuate the study area, which is a 39.33 minute increase in delay from Existing conditions. For a wildfire driven from the west, it is anticipated to take the Proposed Project and adjacent residential neighborhoods 97.57 minutes to evacuate the study area, which is a 14.72 minute increase in delay over Existing conditions.

Though the evacuation volumes are lower under the fire driven from the east scenario, it is anticipated to take longer to evacuate the study area because of the partial access to I-10 from Singleton Drive. For vehicles evacuating the project site and adjacent residential neighborhoods that are trying to seek refuge in the north, they must travel northbound on Calimesa Boulevard, which is a low-capacity two-lane roadway, to access I-10 westbound from the Sandalwood Drive interchange. Additionally, vehicles



evacuating from the east are expected to wait longer at intersections as they attempt to make critical left-turns at key intersections or at the I-10 interchanges. In this case, waiting to turn left against high conflicting volumes results in higher vehicular delays compared to vehicles evacuating from the west that primarily have to make right-turn movements, with less or lower vehicular conflicts, to get onto the I-10 on-ramps.

In addition to reviewing the evacuation travel time, the total intersection delay for the study area was evaluated to see the impact off the Proposed Project’s traffic at the intersections. **Table 3** displays the total intersections for the two scenarios. Detailed evacuation intersection delay information is provided in **Attachment D**.

**Table 3 Evacuation Intersection Delay – Total Study Area**

Scenario	Total Intersection Delay (seconds)		
	Existing Land Uses	Existing Land Uses w/ Project	Delta
Fire Driven from East	603.6 (10 mins & 03 secs)	940.5 (15 mins & 40 secs)	336.9 (5 mins & 36 secs)
Fire Driven from West	368.3 (6 mins & 08 secs)	552.2 (9 mins & 12 secs)	183.9 (3 mins & 03 secs)

As shown in Table 3, the total intersection delay for the study area with the Proposed Project is 940.5 and 552.2 seconds under the wildfire driven from the east and west scenarios, respectively. This represents a 336.9 second increase and 183.9 second increase in delay for the East and West scenarios, respectively.

### Opening Year Conditions

There is anticipated significant growth in the study area from multiple specific plans and individual planned development projects. These cumulative projects are anticipated to add a significant amount of traffic onto the transportation network, and therefore, require significant infrastructure improvements to support the growth. The City’s Circulation Element identifies new roadway extensions and capacity enhancements in the study area to support these projects. Due to the timing uncertainty of the larger specific plan projects and their required roadway network improvements, an Opening Year analysis was not conducted.

### Future Project Mitigation Analysis

The *Oak Valley North Specific Plan Traffic Analysis (September 5, 2023)* prepared by Urban Crossroads identifies several intersection mitigation measures and improvements at key intersections in the study area under both Opening Year and Horizon Year conditions. These improvements include roadway capacity enhancements, traffic signal installations, and traffic signal optimization. As such, these improvements are anticipated to reduce the project’s impact(s) on intersection operations both from a day-to-day standpoint, as well as during times of evacuations. Since these mitigation measures will be implemented under future scenarios, they were not included in the initial evacuation analysis. **Attachment E** summarizes all the planned roadway improvements at the study intersections, and highlights which improvements have been analyzed in this scenario.





This analysis depicts a hypothetical scenario identifying the additional benefits that may be associated with the implementation of the roadway enhancing mitigation measures identified under Opening and Horizon Year conditions. To quantify these benefits, the future year mitigation measures were added to the existing roadway network under base land use conditions, both with and without the project land uses.

**Table 4** displays the evacuation travel time for the Existing Land Uses with Project and Future Mitigation scenario. Detailed evacuation intersection delay information is provided in **Attachment F**.

**Table 4 Evacuation Travel Time with Future Mitigation**

Scenario	Evacuation Travel Time (Min)		
	Existing Land Uses w/ Project	Existing Land Uses w/ Project and Future Mitigation	Delta
Fire Driven from East	133.24 (2 hrs & 13 mins)	121.38 (2 hrs & 01 mins)	-11.86
Fire Driven from West	97.57 (1 hr & 37 mins)	95.16 (1 hr & 35 mins)	-2.41

As shown in Table 4, for a wildfire driven from the east, the Proposed Project's evacuation time is anticipated to decrease with the future mitigation measures by 11.86 minutes. For a wildfire driven from the west, the Proposed Project's evacuation time is anticipated to decrease with the future mitigations by 2.41 minutes. The future mitigation measures are more focused at intersections immediately adjacent to the project site, and specifically for the movements which the Proposed Project would be impacting. As such, the mitigations are expected to improve operations and evacuation travel for a fire driven from the east more than when fires are driven from the west.

An example of this is adding additional northbound lanes at the Calimesa Boulevard / Singleton Road intersection had the highest effect on improving travel times, as it allows more vehicles to pass through the intersection and access the I-10 freeway to seek refuge.

**Table 5** displays the total intersections for the two scenarios. Detailed evacuation intersection delay information is provided in **Attachment G**.

**Table 5 Evacuation Intersection Delay with Future Mitigation – Total Study Area**

Scenario	Total Intersection Delay (seconds)		
	Existing Land Uses w/ Project	Existing Land Uses w/ Project and Future Mitigation	Delta
Fire Driven from East	940.5 (15 mins & 40 secs)	786.3 (13 mins & 06 secs)	-154.2 (2 mins & 34 secs)
Fire Driven from West	552.2 (9 mins & 12 secs)	537.6 (8 mins & 57 secs)	-14.6 (0 mins & 14 secs)



The total intersection delay for the study area with the Proposed Project and Mitigations is 786.3 and 537.6 seconds under the wildfire driven from the east and west scenarios, respectively. The future mitigation measures are anticipated to decrease the total area's intersection delay by 154.2 and 14.6 seconds for the East and West scenarios, respectively.

## **Conclusions**

There are currently no significance standards for evacuation travel time for the City of Calimesa, the County of Riverside, or CEQA. Public safety, not time, is generally the guiding consideration for evaluating impacts related to emergency evacuation. The County considers a Project's impact on evacuation significant if the Project will significantly impair or physically interfere with implementation of an adopted emergency response or evacuation plan; or if the Project will expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

The County of Riverside has historically had an extremely high success rate for safely evacuating large numbers of people and doing so in a managed and strategic way using available technological innovations. Safely undertaking large-scale evacuations may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, residents' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

Notwithstanding evacuation challenges and variables, the success rate in the County of Riverside in safely managing larger area and targeted evacuations is nearly 100% safe evacuations based on research indicating the rare occurrence of injury or loss of life during an early and organized evacuation. Technological advancements and improved evacuation strategies learned from prior wildfire evacuation events have resulted in a system that is many times more capable of managing evacuations. With the technology in use today in the County, evacuations are more strategic and surgical than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation. Evacuation scenarios where large populations are all directed to leave simultaneously, resulting in traffic delays, are thereby minimized, and those populations most at risk populations are able to safely evacuate.

Based on the evacuation simulations above, traffic generated by the Project would considerably increase the average evacuation travel time, specifically for fires driven from the east. However, the Proposed Project plans to implement future mitigation measures to reduce their vehicular impact to the transportation system. These improvements include roadway capacity and signal enhancements that would increase vehicle throughput at certain intersections, and would improve evacuation travel time.

The Project would provide emergency managers the alternative option of recommending employees and visitors temporarily seeking refuge on-site in fire-resistant buildings or within the wide, converted landscapes and hardscapes that would not readily facilitate wildfire spread. This would provide emergency managers with a safer alternative to risking a late evacuation. By contrast, the examples of Southern California evacuations that have included loss of life have been the result of civilians who did not evacuate when directed, and then attempted a late evacuation with travel through long distances of vegetation exposed travel ways as wildfire were overtaking the area. These examples occurred in fire



environments that were more aggressive and included less maintenance than would occur at the Project area.

The Project would not cut off or otherwise modify existing evacuation routes. It would, instead, implement certain roadway improvements that would improve evacuation, such as roadway enhancements on Calimesa Boulevard, and intersection enhancements such as roadway capacity and signal improvements at several adjacent intersections to the project site (as described in the "Future Project Mitigation Analysis" section).

This information will be provided to emergency managers for use in pre-planning scenarios to better inform in the field decisions made pursuant to adopted Emergency Operations Plans. Emergency personnel who issue an evacuation order may take into account these time estimates in determining when and where to issue evacuation orders. In a real evacuation scenario, emergency managers may use alternative actions/options to further expedite evacuation. Such actions may include providing additional lead time in issuing evacuation orders, providing alternative signal control at downstream intersections, utilizing additional off-site routes or directing traffic to roadways with additional capacity, implementing contra-flow lanes, issuing "shelter-in-place" orders when determined to be safer than evacuation, or considering the possibility of a delayed evacuation where parts of the population could be directed to remain on-site until the fire burns out in the sparse fuels around the evacuation route. These options require "in the field" determinations of when evacuations are needed and how they are phased to maximize efficiency. Overall, safe evacuation of the Project and surrounding community is possible in all modeled scenarios.

## **Limitations**

In coordination with fire professionals at Dudek and the County of Riverside Fire Department, Intersecting Metrics has presented a conservative analysis simulating evacuation during an extreme wildfire event. However, as discussed above, wildfires are variable events. The underlying planning principle for fire preparedness, given the dynamic nature of a fire, is to demonstrate the availability of multiple route alternatives and response strategies to permit emergency professionals to manage their response according to the specific circumstances. The Project area provides ample route and response alternatives that were not considered in this model. Emergency responders will coordinate the safest possible evacuation based on the dynamic circumstances of the actual event, including the appropriate phasing of the evacuation, and utilization of the most appropriate ingress and egress routes for area residents and emergency responders.

The breadth of route alternatives and response strategies available to emergency professionals to manage a potential fire in the County cannot and should not be evaluated using this evacuation analysis alone. A comprehensive view of Project fire safety is gained by understanding this memorandum, the Fire Protection Plan and Construction Fire Protection Plan, the Evacuation Plan, along with the standard protocols and "in-the-field" decision making of emergency responders as detailed in the County and City Emergency Operations Plans.

This travel time analysis presents a reasonable vehicle travel time estimate based on professional judgment made by Intersecting Metrics, Dudek, and fire operations experts with experience participating in evacuations in the Riverside County. Changing any number of these assumptions can lengthen or shorten the average vehicle travel time.



For instance, a situation could arise in which professionals may choose to utilize additional roadways for evacuation not utilized in the analyses and may also choose to guide vehicle trips to more or different route permutations relative to what has been modeled in this analysis. A phased evacuation is also likely to be implemented, which improves the orderly flow of traffic in an evacuation scenario.

The net result of changing the variables selected could yield an average evacuation travel time shorter or longer than the results detailed in the analysis. Many factors can shorten or lengthen the vehicle time from the results shown herein. For example:

1. Changing the possible evacuation routes selected would affect the results. For instance, utilizing roads for ingress and/or egress that are not utilized in this analysis could shorten vehicle travel times relative to the results shown herein.
2. Increasing or decreasing the number of path permutations and percentage of the population utilizing each route that leads out of the immediate area could shorten or lengthen vehicle travel time relative to the results shown herein.
3. Emergency professionals electing to reserve certain travel lanes for emergency vehicle ingress for periods of time could affect the travel time relative to the results shown herein.
4. Assuming evacuees utilize fewer or more vehicles to evacuate from their homes relative to the vehicle utilization rate selected in the analysis would shorten or lengthen vehicle travel time relative to the results shown herein.
5. Changing the mix of vehicle trips allocated to each evacuation route could shorten or lengthen vehicle travel time relative to the results shown herein.
6. Assuming different road condition adjustment factors could shorten or lengthen the vehicle travel time relative to the results shown herein.
7. Assuming fewer people are at home when the evacuation notice is given would reduce the number of vehicle trips and shorten vehicle travel time relative to the results shown herein. For instance, an evacuation during daytime hours could result in fewer outbound trips than assumed in this analysis.
8. Assuming some portion of vehicle trips are made in advance of the evacuation notice would reduce the number of vehicle trips relative to the results shown herein.
9. Assuming emergency professionals elect to implement contraflow on certain roadways to open up additional lanes for emergency evacuation egress could reduce the travel time results shown herein.

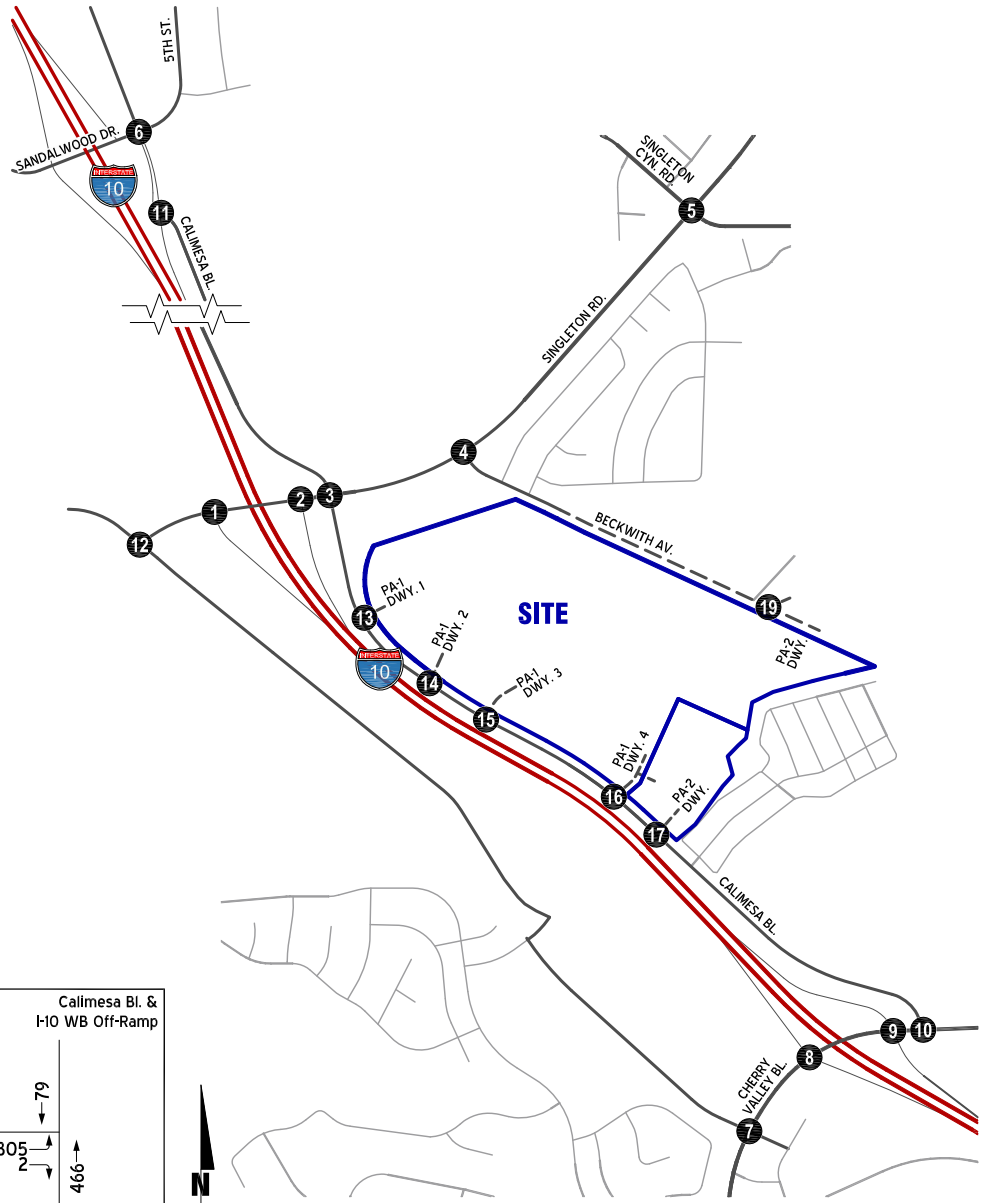
This evacuation time analysis is necessarily limited in scope given the numerous variables inherent in a wildfire and evacuation event. However, as discussed above, it is not anticipated that the Project will significantly impact evacuation of the proposed or existing surrounding community based upon either evacuation timing and other qualitative considerations.






Attachment A  
Existing Traffic Volumes

**EXHIBIT 3-6: EXISTING (2022) AM PEAK HOUR INTERSECTION VOLUMES**

<p><b>1</b> I-10 EB Ramps &amp; Singleton Rd.</p>	<p><b>2</b> I-10 WB Ramps &amp; Singleton Rd.</p>
<p><b>3</b> Calimesa Bl. &amp; Singleton Rd.</p>	<p><b>4</b> Beckwith Av. &amp; Singleton Rd.</p>
<p><b>5</b> Singleton Cyn. Rd. &amp; Singleton Rd.</p>	<p><b>6</b> Calimesa Bl. &amp; Sandalwood Dr.</p>
<p><b>7</b> Roberts Rd. &amp; Cherry Valley Bl.</p>	<p><b>8</b> I-10 EB Ramps &amp; Cherry Valley Bl.</p>
<p><b>9</b> I-10 WB Ramps &amp; Cherry Valley Bl.</p>	<p><b>10</b> Calimesa Bl. &amp; Cherry Valley Bl.</p>
<p><b>12</b> Roberts Rd. &amp; Singleton Rd.</p>	<p><b>13</b> Calimesa Bl. &amp; PA-1 Dwy. 1</p> <p><b>FUTURE INTERSECTION</b></p>
<p><b>16</b> Calimesa Bl. &amp; PA-1 Dwy. 4</p> <p><b>FUTURE INTERSECTION</b></p>	<p><b>17</b> Calimesa Bl. &amp; PA-2 Dwy.</p> <p><b>FUTURE INTERSECTION</b></p>
<p><b>11</b> Calimesa Bl. &amp; I-10 WB Off-Ramp</p>	<p><b>18</b> Calimesa Bl. &amp; PA-3 S. Dwy.</p> <p><b>FUTURE INTERSECTION</b></p>
<p><b>14</b> Calimesa Bl. &amp; PA-1 Dwy. 2</p> <p><b>FUTURE INTERSECTION</b></p>	<p><b>19</b> Beckwith Av. &amp; Holly Hills</p> <p><b>FUTURE INTERSECTION</b></p>



**LEGEND:**

-  INTERSECTION ID
-  REALIGNMENT/FUTURE ROADWAY
-  SITE BOUNDARY



Attachment B  
Evacuation Traffic Volumes

**Oak Valley**

GEOID	Total Vehicles	Fire East	Fire West
		Vehicles in Study Area	Vehicles in Study Area
60650438091	801	401	0
60650438023	2606	1955	1042
60650438241	1083	542	0
60650438244	961	481	384
60650438243	1339	1004	0
60650438231	2193	0	1535
60650438232	465	0	93
60650438233	1790	0	1790
60650438242	1416	0	283
<b>TOTAL</b>	<b>12654</b>	<b>4383</b>	<b>5127</b>

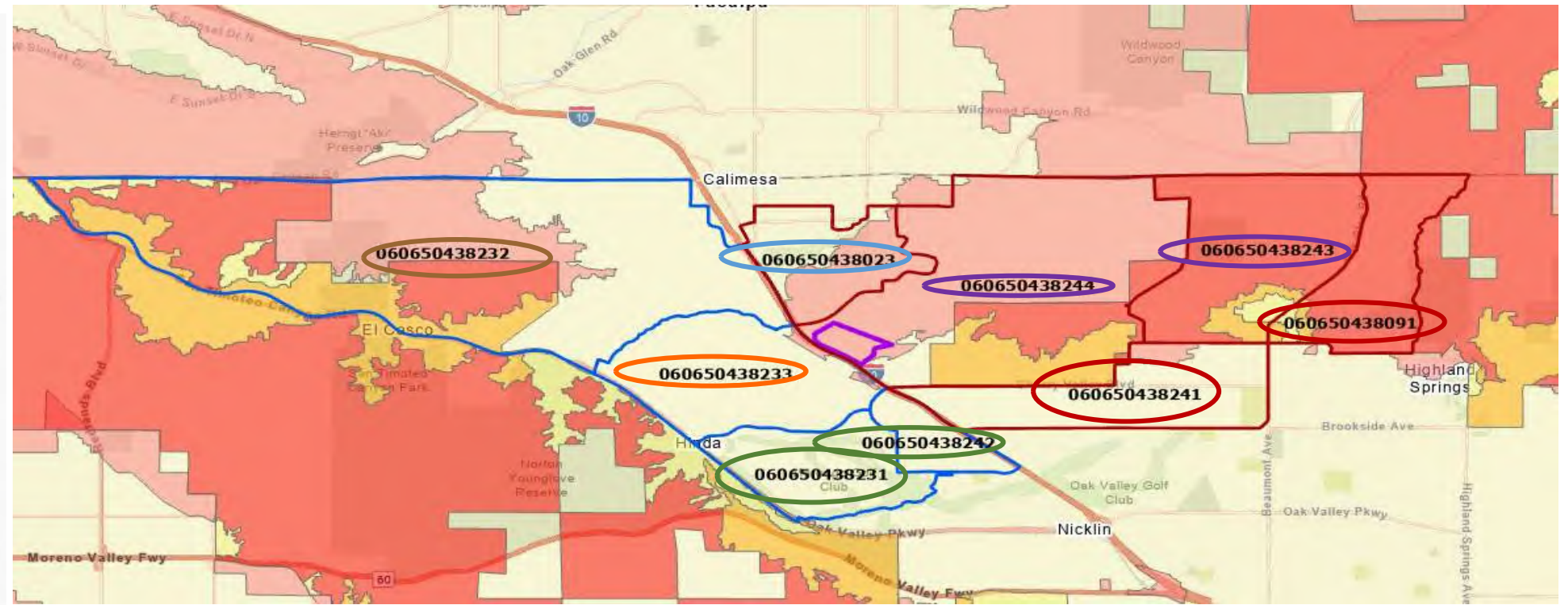
Development Zones Total	Total Vehicles	Fire East Vehs in SA	Fire West Vehs in SA
Red	1884	943	0
Brown	465	0	93
Green	3609	0	1818
Blue	2606	1955	1042
Purple	2300	1485	384
Orange	1790	0	1790
<b>TOTAL</b>	<b>12654</b>	<b>4383</b>	<b>5127</b>

AM PEAK HOUR EVAC 70%			
GEOID	Total Vehicles	Fire East	Fire West
		Vehicles in Study Area	Vehicles in Study Area
60650438091	561	140	0
60650438023	1824	1368	638
60650438241	758	379	0
60650438244	673	505	269
60650438243	937	469	0
60650438231	1535	0	921
60650438232	326	0	65
60650438233	1253	0	1253
60650438242	991	0	198
<b>TOTAL</b>	<b>8858</b>	<b>2861</b>	<b>3344</b>

Development Zones Total	Total Vehicles	Fire East Vehs in SA	Fire West Vehs in SA
Red	1319	519	0
Brown	326	0	65
Green	2526	0	1119
Blue	1824	1368	638
Purple	1610	974	269
Orange	1253	0	1253
<b>TOTAL</b>	<b>8858</b>	<b>2861</b>	<b>3344</b>

Map Legend:

- CBG\_FireEast
- CBG\_FireWest2
- ProjectSite
- SB\_County\_CBG
- Riverside\_County\_CBG
- CA\_Fires selection
- FHSV\_State
- HAZ\_CLASS
  - High
  - Moderate
  - Very High
  - <all other values>
- FHSV\_Local
- Very High (Local)





OAK VALLEY NORTH EVACUATION VOLUME

Project Land Use	Units	Rate	Evac Traffic
High-Cube Parcel Warehouse	982.232	0.65	
	Passenger	0.306365	301
	2-Axle	0.034111	34
	3-Axle	0.055588	55
	4-Axle	0.253936	249
Church	1,200 Seats		10
Residential Units	223	2.17	484
<b>TOTAL</b>			<b>1133</b>

Residential rates based on Census Data for project tract (which includes mf dus)

PCE DISTRIBUTION CALC

	AM	PM	DAILY	HIGH-CUBE	PARKING RATES (PCE)
	1.029 %	0.856 %	6.929 %		0.65
Passenger	0.485	0.502	3.139	45.3%	0.31
2-Axle	0.054	0.035	0.375	5.4%	0.03
3-Axle	0.088	0.058	0.616	8.9%	0.06
4-Axle	0.402	0.261	2.799	40.4%	0.25

TABLE 4-8: INTERIM YEAR (2028) SCENARIO 2 (PA 1 PARCEL HUB WAREHOUSE & TRUCK/TRAILER LOT, AND PA 2 RESIDENTIAL)  
TRIP GENERATION SUMMARY  
PASSENGER CAR EQUIVALENT (PCE)

Land Use	ITE LU Code	Quantity <sup>2</sup>	Trip Generation Rates <sup>1</sup>						
			AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
High-Cube Parcel Hub Warehouse <sup>3,4,5</sup>	156	982.232 TSF	0.514	0.515	1.029	0.582	0.274	0.856	6.929
		Passenger Cars	0.242	0.243	0.485	0.341	0.161	0.502	3.139
		2-Axle Trucks (PCE = 1.5)	0.027	0.027	0.054	0.024	0.011	0.035	0.375
		3-Axle Trucks (PCE = 2.0)	0.044	0.044	0.088	0.040	0.018	0.058	0.616
		4-Axle+ Trucks (PCE = 3.0)	0.201	0.201	0.402	0.177	0.084	0.261	2.799
Truck/Trailer Parking Lot <sup>6</sup>	--	25.62 AC	1.150	2.842	3.992	4.627	2.173	6.800	86.706
		Passenger Cars	0.080	0.302	0.382	0.429	0.461	0.890	12.079
		2-Axle Trucks (PCE = 1.5)	0.120	0.000	0.120	0.167	0.333	0.500	6.311
		3-Axle Trucks (PCE = 2.0)	0.380	1.586	1.966	0.698	0.476	1.174	21.936
		4-Axle+ Trucks (PCE = 3.0)	0.570	0.954	1.524	3.333	0.903	4.236	46.380
Multi-Family Housing	220	223 DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74

Planning Area	Land Use	ITE LU Code	Quantity <sup>2</sup>	Trip Generation Results						
				AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
1	High-Cube Parcel Hub Warehouse	156	982.232 TSF							
	- Passenger Cars			238	239	477	335	158	493	3,083
	- Truck Trips									
	Truck Trips (2-axle):			27	27	54	24	11	35	368
	Truck Trips (3-axle):			43	43	86	39	18	57	605
	Truck Trips (4+-axle):			197	197	394	174	83	257	2,749
	- Net Truck Trips (Actual Vehicles)			267	267	534	237	112	349	3,722
	High Cube Parcel Warehouse Subtotal			505	506	1,011	572	270	842	6,805
	Truck/Trailer Parking Lot	--	25.62 AC							
	- Passenger Cars			2	8	10	11	12	23	309
	- Truck Trips									
2-axle (PCE = 1.5):			3	0	3	4	9	13	162	
3-axle (PCE = 2.0):			10	41	51	18	12	30	562	
4+-axle (3.0):			15	24	39	85	23	108	1,188	
- Net Truck Trips (PCE)			28	65	93	107	44	151	1,912	
Truck/Trailer Parking Lot Subtotal			30	73	103	118	56	174	2,221	
Passenger Cars Subtotal			240	247	487	346	170	516	3,392	
Truck Trips Subtotal			295	332	627	344	156	500	5,634	
Planning Area 1 Subtotal (PCE) <sup>7</sup>			535	579	1,114	690	326	1,016	9,026	
2	Multi-Family Housing	220	223 DU	22	67	89	71	42	113	1,503
INTERIM YEAR (2028) SCENARIO 2 (PA 1 PARCEL HUB WAREHOUSE & TRUCK/TRAILER LOT, AND PA 2 RESIDENTIAL)				557	646	1,203	761	368	1,129	10,529
TOTAL EXTERNAL TRIPS (PCE)										

<sup>1</sup> Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

<sup>2</sup> TSF = Thousand Square Feet; DU = Dwelling Units; AC = Acres

<sup>3</sup> Vehicle Mix Source: Institute of Transportation Engineers (ITE) Trip Generation Handbook Third Edition (September 2017).

<sup>4</sup> Vehicle Mix Source: Institute of Transportation Engineers (ITE) High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).

<sup>5</sup> Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014).

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks

<sup>6</sup> Source: Trip generation rates developed from empirical data summarized on Table 1.1 of Appendix A (trips divided by acreage). Rates shown are the average between the 2 sites.

<sup>7</sup> Total Net Trips (PCE) = Passenger Cars + Net Truck Trips (Passenger Car Equivalent).

P:\UK\001\_13100\_13500\13594\02\_LOS\Excel\13594 - Report.xlsx\2028\_HC Parcel Hub\_TG - PCE

## General Light Industrial (110)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA  
 On a: Weekday (Monday - Friday)  
 Setting/Location: General Urban/Suburban  
 Peak Period of Parking Demand: 9:00 a.m. - 3:00 p.m.  
 Number of Studies: 40  
 Avg. 1000 Sq. Ft. GFA: 56

### Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.65	0.11 - 7.89	0.58 / 1.94	0.52 - 0.78	0.41 ( 63% )

### Data Plot and Equation

#### Land Use: 110 General Light Industrial

##### Description

A light industrial facility is a free-standing facility devoted to a single use. The facility has an emphasis on activities other than manufacturing and typically has minimal office space. Typical light industrial activities include printing, material testing, and assembly of data processing equipment. Industrial park (Land Use 130) and manufacturing (Land Use 140) are related uses.

##### Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday at 29 general urban/suburban study sites.

Hour Beginning	Percent of Weekday Peak Parking Demand
12:00-4:00 a.m.	0
5:00 a.m.	2
6:00 a.m.	15
7:00 a.m.	41
8:00 a.m.	83
9:00 a.m.	100
10:00 a.m.	99
11:00 a.m.	98
12:00 p.m.	94
1:00 p.m.	90
2:00 p.m.	94
3:00 p.m.	88
4:00 p.m.	68
5:00 p.m.	49
6:00 p.m.	9
7:00 p.m.	3
8:00 p.m.	3
9:00 p.m.	3
10:00 p.m.	0
11:00 p.m.	0

#### Land Use: 220 Multifamily Housing (Low-Rise)

##### Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and with one or two levels (floors) of residence. Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), and affordable housing (Land Use 223) are related land uses.

##### Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand (1) on a weekday (10 study sites) and a Saturday (11 study sites) in a general urban/suburban setting and (2) on a weekday (three study sites) and a Saturday (three study sites) in a dense multi-use urban setting.

Hour Beginning	Percent of Peak Parking Demand			
	General Urban/Suburban		Dense Multi-Use Urban	
	Weekday	Saturday	Weekday	Saturday
12:00-4:00 a.m.	100	93	86	100
5:00 a.m.	97	100	100	94
6:00 a.m.	90	98	94	91
7:00 a.m.	77	96	81	85
8:00 a.m.	56	92	58	79
9:00 a.m.	45	80	56	76
10:00 a.m.	40	78	53	71
11:00 a.m.	37	71	58	74
12:00 p.m.	36	68	56	68
1:00 p.m.	36	66	53	68
2:00 p.m.	37	65	47	68
3:00 p.m.	43	68	56	56
4:00 p.m.	45	70	53	59
5:00 p.m.	55	73	61	53
6:00 p.m.	66	77	81	50
7:00 p.m.	73	81	67	56
8:00 p.m.	77	82	61	65
9:00 p.m.	86	86	64	74
10:00 p.m.	92	87	75	85
11:00 p.m.	97	92	86	91



Attachment C  
SimTraffic Evacuation Time Worksheets – Existing  
Conditions

1: Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	1.1	0.0	1.1
Total Del/Veh (s)	2.0	0.1	5.5	8.6	5.5
Stop/Veh	0.00	0.00	0.02	0.00	0.02
Travel Time (hr)	0.0	0.0	3.6	0.0	3.6
Vehicles Entered	6	2	722	4	734
Vehicles Exited	6	2	720	4	732
Hourly Exit Rate	6	2	720	4	732
Input Volume	6	2	944	6	958
% of Volume	100	100	76	67	76
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

2: I-10 WB Ramps & Singleton Rd Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	5.9	5.9
Denied Del/Veh (s)	0.0	0.0	117.2	109.3	22.9
Total Delay (hr)	0.1	0.4	0.1	21.7	22.4
Total Del/Veh (s)	41.7	2.0	482.1	432.4	87.8
Stop/Veh	0.67	0.00	2.00	0.76	0.16
Travel Time (hr)	0.1	1.3	0.2	28.5	30.0
Vehicles Entered	6	728	1	179	914
Vehicles Exited	6	727	1	144	878
Hourly Exit Rate	6	727	1	144	878
Input Volume	6	949	2	193	1150
% of Volume	100	77	50	75	76
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	14	14

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	5.7	2.8	0.0	0.7	16.5	11.2	0.0	23.9	5.2	1.9	0.5	0.4
Total Del/Veh (s)	555.6	87.6	2.2	127.4	79.9	82.4		414.3	349.0	109.6	94.3	52.5
Stop/Veh	0.97	0.95	1.00	1.35	0.99	1.40		1.21	1.26	1.11	1.00	1.04
Travel Time (hr)	5.8	3.1	0.0	0.8	19.4	14.0	0.0	24.6	5.5	2.5	0.6	0.6
Vehicles Entered	34	115	1	20	734	477	0	187	48	60	18	24
Vehicles Exited	31	114	1	18	725	475	0	185	49	60	18	25
Hourly Exit Rate	31	114	1	18	725	475	0	185	49	60	18	25
Input Volume	47	152	1	22	952	608	1	507	125	60	19	21
% of Volume	66	75	100	81	76	78	0	36	39	100	94	118
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	68.9
Total Del/Veh (s)	139.7
Stop/Veh	1.14
Travel Time (hr)	77.0
Vehicles Entered	1718
Vehicles Exited	1701
Hourly Exit Rate	1701
Input Volume	2514
% of Volume	68
Denied Entry Before	0
Denied Entry After	0

4: Beckwith Ave & Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	4.2	113.0	0.8	117.9
Denied Del/Veh (s)	0.0	0.0	0.0	12.5	1108.3	941.8	236.0
Total Delay (hr)	0.1	0.0	0.1	33.2	77.1	0.2	110.6
Total Del/Veh (s)	1.3	1.2	85.3	99.1	1791.4	658.7	250.8
Stop/Veh	0.00	0.00	1.00	0.93	0.32	1.00	0.74
Travel Time (hr)	1.3	0.0	0.1	47.7	191.0	1.0	241.2
Vehicles Entered	216	7	3	1196	99	1	1522
Vehicles Exited	213	7	3	1157	73	1	1454
Hourly Exit Rate	213	7	3	1157	73	1	1454
Input Volume	325	11	3	1221	360	2	1922
% of Volume	66	62	100	95	20	50	76
Denied Entry Before	0	0	0	0	2	0	2
Denied Entry After	0	0	0	7	268	2	277

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4
Denied Del/Veh (s)	0.4	0.0	0.0	0.1	0.1	0.1	0.1	4.2	0.7	0.7	2.7	0.9
Total Delay (hr)	0.1	0.6	0.0	2.9	0.0	0.0	0.0	0.0	0.1	0.0	0.9	4.6
Total Del/Veh (s)	17.1	11.5	4.3	13.3	3.4	23.4	37.8	3.3	10.5	9.7	7.3	11.2
Stop/Veh	0.89	0.53	0.67	0.49	0.43	1.00	1.00	1.00	0.55	0.00	0.59	0.53
Travel Time (hr)	0.2	1.2	0.0	16.1	0.3	0.1	0.0	0.0	0.2	0.0	4.0	22.1
Vehicles Entered	19	193	3	760	14	6	1	1	22	1	430	1450
Vehicles Exited	18	193	3	760	14	6	1	1	22	1	431	1450
Hourly Exit Rate	18	193	3	760	14	6	1	1	22	1	431	1450
Input Volume	32	290	4	755	12	7	1	1	20	1	443	1567
% of Volume	57	67	75	101	114	86	100	100	109	100	97	93
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	2.3	0.4	2.6	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	1.4	0.8	0.1	0.3	5.1	1.0	3.8	4.0	0.2	0.3	0.3	2.1
Total Del/Veh (s)	40.5	16.5	6.7	58.6	29.6	14.4	30.9	27.3	7.8	45.6	45.7	25.6
Stop/Veh	0.81	0.51	0.46	1.22	0.65	0.79	0.75	0.62	0.60	0.91	0.88	0.86
Travel Time (hr)	3.2	3.2	0.7	0.4	9.4	3.2	5.5	5.5	0.6	0.9	1.0	10.5
Vehicles Entered	121	165	40	17	614	251	439	523	93	22	24	282
Vehicles Exited	119	165	40	17	620	250	438	518	92	23	25	288
Hourly Exit Rate	119	165	40	17	620	250	438	518	92	23	25	288
Input Volume	123	171	40	16	632	253	766	942	153	22	23	290
% of Volume	97	96	101	105	98	99	57	55	60	103	108	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.4
Total Delay (hr)	19.4
Total Del/Veh (s)	26.5
Stop/Veh	0.70
Travel Time (hr)	44.1
Vehicles Entered	2591
Vehicles Exited	2595
Hourly Exit Rate	2595
Input Volume	3431
% of Volume	76
Denied Entry Before	0
Denied Entry After	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.5	2.7	1.3	1.3
Total Delay (hr)	11.5	213.5	6.3	2.0	1.0	0.0	0.5	0.6	2.7	32.2	4.9	11.7
Total Del/Veh (s)	1538.5	1384.8	1336.2	139.3	25.5	3.9	143.8	103.4	80.7	772.9	740.2	753.1
Stop/Veh	1.44	1.57	1.59	0.98	0.49	0.61	0.92	0.86	0.94	1.30	1.33	1.29
Travel Time (hr)	11.9	221.8	6.6	2.1	1.2	0.1	0.5	0.7	3.0	34.4	5.3	12.6
Vehicles Entered	22	468	14	49	139	31	12	20	118	140	22	52
Vehicles Exited	9	180	7	50	141	31	12	21	108	77	12	31
Hourly Exit Rate	9	180	7	50	141	31	12	21	108	77	12	31
Input Volume	21	482	20	120	336	83	11	22	114	143	20	51
% of Volume	42	37	35	42	42	37	107	94	95	54	59	61
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	3	0	1

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.6
Total Delay (hr)	287.0
Total Del/Veh (s)	858.8
Stop/Veh	1.26
Travel Time (hr)	300.2
Vehicles Entered	1087
Vehicles Exited	679
Hourly Exit Rate	679
Input Volume	1425
% of Volume	48
Denied Entry Before	0
Denied Entry After	4



8: Cherry Valley Blvd & I-10 EB Ramps Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBR	All
Denied Delay (hr)	1.4	0.2	0.0	0.0	79.2	161.3	242.1
Denied Del/Veh (s)	16.1	11.8	0.0	0.0	1558.6	1544.2	700.6
Total Delay (hr)	11.9	2.5	1.6	1.0	11.4	18.7	47.0
Total Del/Veh (s)	137.2	134.1	29.9	26.2	804.1	641.8	197.1
Stop/Veh	0.64	0.48	0.59	0.40	1.35	1.18	0.69
Travel Time (hr)	13.6	2.9	2.4	1.5	90.8	180.4	291.5
Vehicles Entered	298	65	187	130	41	85	806
Vehicles Exited	298	65	188	132	39	86	808
Hourly Exit Rate	298	65	188	132	39	86	808
Input Volume	603	140	281	202	162	339	1726
% of Volume	49	46	67	66	24	25	47
Denied Entry Before	0	0	0	0	25	51	76
Denied Entry After	4	1	0	0	142	291	438

9: I-10 WB Ramps & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Delay (hr)	0.2	0.1	0.0	0.0	7.9	0.8	10.4	19.4
Denied Del/Veh (s)	3.6	2.9	0.0	0.0	239.6	233.4	224.6	50.5
Total Delay (hr)	13.9	8.4	1.0	0.8	13.0	1.8	21.5	60.4
Total Del/Veh (s)	211.6	243.1	15.1	5.6	532.7	654.7	594.3	162.5
Stop/Veh	1.38	1.36	0.21	0.23	1.27	1.20	0.98	0.68
Travel Time (hr)	15.1	8.9	1.3	2.0	21.3	2.7	32.5	83.7
Vehicles Entered	222	115	249	498	84	10	122	1300
Vehicles Exited	221	116	247	499	70	7	101	1261
Hourly Exit Rate	221	116	247	499	70	7	101	1261
Input Volume	514	252	351	695	132	10	167	2121
% of Volume	43	46	70	72	53	68	60	59
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	1	0	0	0	34	3	44	82

10: Cherry Valley Blvd & Calimesa Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	13.4	5.4	0.0	0.0	18.8
Denied Del/Veh (s)	0.0	0.0	48.3	46.8	0.0	0.3	40.4
Total Delay (hr)	5.2	2.7	50.8	20.7	8.9	3.3	91.7
Total Del/Veh (s)	136.1	111.0	203.4	201.3	863.4	706.6	213.0
Stop/Veh	1.17	0.96	0.92	1.00	1.16	1.65	0.98
Travel Time (hr)	5.5	2.9	78.5	32.6	9.2	3.5	132.3
Vehicles Entered	130	87	886	362	28	15	1508
Vehicles Exited	132	85	730	306	37	16	1306
Hourly Exit Rate	132	85	730	306	37	16	1306
Input Volume	248	170	1030	404	34	15	1901
% of Volume	53	50	71	76	110	105	69
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	115	51	0	0	166

11: Calimesa Blvd & I-10 WB Ramp Performance by movement

Movement	EBL	NBT	SBT	All
Denied Delay (hr)	0.0	39.3	0.0	39.4
Denied Del/Veh (s)	0.2	173.3	0.0	117.8
Total Delay (hr)	0.9	99.0	0.2	100.1
Total Del/Veh (s)	10.9	414.8	9.1	289.5
Stop/Veh	1.00	0.83	0.96	0.88
Travel Time (hr)	1.4	147.0	0.5	149.0
Vehicles Entered	304	752	82	1138
Vehicles Exited	304	750	83	1137
Hourly Exit Rate	304	750	83	1137
Input Volume	305	1555	80	1941
% of Volume	100	48	103	59
Denied Entry Before	0	15	0	15
Denied Entry After	0	65	0	65

12: Roberts Rd & Singleton Rd Performance by movement

Movement	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.1	0.1	2.2	0.0	1.1
Stop/Veh	1.00	0.00	1.00	0.00	0.40
Travel Time (hr)	0.0	0.0	0.0	0.0	0.0
Vehicles Entered	1	2	1	1	5
Vehicles Exited	1	2	1	1	5
Hourly Exit Rate	1	2	1	1	5
Input Volume	2	2	2	3	9
% of Volume	50	100	50	33	56
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

13: Calimesa Blvd & PA-1 Drwy 1 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	20.1	0.0	20.1
Total Del/Veh (s)	281.6	1.5	246.4
Stop/Veh	1.00	0.00	0.88
Travel Time (hr)	20.8	0.2	21.0
Vehicles Entered	249	36	285
Vehicles Exited	236	37	273
Hourly Exit Rate	236	37	273
Input Volume	633	42	676
% of Volume	37	87	40
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

14: Calimesa Blvd & PA-1 Drwy 2 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	21.6	0.0	21.6
Total Del/Veh (s)	283.5	0.0	252.2
Stop/Veh	1.03	0.00	0.92
Travel Time (hr)	22.4	0.1	22.5
Vehicles Entered	272	34	306
Vehicles Exited	249	34	283
Hourly Exit Rate	249	34	283
Input Volume	633	41	674
% of Volume	39	83	42
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

15: Calimesa Blvd & PA-1 Drwy 3 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	21.0	0.0	21.0
Total Del/Veh (s)	253.3	0.0	226.7
Stop/Veh	0.93	0.00	0.83
Travel Time (hr)	22.0	0.1	22.2
Vehicles Entered	297	34	331
Vehicles Exited	272	34	306
Hourly Exit Rate	272	34	306
Input Volume	633	41	674
% of Volume	43	83	45
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

16: Calimesa Blvd & PA-1 Drwy 4 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	25.3	0.0	25.3
Total Del/Veh (s)	275.6	0.0	249.9
Stop/Veh	0.84	0.00	0.76
Travel Time (hr)	26.7	0.1	26.8
Vehicles Entered	328	34	362
Vehicles Exited	297	34	331
Hourly Exit Rate	297	34	331
Input Volume	633	41	674
% of Volume	47	83	49
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

17: Calimesa Blvd & PA-2 Drwy 1 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	57.8	0.0	57.8
Total Del/Veh (s)	466.9	0.0	432.9
Stop/Veh	1.05	0.00	0.97
Travel Time (hr)	63.1	0.1	63.2
Vehicles Entered	438	34	472
Vehicles Exited	343	35	378
Hourly Exit Rate	343	35	378
Input Volume	652	41	693
% of Volume	53	86	55
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

1: Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	1.2	0.0	1.3
Total Del/Veh (s)	3.9	1.0	9.5	5.4	5.7
Stop/Veh	0.00	0.06	0.57	0.00	0.34
Travel Time (hr)	0.0	2.0	2.8	0.0	4.9
Vehicles Entered	5	372	460	6	843
Vehicles Exited	5	373	462	6	846
Hourly Exit Rate	5	373	462	6	846
Input Volume	6	378	507	6	897
% of Volume	83	99	91	100	94
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

2: I-10 WB Ramps & Singleton Rd Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.2
Denied Del/Veh (s)	0.0	0.0	0.6	3.9	1.1
Total Delay (hr)	0.0	0.3	0.0	0.1	0.5
Total Del/Veh (s)	3.2	2.7	6.5	2.4	2.6
Stop/Veh	0.00	0.00	1.00	0.99	0.29
Travel Time (hr)	0.0	1.0	0.0	1.3	2.4
Vehicles Entered	5	466	1	189	661
Vehicles Exited	5	465	1	188	659
Hourly Exit Rate	5	465	1	188	659
Input Volume	6	511	2	193	712
% of Volume	83	91	50	97	92
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	0.4	0.8	0.0	0.3	3.1	3.0	0.4	2.4	0.4	0.5	0.1	0.1
Total Del/Veh (s)	30.7	18.8	1.2	45.4	26.9	18.5	22.4	22.8	10.1	25.0	27.0	10.4
Stop/Veh	0.98	0.66	0.00	1.22	0.72	0.91	0.74	0.72	0.87	0.82	0.79	0.90
Travel Time (hr)	0.5	1.2	0.0	0.4	4.7	6.5	0.7	3.9	1.1	0.9	0.3	0.2
Vehicles Entered	42	151	1	23	408	569	68	381	142	64	19	20
Vehicles Exited	41	150	1	22	405	572	68	383	142	64	19	20
Hourly Exit Rate	41	150	1	22	405	572	68	383	142	64	19	20
Input Volume	47	152	1	22	420	579	95	485	188	60	18	21
% of Volume	88	99	100	99	96	99	72	79	75	107	104	94
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	11.4
Total Del/Veh (s)	21.5
Stop/Veh	0.80
Travel Time (hr)	20.3
Vehicles Entered	1888
Vehicles Exited	1887
Hourly Exit Rate	1887
Input Volume	2088
% of Volume	90
Denied Entry Before	0
Denied Entry After	0

4: Beckwith Ave & Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.1	0.0	0.0	0.1	0.7	0.0	0.9
Total Del/Veh (s)	1.2	1.3	2.5	0.4	16.2	11.4	2.5
Stop/Veh	0.00	0.00	0.33	0.00	0.98	1.00	0.12
Travel Time (hr)	2.2	0.1	0.0	7.5	2.5	0.0	12.3
Vehicles Entered	346	9	3	839	158	2	1357
Vehicles Exited	346	10	3	841	159	2	1361
Hourly Exit Rate	346	10	3	841	159	2	1361
Input Volume	388	11	3	853	168	2	1425
% of Volume	89	89	100	99	95	100	96
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.3	0.0	0.0		0.1	0.1	0.1	0.1	3.5	0.6	0.3	2.9
Total Delay (hr)	0.1	0.9	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	14.9	9.8	1.2		9.2	1.7	17.8	7.6	3.6	8.6	13.2	4.3
Stop/Veh	0.89	0.45	0.50		0.41	0.43	0.86	0.50	0.50	0.67	0.67	0.60
Travel Time (hr)	0.2	2.0	0.0	0.0	10.6	0.3	0.1	0.0	0.0	0.1	0.0	2.5
Vehicles Entered	28	325	2	0	529	13	7	2	2	14	3	295
Vehicles Exited	28	326	2	0	525	14	6	2	2	15	3	297
Hourly Exit Rate	28	326	2	0	525	14	6	2	2	15	3	297
Input Volume	32	353	4	1	536	12	7	1	1	20	1	294
% of Volume	88	92	50	0	98	114	86	200	200	74	300	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.8
Total Delay (hr)	2.8
Total Del/Veh (s)	8.3
Stop/Veh	0.48
Travel Time (hr)	15.8
Vehicles Entered	1220
Vehicles Exited	1220
Hourly Exit Rate	1220
Input Volume	1263
% of Volume	97
Denied Entry Before	0
Denied Entry After	0



6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	1.8	0.3	2.1	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	1.4	0.7	0.0	0.2	2.0	0.0	2.7	3.1	0.2	0.2	0.2	0.9
Total Del/Veh (s)	26.0	15.0	4.8	36.5	23.6	6.4	23.7	18.8	7.6	34.5	31.8	11.5
Stop/Veh	0.76	0.52	0.53	1.00	0.71	0.74	0.66	0.53	0.57	0.96	0.88	0.72
Travel Time (hr)	4.3	3.3	0.6	0.3	4.1	0.2	4.2	4.7	0.6	0.9	0.9	9.3
Vehicles Entered	189	174	36	15	302	23	405	583	92	23	23	280
Vehicles Exited	190	174	35	15	301	23	403	581	92	22	23	282
Hourly Exit Rate	190	174	35	15	301	23	403	581	92	22	23	282
Input Volume	188	171	40	16	300	19	634	936	153	22	23	290
% of Volume	101	102	88	92	100	119	64	62	60	99	99	97
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	11.7
Total Del/Veh (s)	19.3
Stop/Veh	0.64
Travel Time (hr)	33.3
Vehicles Entered	2145
Vehicles Exited	2141
Hourly Exit Rate	2141
Input Volume	2793
% of Volume	77
Denied Entry Before	0
Denied Entry After	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	7.8	737.1	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1116.0	1178.3	1182.5	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3
Total Delay (hr)	5.3	492.2	6.4	5.6	3.5	0.2	0.2	0.5	0.2	15.5	0.6	1.7
Total Del/Veh (s)	1202.2	1249.7	1284.1	171.6	39.7	12.0	63.4	71.3	6.7	114.5	112.5	107.8
Stop/Veh	1.69	2.08	2.00	1.41	0.45	0.45	0.91	0.83	0.96	1.25	1.21	1.24
Travel Time (hr)	13.3	1251.4	14.9	5.9	3.9	0.5	0.2	0.5	0.6	24.6	1.0	2.9
Vehicles Entered	11	910	12	105	314	74	10	22	119	457	18	55
Vehicles Exited	8	903	11	111	312	74	11	23	119	462	18	56
Hourly Exit Rate	8	903	11	111	312	74	11	23	119	462	18	56
Input Volume	21	2167	20	120	336	83	11	22	114	456	20	51
% of Volume	38	42	54	92	93	89	98	103	104	101	89	110
Denied Entry Before	1	134	1	0	0	0	0	0	0	0	0	0
Denied Entry After	14	1342	13	0	0	0	0	0	0	0	0	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	All
Denied Delay (hr)	753.1
Denied Del/Veh (s)	780.0
Total Delay (hr)	532.1
Total Del/Veh (s)	715.5
Stop/Veh	1.57
Travel Time (hr)	1319.7
Vehicles Entered	2107
Vehicles Exited	2108
Hourly Exit Rate	2108
Input Volume	3423
% of Volume	62
Denied Entry Before	136
Denied Entry After	1369

8: Cherry Valley Blvd & I-10 EB Ramps Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	11.6	24.9	36.6
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	246.2	261.1	59.3
Total Delay (hr)	5.2	1.6	0.5	3.9	10.8	17.2	39.1
Total Del/Veh (s)	18.1	12.4	89.7	69.8	249.9	193.1	64.1
Stop/Veh	0.35	0.34	1.14	0.71	1.73	1.56	0.66
Travel Time (hr)	6.6	3.0	0.6	4.6	22.9	43.4	81.2
Vehicles Entered	1028	465	21	198	147	304	2163
Vehicles Exited	1032	464	20	193	143	301	2153
Hourly Exit Rate	1032	464	20	193	143	301	2153
Input Volume	1883	858	21	202	162	339	3465
% of Volume	55	54	94	96	88	89	62
Denied Entry Before	0	0	0	0	0	1	1
Denied Entry After	0	0	0	0	23	40	63

9: I-10 WB Ramps & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.5	0.4	3.6	0.3
Total Delay (hr)	6.4	4.5	0.6	0.7	3.6	0.4	1.6	17.8
Total Del/Veh (s)	32.9	32.7	22.5	7.0	102.5	123.8	33.9	32.7
Stop/Veh	1.19	1.03	0.31	0.36	1.19	1.36	1.33	0.97
Travel Time (hr)	9.2	6.2	0.7	1.5	4.4	0.4	2.8	25.3
Vehicles Entered	690	485	97	360	127	11	167	1937
Vehicles Exited	695	486	97	358	121	10	166	1933
Hourly Exit Rate	695	486	97	358	121	10	166	1933
Input Volume	1213	832	91	373	132	10	167	2818
% of Volume	57	58	107	96	91	98	99	69
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0

10: Cherry Valley Blvd & Calimesa Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0	0.4	0.1
Total Delay (hr)	1.1	0.7	0.6	0.0	0.5	0.0	2.9
Total Del/Veh (s)	10.6	8.9	4.7	0.8	53.3	4.7	8.2
Stop/Veh	0.76	0.38	0.01	0.06	0.97	1.00	0.35
Travel Time (hr)	1.9	1.2	8.5	2.5	0.9	0.2	15.1
Vehicles Entered	359	296	446	128	34	14	1277
Vehicles Exited	359	295	444	127	34	14	1273
Hourly Exit Rate	359	295	444	127	34	14	1273
Input Volume	542	458	448	124	34	15	1621
% of Volume	66	64	99	102	101	92	79
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

11: Calimesa Blvd & I-10 WB Ramp Performance by movement

Movement	EBL	NBT	SBT	All
Denied Delay (hr)	1.6	392.2	0.0	393.7
Denied Del/Veh (s)	18.4	1006.2	0.0	793.6
Total Delay (hr)	4.1	89.4	0.2	93.7
Total Del/Veh (s)	47.8	366.9	9.7	267.7
Stop/Veh	0.70	1.30	0.99	1.13
Travel Time (hr)	6.2	489.8	0.5	496.5
Vehicles Entered	305	781	74	1160
Vehicles Exited	300	779	74	1153
Hourly Exit Rate	300	779	74	1153
Input Volume	305	1417	80	1802
% of Volume	98	55	92	64
Denied Entry Before	0	167	0	167
Denied Entry After	4	622	0	626

12: Roberts Rd & Singleton Rd Performance by movement

Movement	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	3.7	0.0	1.6	0.8	0.8
Stop/Veh	1.00	0.00	1.00	0.00	0.01
Travel Time (hr)	0.0	0.0	0.0	6.0	6.0
Vehicles Entered	2	2	2	374	380
Vehicles Exited	2	2	2	373	379
Hourly Exit Rate	2	2	2	373	379
Input Volume	2	2	2	379	385
% of Volume	100	100	100	98	99
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

13: Calimesa Blvd & PA-1 Drwy 1 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	1.6	0.2
Stop/Veh	0.00	0.00	0.00
Travel Time (hr)	1.7	0.2	1.9
Vehicles Entered	588	42	630
Vehicles Exited	589	42	631
Hourly Exit Rate	589	42	631
Input Volume	767	42	810
% of Volume	77	99	78
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

14: Calimesa Blvd & PA-1 Drwy 2 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.0	0.1
Stop/Veh	0.00	0.00	0.00
Travel Time (hr)	1.9	0.1	2.0
Vehicles Entered	588	40	628
Vehicles Exited	588	40	628
Hourly Exit Rate	588	40	628
Input Volume	767	41	808
% of Volume	77	98	78
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

15: Calimesa Blvd & PA-1 Drwy 3 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.0	0.1
Stop/Veh	0.00	0.00	0.00
Travel Time (hr)	2.2	0.1	2.4
Vehicles Entered	588	40	628
Vehicles Exited	588	40	628
Hourly Exit Rate	588	40	628
Input Volume	767	41	808
% of Volume	77	98	78
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

16: Calimesa Blvd & PA-1 Drwy 4 Performance by movement

Movement	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.1
Total Del/Veh (s)	0.3	0.0	0.3
Stop/Veh	0.00	0.00	0.00
Travel Time (hr)	2.7	0.1	2.8
Vehicles Entered	589	40	629
Vehicles Exited	588	39	627
Hourly Exit Rate	588	39	627
Input Volume	768	41	808
% of Volume	77	96	78
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

17: Calimesa Blvd & PA-2 Drwy 1 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Delay (hr)	0.2	0.1	0.0	0.3
Total Del/Veh (s)	4.5	1.0	0.0	1.6
Stop/Veh	0.99	0.00	0.00	0.18
Travel Time (hr)	0.5	6.5	0.2	7.2
Vehicles Entered	118	486	39	643
Vehicles Exited	118	485	40	643
Hourly Exit Rate	118	485	40	643
Input Volume	120	666	41	827
% of Volume	98	73	98	78
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

1: Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.7	0.0	0.7
Total Del/Veh (s)	1.2	0.0	5.1	7.5	5.1
Stop/Veh	0.00	0.00	0.01	0.00	0.01
Travel Time (hr)	0.0	0.0	2.5	0.0	2.5
Vehicles Entered	7	1	513	3	524
Vehicles Exited	7	1	516	3	527
Hourly Exit Rate	7	1	516	3	527
Input Volume	6	2	1336	6	1350
% of Volume	117	50	39	48	39
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

2: I-10 WB Ramps & Singleton Rd Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.1	8.4	8.5
Denied Del/Veh (s)	0.0	0.0	174.8	151.1	42.3
Total Delay (hr)	0.2	0.3	0.3	30.1	30.8
Total Del/Veh (s)	72.0	1.9	506.3	584.8	156.2
Stop/Veh	0.62	0.00	1.00	0.74	0.20
Travel Time (hr)	0.2	1.0	0.4	39.3	40.9
Vehicles Entered	7	513	2	180	702
Vehicles Exited	8	514	1	141	664
Hourly Exit Rate	8	514	1	141	664
Input Volume	6	1340	2	193	1542
% of Volume	133	38	50	73	43
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	20	20



3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.3	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.5	7.8	40.0	0.0	0.0	0.1
Total Delay (hr)	5.4	3.8	0.0	0.7	21.1	13.2	6.6	19.5	2.0	5.6	1.8	1.8
Total Del/Veh (s)	539.7	113.3	3.3	239.6	173.9	187.2	246.1	243.7	220.4	317.1	287.3	312.3
Stop/Veh	1.11	0.88	1.00	1.90	1.24	1.57	1.40	1.57	1.41	1.31	1.13	1.38
Travel Time (hr)	5.5	4.1	0.0	0.7	22.7	14.6	7.3	21.1	2.4	6.2	2.0	2.0
Vehicles Entered	30	118	1	9	413	241	89	266	30	58	21	20
Vehicles Exited	30	118	1	9	415	234	91	264	30	58	22	20
Hourly Exit Rate	30	118	1	9	415	234	91	264	30	58	22	20
Input Volume	47	152	1	22	952	608	393	1067	125	60	19	21
% of Volume	64	78	100	40	44	39	23	25	24	97	114	94
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	1	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	1.1
Denied Del/Veh (s)	3.2
Total Delay (hr)	81.6
Total Del/Veh (s)	212.4
Stop/Veh	1.36
Travel Time (hr)	88.6
Vehicles Entered	1296
Vehicles Exited	1292
Hourly Exit Rate	1292
Input Volume	3466
% of Volume	37
Denied Entry Before	0
Denied Entry After	1

4: Beckwith Ave & Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	13.8	255.2	1.3	270.3
Denied Del/Veh (s)	0.0	0.0	0.0	72.6	2121.8	2412.3	733.9
Total Delay (hr)	0.1	0.0	0.1	58.0	80.7	1.0	139.9
Total Del/Veh (s)	1.2	1.0	201.8	288.2	3339.1	3597.2	493.8
Stop/Veh	0.00	0.00	2.00	1.57	0.01	0.00	1.12
Travel Time (hr)	1.2	0.1	0.1	77.7	336.0	2.3	417.4
Vehicles Entered	197	8	2	661	6	0	874
Vehicles Exited	197	8	2	657	6	0	870
Hourly Exit Rate	197	8	2	657	6	0	870
Input Volume	325	11	3	1221	360	2	1922
% of Volume	61	71	67	54	2	0	45
Denied Entry Before	0	0	0	5	76	1	82
Denied Entry After	0	0	0	23	427	2	452

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	9.4	0.1	0.0	0.0	0.0	3.8	74.6	87.9
Denied Del/Veh (s)	0.5	0.0	0.0	0.1	46.4	40.6	0.1	0.1	4.2	623.4	599.5	223.4
Total Delay (hr)	0.1	0.9	0.0	0.3	264.1	4.0	0.1	0.0	0.0	1.8	37.5	308.8
Total Del/Veh (s)	21.7	17.2	9.5	1104.3	1274.5	1194.0	78.0	19.1	3.6	405.0	408.1	846.7
Stop/Veh	0.95	0.66	1.00	1.00	1.45	1.25	1.00	1.00	1.00	1.38	1.50	1.34
Travel Time (hr)	0.2	1.4	0.0	0.3	281.9	4.2	0.1	0.0	0.0	5.7	114.0	408.0
Vehicles Entered	20	178	2	1	663	11	5	1	1	15	305	1202
Vehicles Exited	20	177	2	0	365	5	4	1	1	13	291	879
Hourly Exit Rate	20	177	2	0	365	5	4	1	1	13	291	879
Input Volume	32	290	4	1	755	12	7	1	1	20	443	1567
% of Volume	63	61	50	0	48	41	57	100	100	64	66	56
Denied Entry Before	0	0	0	0	0	0	0	0	0	1	5	6
Denied Entry After	0	0	0	0	64	1	0	0	0	7	143	215

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	2.4	0.4	2.5	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	1.4	0.8	0.1	0.3	5.5	1.1	4.3	4.0	0.1	0.4	0.3	2.9
Total Del/Veh (s)	39.7	18.0	6.7	66.0	30.8	15.4	33.1	27.3	7.4	59.7	51.2	33.3
Stop/Veh	0.77	0.50	0.53	1.24	0.68	0.74	0.76	0.62	0.58	0.95	0.91	0.94
Travel Time (hr)	3.4	3.3	0.7	0.4	9.8	3.1	6.1	5.5	0.4	1.0	0.9	11.9
Vehicles Entered	128	167	38	17	633	243	466	518	66	21	22	303
Vehicles Exited	127	166	38	17	624	243	470	523	65	21	22	301
Hourly Exit Rate	127	166	38	17	624	243	470	523	65	21	22	301
Input Volume	123	171	40	16	632	253	1102	1165	153	22	23	290
% of Volume	103	97	96	105	99	96	43	45	43	94	95	104
Denied Entry Before	0	0	0	0	0	1	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.4
Total Delay (hr)	21.3
Total Del/Veh (s)	28.7
Stop/Veh	0.71
Travel Time (hr)	46.6
Vehicles Entered	2622
Vehicles Exited	2617
Hourly Exit Rate	2617
Input Volume	3991
% of Volume	66
Denied Entry Before	1
Denied Entry After	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	3.5	0.0	0.0	0.0	0.0	0.2	0.2	1.8	5.9	0.8	2.0
Denied Del/Veh (s)	22.1	26.3	6.6	0.0	0.0	0.0	63.4	25.9	54.5	138.2	111.8	156.7
Total Delay (hr)	16.2	306.7	14.5	1.9	1.1	0.0	0.7	1.1	7.5	55.4	9.1	17.1
Total Del/Veh (s)	2240.4	1954.2	1930.9	158.8	29.4	2.2	198.2	171.5	230.0	1355.9	1553.7	1334.9
Stop/Veh	0.96	1.06	1.07	1.00	0.42	0.55	0.83	0.96	0.77	1.16	1.24	1.02
Travel Time (hr)	16.6	315.6	14.8	2.0	1.3	0.1	0.9	1.3	9.7	62.9	10.1	19.6
Vehicles Entered	22	443	21	39	138	37	11	22	114	123	19	37
Vehicles Exited	3	82	5	38	139	38	11	22	110	64	11	20
Hourly Exit Rate	3	82	5	38	139	38	11	22	110	64	11	20
Input Volume	21	482	20	120	336	83	11	22	114	143	20	51
% of Volume	14	17	25	32	41	46	98	99	96	45	54	39
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	1	33	1	0	0	0	0	1	8	30	6	10

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	All
Denied Delay (hr)	14.6
Denied Del/Veh (s)	47.0
Total Delay (hr)	431.1
Total Del/Veh (s)	1290.1
Stop/Veh	0.95
Travel Time (hr)	455.0
Vehicles Entered	1026
Vehicles Exited	543
Hourly Exit Rate	543
Input Volume	1425
% of Volume	38
Denied Entry Before	0
Denied Entry After	90

8: Cherry Valley Blvd & I-10 EB Ramps Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBR	All
Denied Delay (hr)	0.8	1.1	0.0	0.0	94.4	190.0	286.3
Denied Del/Veh (s)	14.7	72.1	0.0	0.0	1788.0	1745.0	816.7
Total Delay (hr)	12.1	2.6	1.6	0.7	12.3	18.1	47.6
Total Del/Veh (s)	199.7	178.1	20.2	19.6	871.4	671.1	202.8
Stop/Veh	0.67	0.57	0.61	0.46	0.92	0.85	0.64
Travel Time (hr)	13.3	3.9	2.8	1.2	106.9	208.5	336.5
Vehicles Entered	205	52	285	135	39	80	796
Vehicles Exited	206	51	282	133	36	81	789
Hourly Exit Rate	206	51	282	133	36	81	789
Input Volume	603	140	449	202	162	339	1895
% of Volume	34	36	63	66	22	24	42
Denied Entry Before	0	0	0	0	32	71	103
Denied Entry After	1	2	0	0	151	312	466

9: I-10 WB Ramps & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Delay (hr)	0.2	0.0	0.0	0.0	16.2	1.2	21.8	39.4
Denied Del/Veh (s)	4.8	0.0	0.0	0.0	423.7	415.9	447.6	104.2
Total Delay (hr)	15.0	7.9	1.3	0.6	17.1	1.6	22.5	66.0
Total Del/Veh (s)	296.9	336.7	13.5	4.8	581.7	720.6	643.1	182.2
Stop/Veh	1.53	1.51	0.22	0.24	1.50	1.75	1.29	0.71
Travel Time (hr)	15.9	8.1	1.7	1.7	33.9	2.8	44.9	109.0
Vehicles Entered	165	77	337	458	100	7	116	1260
Vehicles Exited	171	76	335	457	85	7	95	1226
Hourly Exit Rate	171	76	335	457	85	7	95	1226
Input Volume	514	252	518	695	132	10	167	2288
% of Volume	33	30	65	66	64	68	57	54
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	38	3	59	100

10: Cherry Valley Blvd & Calimesa Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	50.9	20.5	0.0	0.0	71.4
Denied Del/Veh (s)	0.0	0.0	172.1	187.3	0.0	0.3	152.1
Total Delay (hr)	5.1	3.0	93.8	34.1	1.7	5.9	143.7
Total Del/Veh (s)	181.7	135.2	380.0	386.4	424.6	285.4	350.4
Stop/Veh	1.08	0.95	1.58	1.70	0.86	0.89	1.50
Travel Time (hr)	5.4	3.1	158.8	60.1	1.8	6.7	235.8
Vehicles Entered	95	76	864	311	8	52	1406
Vehicles Exited	97	74	720	252	14	75	1232
Hourly Exit Rate	97	74	720	252	14	75	1232
Input Volume	248	170	1030	404	34	183	2069
% of Volume	39	44	70	62	41	41	60
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	201	83	0	0	284

11: Calimesa Blvd & I-10 WB Ramp Performance by movement

Movement	EBL	NBT	SBT	All
Denied Delay (hr)	0.0	44.3	0.0	44.3
Denied Del/Veh (s)	0.2	196.1	0.0	133.5
Total Delay (hr)	0.9	98.7	0.2	99.8
Total Del/Veh (s)	10.7	416.4	9.0	289.9
Stop/Veh	1.00	0.72	0.96	0.80
Travel Time (hr)	1.4	151.7	0.5	153.6
Vehicles Entered	304	743	78	1125
Vehicles Exited	305	745	78	1128
Hourly Exit Rate	305	745	78	1128
Input Volume	305	2115	80	2500
% of Volume	100	35	97	45
Denied Entry Before	0	18	0	18
Denied Entry After	0	70	0	70

12: Roberts Rd & Singleton Rd Performance by movement

Movement	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.1	0.1	1.0	0.0	1.2
Stop/Veh	1.00	0.00	1.00	0.00	0.33
Travel Time (hr)	0.0	0.0	0.0	0.0	0.1
Vehicles Entered	1	1	1	3	6
Vehicles Exited	1	1	1	3	6
Hourly Exit Rate	1	1	1	3	6
Input Volume	2	2	2	3	9
% of Volume	50	50	50	100	67
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

13: Calimesa Blvd & PA-1 Drwy 1 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	144.4	0.2	0.0	144.6
Denied Del/Veh (s)	1917.9	2.3	0.0	803.3
Total Delay (hr)	31.9	20.3	0.0	52.2
Total Del/Veh (s)	1617.5	199.1	1.9	401.6
Stop/Veh	0.00	1.01	0.00	0.79
Travel Time (hr)	176.5	21.5	0.1	198.1
Vehicles Entered	39	346	30	415
Vehicles Exited	39	346	30	415
Hourly Exit Rate	39	346	30	415
Input Volume	224	1362	42	1628
% of Volume	17	25	71	25
Denied Entry Before	50	0	0	50
Denied Entry After	232	1	0	233

14: Calimesa Blvd & PA-1 Drwy 2 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	88.8	0.2	0.0	89.1
Denied Del/Veh (s)	1786.9	2.7	0.0	606.3
Total Delay (hr)	24.2	23.6	0.0	47.7
Total Del/Veh (s)	1814.2	245.1	0.0	405.4
Stop/Veh	0.00	1.09	0.00	0.89
Travel Time (hr)	113.1	24.9	0.1	138.1
Vehicles Entered	24	322	28	374
Vehicles Exited	25	322	28	375
Hourly Exit Rate	25	322	28	375
Input Volume	168	1193	41	1402
% of Volume	15	27	69	27
Denied Entry Before	18	0	0	18
Denied Entry After	155	0	0	155

15: Calimesa Blvd & PA-1 Drwy 3 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	73.2	0.0	0.0	73.2
Denied Del/Veh (s)	1667.6	0.0	0.0	538.8
Total Delay (hr)	23.4	24.3	0.0	47.7
Total Del/Veh (s)	1958.7	266.3	0.0	429.6
Stop/Veh	0.16	1.22	0.00	1.02
Travel Time (hr)	96.7	25.5	0.1	122.3
Vehicles Entered	24	303	28	355
Vehicles Exited	19	303	28	350
Hourly Exit Rate	19	303	28	350
Input Volume	168	1025	41	1234
% of Volume	11	30	69	28
Denied Entry Before	6	0	0	6
Denied Entry After	134	0	0	134



16: Calimesa Blvd & PA-1 Drwy 4 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	92.9	0.5	0.0	93.4
Denied Del/Veh (s)	1479.3	6.5	0.0	628.3
Total Delay (hr)	28.0	33.1	0.0	61.0
Total Del/Veh (s)	1832.0	381.4	0.0	556.3
Stop/Veh	0.18	1.31	0.00	1.06
Travel Time (hr)	121.0	34.8	0.1	155.8
Vehicles Entered	36	280	28	344
Vehicles Exited	27	277	28	332
Hourly Exit Rate	27	277	28	332
Input Volume	224	802	41	1066
% of Volume	12	35	69	31
Denied Entry Before	0	0	0	0
Denied Entry After	190	1	0	191

17: Calimesa Blvd & PA-2 Drwy 1 Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	78.9	75.8	0.0	0.0	154.7
Denied Del/Veh (s)	1596.7	1673.8	0.0	0.0	775.8
Total Delay (hr)	9.0	9.3	91.3	0.1	109.7
Total Del/Veh (s)	1050.6	1399.8	862.2	11.1	851.3
Stop/Veh	0.23	0.12	1.68	0.04	1.40
Travel Time (hr)	88.1	85.2	95.3	0.2	268.8
Vehicles Entered	23	19	349	28	419
Vehicles Exited	21	15	272	28	336
Hourly Exit Rate	21	15	272	28	336
Input Volume	168	168	652	41	1029
% of Volume	12	9	42	69	33
Denied Entry Before	2	4	0	0	6
Denied Entry After	155	144	0	0	299

24: Calimesa Blvd Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	44.1	0.7	0.0	44.8
Denied Del/Veh (s)	465.4	4.6	0.0	170.3
Total Delay (hr)	46.2	90.6	0.1	136.9
Total Del/Veh (s)	607.1	524.7	3.5	506.6
Stop/Veh	0.67	0.79	0.00	0.70
Travel Time (hr)	92.5	97.1	1.0	190.6
Vehicles Entered	236	528	76	840
Vehicles Exited	220	523	76	819
Hourly Exit Rate	220	523	76	819
Input Volume	342	1722	79	2144
% of Volume	64	30	96	38
Denied Entry Before	20	0	0	20
Denied Entry After	105	1	0	106

Total Network Performance

Denied Delay (hr)	1423.9
Denied Del/Veh (s)	590.3
Total Delay (hr)	1892.6
Total Del/Veh (s)	940.5
Stop/Veh	2.44
Travel Time (hr)	3518.5
Vehicles Entered	5867
Vehicles Exited	4691
Hourly Exit Rate	4691
Input Volume	43601
% of Volume	11
Denied Entry Before	310
Denied Entry After	2816

1: Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	2.0	0.0	2.1
Total Del/Veh (s)	4.3	1.0	10.9	7.9	7.3
Stop/Veh	0.00	0.09	0.65	0.17	0.44
Travel Time (hr)	0.0	2.1	4.3	0.0	6.4
Vehicles Entered	3	376	655	6	1040
Vehicles Exited	3	376	654	6	1039
Hourly Exit Rate	3	376	654	6	1039
Input Volume	6	378	955	6	1344
% of Volume	50	100	68	100	77
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

2: I-10 WB Ramps & Singleton Rd Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.2
Denied Del/Veh (s)	0.0	0.0	0.1	3.8	0.9
Total Delay (hr)	0.0	0.4	0.0	0.2	0.5
Total Del/Veh (s)	3.6	1.9	10.2	3.0	2.2
Stop/Veh	0.00	0.00	1.00	0.99	0.23
Travel Time (hr)	0.0	1.7	0.0	1.4	3.2
Vehicles Entered	3	659	1	197	860
Vehicles Exited	3	660	1	195	859
Hourly Exit Rate	3	660	1	195	859
Input Volume	6	959	2	193	1160
% of Volume	50	69	50	101	74
Denied Entry Before	0	0	0	1	1
Denied Entry After	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.2	0.2	0.1
Total Delay (hr)	1.0	1.9	0.8	15.8	19.8	4.5	7.9	3.0	1.0	0.3	0.3	56.4
Total Del/Veh (s)	79.3	44.3	237.0	215.1	195.9	39.7	42.2	33.9	57.2	63.0	40.4	86.3
Stop/Veh	1.11	0.79	2.67	2.17	2.24	0.73	0.73	0.74	0.90	0.89	0.96	1.16
Travel Time (hr)	1.1	2.3	0.8	16.8	21.8	6.3	10.5	4.7	1.4	0.4	0.4	66.6
Vehicles Entered	45	153	11	247	343	401	671	319	60	18	22	2290
Vehicles Exited	42	157	11	250	342	401	667	316	60	19	22	2287
Hourly Exit Rate	42	157	11	250	342	401	667	316	60	19	22	2287
Input Volume	47	152	22	420	579	543	876	412	60	18	21	3151
% of Volume	90	104	49	60	59	74	76	77	100	104	104	73
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

4: Beckwith Ave & Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.3	10.4	62.9	0.3	73.9
Denied Del/Veh (s)	0.0	0.0	577.8	62.2	1347.2	596.1	203.8
Total Delay (hr)	0.1	0.0	0.2	59.0	79.2	1.5	140.0
Total Del/Veh (s)	1.0	1.1	287.6	326.4	3032.9	2744.2	392.6
Stop/Veh	0.00	0.00	1.50	1.78	0.18	0.00	0.92
Travel Time (hr)	3.3	0.1	0.5	74.6	142.2	1.9	222.6
Vehicles Entered	522	10	2	583	29	1	1147
Vehicles Exited	523	9	2	587	14	0	1135
Hourly Exit Rate	523	9	2	587	14	0	1135
Input Volume	612	11	3	853	168	2	1649
% of Volume	85	80	67	69	8	0	69
Denied Entry Before	0	0	0	4	0	0	4
Denied Entry After	0	0	0	19	139	1	159

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.5
Denied Del/Veh (s)	0.1	0.0	0.0		0.1	0.1	0.1	0.1	4.9	21.9	21.0	18.6
Total Delay (hr)	0.2	1.4	0.0	0.0	102.2	1.3	0.1	0.0	0.0	1.0	0.1	18.7
Total Del/Veh (s)	22.3	10.0	6.9		650.0	577.4	53.6	17.2	7.3	204.5	175.3	227.6
Stop/Veh	0.90	0.42	0.67		1.31	1.12	1.00	1.00	1.00	1.33	1.00	1.26
Travel Time (hr)	0.3	3.0	0.0	0.1	110.7	1.4	0.2	0.0	0.0	1.2	0.1	22.0
Vehicles Entered	29	494	3	0	549	8	8	1	2	18	2	293
Vehicles Exited	29	492	3	0	337	4	8	1	2	17	1	263
Hourly Exit Rate	29	492	3	0	337	4	8	1	2	17	1	263
Input Volume	32	577	4	1	536	12	7	1	1	20	1	294
% of Volume	91	85	75	0	63	33	114	100	200	84	100	89
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	1	0	6

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	1.7
Denied Del/Veh (s)	4.3
Total Delay (hr)	125.0
Total Del/Veh (s)	315.1
Stop/Veh	0.98
Travel Time (hr)	139.0
Vehicles Entered	1407
Vehicles Exited	1157
Hourly Exit Rate	1157
Input Volume	1486
% of Volume	78
Denied Entry Before	0
Denied Entry After	7

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	3.2	0.2	3.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	1.5	0.7	0.1	0.1	2.2	0.0	2.9	2.7	0.2	0.2	0.2	1.1
Total Del/Veh (s)	27.8	15.1	7.6	39.4	26.8	6.0	22.5	18.7	7.5	35.6	41.2	13.4
Stop/Veh	0.75	0.52	0.62	1.08	0.75	0.81	0.62	0.51	0.54	0.96	0.95	0.74
Travel Time (hr)	4.3	3.1	0.7	0.2	4.2	0.2	4.7	4.2	0.5	0.9	0.8	9.5
Vehicles Entered	186	163	38	13	288	21	461	522	79	21	20	280
Vehicles Exited	187	162	38	13	288	20	460	523	79	24	21	281
Hourly Exit Rate	187	162	38	13	288	20	460	523	79	24	21	281
Input Volume	188	171	40	16	300	19	914	1047	153	22	23	290
% of Volume	99	95	96	80	96	104	50	50	52	108	90	97
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	12.0
Total Del/Veh (s)	20.3
Stop/Veh	0.64
Travel Time (hr)	33.3
Vehicles Entered	2092
Vehicles Exited	2096
Hourly Exit Rate	2096
Input Volume	3184
% of Volume	66
Denied Entry Before	0
Denied Entry After	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	6.5	754.5	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1021.0	1202.5	1188.6	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.3	0.3
Total Delay (hr)	5.4	498.5	4.6	6.4	1.7	0.1	0.3	0.5	0.2	23.4	1.2	2.9
Total Del/Veh (s)	1500.5	1291.1	1278.0	207.5	20.0	5.5	86.4	79.5	6.9	179.3	198.8	174.4
Stop/Veh	2.23	1.95	1.62	1.30	0.39	0.55	1.00	0.92	0.97	1.64	1.71	1.68
Travel Time (hr)	12.2	1274.0	12.1	6.7	2.2	0.3	0.3	0.6	0.5	32.3	1.6	4.1
Vehicles Entered	7	860	7	108	313	74	11	23	109	453	21	60
Vehicles Exited	10	859	9	105	312	73	11	23	109	433	20	55
Hourly Exit Rate	10	859	9	105	312	73	11	23	109	433	20	55
Input Volume	21	2167	20	120	336	83	11	22	114	456	20	51
% of Volume	47	40	44	88	93	88	98	103	96	95	99	108
Denied Entry Before	1	90	1	0	0	0	0	0	0	0	0	0
Denied Entry After	16	1399	15	0	0	0	0	0	0	0	0	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	All
Denied Delay (hr)	768.4
Denied Del/Veh (s)	795.8
Total Delay (hr)	545.3
Total Del/Veh (s)	750.9
Stop/Veh	1.58
Travel Time (hr)	1346.7
Vehicles Entered	2046
Vehicles Exited	2019
Hourly Exit Rate	2019
Input Volume	3423
% of Volume	59
Denied Entry Before	92
Denied Entry After	1430

8: Cherry Valley Blvd & I-10 EB Ramps Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	22.1	49.4	71.7
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	480.3	477.0	116.3
Total Delay (hr)	5.8	1.9	3.6	7.9	10.2	18.0	47.4
Total Del/Veh (s)	21.5	15.6	156.0	134.7	266.4	209.0	79.4
Stop/Veh	0.43	0.39	1.43	1.08	1.57	1.49	0.75
Travel Time (hr)	7.1	3.2	3.9	8.7	32.9	68.7	124.5
Vehicles Entered	965	434	81	199	126	290	2095
Vehicles Exited	961	434	81	204	126	292	2098
Hourly Exit Rate	961	434	81	204	126	292	2098
Input Volume	1883	858	77	201	162	339	3520
% of Volume	51	51	105	102	78	86	60
Denied Entry Before	0	0	0	0	6	18	24
Denied Entry After	0	0	0	0	40	83	123

9: I-10 WB Ramps & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.5	0.5	3.6	0.4
Total Delay (hr)	7.4	5.3	1.2	0.6	8.2	0.4	6.2	29.2
Total Del/Veh (s)	41.0	41.7	29.0	6.0	207.9	200.4	131.0	54.5
Stop/Veh	1.33	1.18	0.35	0.30	1.65	1.62	1.77	1.09
Travel Time (hr)	9.9	6.9	1.3	1.5	9.0	0.5	7.3	36.5
Vehicles Entered	636	451	143	362	138	8	165	1903
Vehicles Exited	634	452	145	364	136	8	164	1903
Hourly Exit Rate	634	452	145	364	136	8	164	1903
Input Volume	1213	832	146	373	132	10	167	2874
% of Volume	52	54	99	98	103	78	98	66
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0



10: Cherry Valley Blvd & Calimesa Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0	0.2	0.1
Total Delay (hr)	0.9	0.6	0.8	0.1	0.2	0.1	2.8
Total Del/Veh (s)	10.0	8.1	6.7	2.5	29.0	4.9	7.8
Stop/Veh	0.74	0.35	0.02	0.07	1.00	1.00	0.35
Travel Time (hr)	1.7	1.1	8.6	2.6	0.5	0.9	15.5
Vehicles Entered	334	282	439	131	25	63	1274
Vehicles Exited	335	282	441	131	26	64	1279
Hourly Exit Rate	335	282	441	131	26	64	1279
Input Volume	542	458	448	124	34	71	1677
% of Volume	62	62	98	105	77	90	76
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

11: Calimesa Blvd & I-10 WB Ramp Performance by movement

Movement	EBL	NBT	SBT	All
Denied Delay (hr)	4.7	412.7	0.0	417.4
Denied Del/Veh (s)	54.9	1044.1	0.0	834.3
Total Delay (hr)	5.5	91.1	0.2	96.8
Total Del/Veh (s)	67.1	375.3	10.1	280.4
Stop/Veh	0.53	1.23	1.00	1.05
Travel Time (hr)	10.6	512.0	0.5	523.1
Vehicles Entered	291	776	73	1140
Vehicles Exited	286	776	73	1135
Hourly Exit Rate	286	776	73	1135
Input Volume	305	1809	80	2194
% of Volume	94	43	91	52
Denied Entry Before	2	181	0	183
Denied Entry After	14	647	0	661

12: Roberts Rd & Singleton Rd Performance by movement

Movement	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	2.9	0.0	1.5	0.8	0.8
Stop/Veh	1.00	0.00	1.00	0.00	0.01
Travel Time (hr)	0.0	0.0	0.0	6.0	6.0
Vehicles Entered	1	3	3	375	382
Vehicles Exited	1	3	3	375	382
Hourly Exit Rate	1	3	3	375	382
Input Volume	2	2	2	379	385
% of Volume	50	150	150	99	99
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

13: Calimesa Blvd & PA-1 Drwy 1 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	111.6	0.0	0.0	111.6
Denied Del/Veh (s)	1243.3	0.0	0.0	243.8
Total Delay (hr)	31.0	5.3	0.0	36.4
Total Del/Veh (s)	820.8	14.8	2.0	89.4
Stop/Veh	0.00	0.27	0.00	0.24
Travel Time (hr)	143.1	9.2	0.1	152.4
Vehicles Entered	105	1293	31	1429
Vehicles Exited	105	1285	31	1421
Hourly Exit Rate	105	1285	31	1421
Input Volume	280	1551	42	1874
% of Volume	38	83	73	76
Denied Entry Before	32	0	0	32
Denied Entry After	218	0	0	218

14: Calimesa Blvd & PA-1 Drwy 2 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	1.5	0.0	0.0	1.5
Denied Del/Veh (s)	33.6	0.0	0.0	3.9
Total Delay (hr)	5.2	2.6	0.0	7.8
Total Del/Veh (s)	126.3	8.1	0.0	20.9
Stop/Veh	0.95	0.14	0.00	0.23
Travel Time (hr)	7.2	6.7	0.1	14.0
Vehicles Entered	146	1168	28	1342
Vehicles Exited	133	1160	28	1321
Hourly Exit Rate	133	1160	28	1321
Input Volume	168	1383	41	1592
% of Volume	79	84	69	83
Denied Entry Before	0	0	0	0
Denied Entry After	10	0	0	10

15: Calimesa Blvd & PA-1 Drwy 3 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.0	0.0	0.1
Total Delay (hr)	1.9	0.7	0.0	2.6
Total Del/Veh (s)	31.7	2.7	0.0	7.7
Stop/Veh	1.00	0.04	0.00	0.21
Travel Time (hr)	2.8	4.5	0.1	7.4
Vehicles Entered	212	966	28	1206
Vehicles Exited	204	966	28	1198
Hourly Exit Rate	204	966	28	1198
Input Volume	224	1160	41	1425
% of Volume	91	83	69	84
Denied Entry Before	0	0	0	0
Denied Entry After	1	0	0	1

16: Calimesa Blvd & PA-1 Drwy 4 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.5	0.3	0.0	0.8
Total Del/Veh (s)	9.5	1.2	0.0	2.7
Stop/Veh	1.00	0.00	0.00	0.18
Travel Time (hr)	1.3	4.0	0.1	5.4
Vehicles Entered	179	787	28	994
Vehicles Exited	180	787	28	995
Hourly Exit Rate	180	787	28	995
Input Volume	168	992	41	1201
% of Volume	107	79	69	83
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

17: Calimesa Blvd & PA-2 Drwy 1 Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.1
Total Delay (hr)	0.2	1.1	0.2	0.0	1.5
Total Del/Veh (s)	14.7	11.8	1.6	0.1	6.1
Stop/Veh	1.00	0.99	0.00	0.00	0.43
Travel Time (hr)	0.4	2.2	6.4	0.1	9.1
Vehicles Entered	53	333	466	28	880
Vehicles Exited	53	333	466	28	880
Hourly Exit Rate	53	333	466	28	880
Input Volume	56	344	666	41	1107
% of Volume	95	97	70	69	80
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0



Attachment D  
SimTraffic Intersection Delay Results – Existing  
Conditions

---

Total Network Performance

---

Denied Delay (hr)	573.0
Denied Del/Veh (s)	282.9
Total Delay (hr)	1141.1
Total Del/Veh (s)	603.6
Stop/Veh	2.26
Travel Time (hr)	1942.8
Vehicles Entered	5961
Vehicles Exited	5007
Hourly Exit Rate	5007
Input Volume	35592
% of Volume	14
Denied Entry Before	99
Denied Entry After	1331

---

Total Network Performance

---

Denied Delay (hr)	1211.7
Denied Del/Veh (s)	513.3
Total Delay (hr)	755.5
Total Del/Veh (s)	368.3
Stop/Veh	1.96
Travel Time (hr)	2238.9
Vehicles Entered	6370
Vehicles Exited	6347
Hourly Exit Rate	6347
Input Volume	40328
% of Volume	16
Denied Entry Before	304
Denied Entry After	2128

---

Total Network Performance

---

Denied Delay (hr)	1423.9
Denied Del/Veh (s)	590.3
Total Delay (hr)	1892.6
Total Del/Veh (s)	940.5
Stop/Veh	2.44
Travel Time (hr)	3518.5
Vehicles Entered	5867
Vehicles Exited	4691
Hourly Exit Rate	4691
Input Volume	43601
% of Volume	11
Denied Entry Before	310
Denied Entry After	2816



---

Total Network Performance

---

Denied Delay (hr)	1543.9
Denied Del/Veh (s)	572.1
Total Delay (hr)	1263.5
Total Del/Veh (s)	552.2
Stop/Veh	2.70
Travel Time (hr)	3090.9
Vehicles Entered	6907
Vehicles Exited	6508
Hourly Exit Rate	6508
Input Volume	48558
% of Volume	13
Denied Entry Before	340
Denied Entry After	2808



Attachment E  
Proposed Project Intersection Mitigations

TABLE 1-3: OPENING YEAR AND INTERIM YEAR IMPROVEMENTS

Intersection # Location	Opening Year Cumulative (2025)			Interim Year Cumulative (2028)			Sunday Morning With Project Scenario 3
	Without Project	With PA1 High-Cube Warehouse & Truck/Trailer Lot Project	With PA1 Parcel Hub Warehouse & Truck/Trailer Lot Project	Without Project	With Project Scenario 1	With Project Scenario 2	
1 I-10 EB Ramps / Singleton Rd.	- Install a Traffic Signal	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Construct 1 shared SB left/through lane	- Same	- Same	- Modify SB L/T striping to SB L/T/R lane	- Same	- Same	- Same
	- Construct 1 SB right turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 EB right turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 WB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
				- Add 2nd EB through lane	- Same	- Same	- Same
					- Add 1 SB left turn lane		
2 I-10 WB Ramps / Singleton Rd.	- Install a Traffic Signal	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 EB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 WB right turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
				- Add 1 NB left turn lane	- Same	- Same	- Same
				- Add 2nd EB left turn lane	- Same	- Same	- Same
						- Add 1 NBR & modify existing NBT to shared NBT/R	
3 Calimesa Bl. / Singleton Rd.	- Realign Calimesa Boulevard	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Install a Traffic Signal	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1NBT/R	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 SBL & 1 SBT	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 EB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 WB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 NB left turn lane	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 EB right turn lane	- Same	--	--	--	--
			- Add 2nd NB left turn lane	--	- Add 2nd NBL	- Same	- Same
				- Add 1 SB right turn lane	- Same	- Same	- Same
				- Add 2nd EBT lane	- Modify previous (2025 w/ Project) EBR improvement to provide 2nd EB through lane	- Same as 2028 w/ Project Scenario 1	- Same as 2028 w/ Project Scenario 1
				- Add a 2nd WB through lane	- Same	- Same	- Same
				- Add 1 NBR	- Same	- Same	

TABLE 1-3: OPENING YEAR AND INTERIM YEAR IMPROVEMENTS

Intersection #	Location	Opening Year Cumulative (2025)			Interim Year Cumulative (2028)			Sunday Morning With Project Scenario 3
		Without Project	With PA1 High-Cube Warehouse & Truck/Trailer Lot Project	With PA1 Parcel Hub Warehouse & Truck/Trailer Lot Project	Without Project	With Project Scenario 1	With Project Scenario 2	
4	Beckwith Av. / Singleton Rd.	--	--	--	- Install a Traffic Signal	- Same	- Same	- Same
					- Provide 1 NB left turn lane	- Same	- Same	- Same
					- Provide 1 EB U-turn lane	- Same	- Same	- Same
					- Provide 1 EB right turn lane	- Same	- Same	- Same
5	Singleton Cyn. Rd. / Singleton Rd.	--	--	--	--	--	--	--
6	Calimesa Bl. / Sandalwood Dr. - 5th St.	--	--	--	- Modify NBT striping to NBL turn lane	- Same	- Same	- Same
					- Modify WBR striping to WBT lane	- Same	- Same	- Same
7	Roberts Rd. / Cherry Valley Bl.	- Add 1 SB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
					- Add 2nd SB left turn lane	- Same	- Same	- Same
					- Add 2nd EB left turn lane	- Same	- Same	- Same
					- Modify traffic signal to implement overlap phasing on the existing WB right turn lane	- Same	- Same	- Same
8	I-10 EB Ramps / Cherry Valley Bl.	- Install a Traffic Signal	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 SB right turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 EB right turn lane	- Same	- Same	- Reconstruct EB right turn to shared EB through/right lane	- Same	- Same	- Same
		- Add 1 WB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
					- Add 2nd SB right turn lane	- Same	- Same	- Same
					- Widen Cherry Valley Boulevard Bridge to 4 lane roadway	- Same	- Same	- Same
					- Add 2nd WB through lane	- Same	- Same	- Same
9	I-10 WB Ramps / Cherry Valley Bl.	- Install a Traffic Signal	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 NB right turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 EB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
		- Add 1 WB right turn lane	- Same	- Same	- Reconstruct WB right turn to 2nd WB through lane	- Same	- Same	- Same
					- Add 2nd EB left turn lane	- Same	- Same	- Same
					- Add 1 WB right turn lane	- Same		

TABLE 1-3: OPENING YEAR AND INTERIM YEAR IMPROVEMENTS

Intersection # Location	Opening Year Cumulative (2025)			Interim Year Cumulative (2028)			Sunday Morning With Project Scenario 3
	Without Project	With PA1 High-Cube Warehouse & Truck/Trailer Lot Project	With PA1 Parcel Hub Warehouse & Truck/Trailer Lot Project	Without Project	With Project Scenario 1	With Project Scenario 2	
10 Calimesa Bl. / Cherry Valley Bl.	- Install a Traffic Signal	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 SB right turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 1 EB left turn lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
	- Add 2nd WB through lane	- Same	- Same	- Same as 2025	- Same as 2025	- Same as 2025	- Same as 2025
					- Modify traffic signal to implement overlap phasing on the SBR turn lane	- Same	- Same
11 Calimesa Bl. / I-10 WB off-ramp	--	--	--	- Install a Traffic Signal	- Same	- Same	- Same
12 Roberts Rd. / Singleton Rd.	--	--	--	- Realign Roberts Road	- Same	- Same	- Same
				- Install a Traffic Signal	- Same	- Same	- Same
				NB Approach: 1 NBL, 1 NBT, & 1 NBR	- Same	- Same	- Same
				SB Approach: 1 SBL, 2 SBT, & 1 SBR	- Same	- Same	- Same
				EB Approach: 1 EBL, 2 EBT, & 1 EBR	- Same	- Same	- Same
				WB Approach: 1 WBL, 2 WBT, & 1 WBR	- Same	- Same	- Same
				- Add 2nd NB through lane	- Same	- Same	- Same
13 Calimesa Bl. / PA-1 Dwy. 1	- N/A	- Provide Cross-Street Stop	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 1 SB left turn lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Construct 1 shared WB L/R	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 2nd NB through lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
				- Add 2nd SB through lane	- Same	- Same	- Same
14 Calimesa Bl. / PA-1 Dwy. 2	- N/A	- Provide Cross-Street Stop	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 1 SB left turn lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Construct 1 shared WB L/R	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 2nd NB through lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
				- Add 2nd SB through lane	- Same	- Same	- Same

**TABLE 1-3: OPENING YEAR AND INTERIM YEAR IMPROVEMENTS**

Intersection # Location	Opening Year Cumulative (2025)			Interim Year Cumulative (2028)			Sunday Morning With Project Scenario 3
	Without Project	With PA1 High-Cube Warehouse & Truck/Trailer Lot Project	With PA1 Parcel Hub Warehouse & Truck/Trailer Lot Project	Without Project	With Project Scenario 1	With Project Scenario 2	
15 Calimesa Bl. / PA-1 Dwy. 3	- N/A	- Provide Cross-Street Stop	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 1 SB left turn lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Construct 1 shared WB L/R	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 2nd NB through lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
				- Add 2nd SB through lane	- Same	- Same	- Same
16 Calimesa Bl. / PA-1 Dwy. 4	- N/A	- Provide Cross-Street Stop	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 1 SB left turn lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Construct 1 shared WB L/R	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
		- Add 2nd NB through lane	- Same		- Same as 2025 with Project	- Same as 2025 with Project	- Same as 2025 with Project
				- Add 2nd SB through lane	- Same	- Same	- Same
17 Calimesa Bl. / PA-2 Dwy.	- N/A	- N/A	- N/A		- Provide Cross-Street Stop	- Same	- Same
					- Add 1 SB left turn lane	- Same	- Same
					- Construct 1 shared WB L/R	- Same	- Same
					- Add 2nd NB through lane	- Same	- Same
				- Add 2nd SB through lane	- Same	- Same	- Same

Z:\Shared\Uclabs\_13100-13500\_13500\13594\02\_LOS\Excel\13594-08 - Report - JB.xlsx\2-3 OY

**TABLE 1-4: HORIZON YEAR IMPROVEMENTS AND PROJECT FAIR SHARE TRAFFIC CONTRIBUTIONS**

Intersection #	Location	Horizon Year (2045)						
		With Project Scenario 1		With Project Scenario 2		Sunday Morning With Project Scenario 3		
		Without Project	Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>
1	I-10 EB Ramps / Singleton Rd.	- Same as 2025 (Install TS)	- Same as 2025	4.5%	- Same as 2025	12.9%	- Same as 2025	6.7%
		- Modify SB L/T/R striping to SB L/T lane	- Same		- Modify SB L/T striping to SB L/T/R lane		- Same	
		- Same as 2025 (Add 1 SBR)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 EBR)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 WBL)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2028 (Add 2nd EBT)	- Same as 2028		- Same as 2028		- Same as 2028	
		--	--		- Add 1 SB left turn lane (same as 2028)		--	
		- Add 2nd SB right turn lane	- Same		--		- Same	
		- Add 2nd WB left turn lane	- Same		- Same		- Same	
- Add 2nd WB through lane	- Same		- Same		- Same			
2	I-10 WB Ramps / Singleton Rd.	- Same as 2025 (Install TS)	- Same as 2025	8.4%	- Same as 2025	22.9%	- Same as 2025	10.3%
		- Same as 2025 (Add 1 EBL)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 WBR)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2028 (Add 1 NBL)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Add 2nd EBL)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Add 1 NB right turn lane & modify existing NBT to shared NB L/T/R	- Same		- Same		- Same	
		- Add 2nd EBT	- Same		- Same		- Same	
		- Modify WB approach to provide a 2nd WBT and 1 WBR	- Same		- Same		- Same	
3	Calimesa Bl. / Singleton Rd.	- Same as 2025 (Realign Calimesa)	- Same as 2025	11.7%	- Same as 2025	28.0%	- Same as 2025	17.8%
		- Same as 2025 (Install TS)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 NBT/R)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 SBL & 1 SBT/R)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 EBL)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 WBL)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Add 1 NB left turn lane	- Same as 2025 w/ Project (Add 1 NBL)		- Same as 2025 w/ Project		- Same as 2025 w/ Project	
		--	-		-		-	
		- Add 2nd NB left turn lane	- Same as 2028 w/ Project (Add 2nd NBL)		- Same as 2028 w/ Project		- Same as 2028 w/ Project	
		- Same as 2028 (Add 1 SBR)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Add 2nd EBT)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Add 2nd WBT)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Add 2nd NBT lane	- Modify previous 2028 w/ Project improvement (Add 1 NBR) to provide 2nd NBT lane		- Same		- Same	
		- Add 2nd EBL	- Same		- Same		- Same	
	- Add 1 EB right turn lane		- Same		- Same			

**TABLE 1-4: HORIZON YEAR IMPROVEMENTS AND PROJECT FAIR SHARE TRAFFIC CONTRIBUTIONS**

#	Intersection Location	Horizon Year (2045)						
		Without Project	With Project Scenario 1		With Project Scenario 2		Sunday Morning With Project Scenario 3	
			Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>
4	Beckwith Av. / Singleton Rd.	- Same as 2028 (Install TS)	- Same as 2028	0.8%	- Same as 2028	2.5%	- Same as 2028	3.8%
		- Same as 2028 (Add 1 NBL)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Add 1 EBU-turn)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Modify previous EBR improvement to provide 2nd EBT lane	- Same		- Same		- Same	
		- Add 2nd WBT lane	- Same		- Same		- Same	
5	Singleton Cyn. Rd. / Singleton Rd.	- Install a Traffic Signal	- Same	1.3%	- Same	3.5%	- Same	4.7%
		- Add 1 NB left turn lane	- Same		- Same		- Same	
		- Add 1 SB left turn lane	- Same		- Same		- Same	
6	Calimesa Bl. / Sandalwood Dr. - 5th St.	- Same as 2028 (Modify NBT striping to NBL turn lane)	- Same	1.1%	- Same	2.4%	- Same	7.6%
		- Same as 2028 (Modify WBR striping to WBT lane)	- Same		- Same		- Same	
7	Roberts Rd. / Cherry Valley Bl.	- Same as 2025 (Add 1 SBL)	- Same as 2025	0.9%	- Same as 2025	2.5%	- Same as 2025	7.2%
		- Same as 2028 (Add 2nd SBL)	- Same		- Same		- Same	
		- Same as 2028 (Add 2nd EBL)	- Same		- Same		- Same	
		- Same as 2028 (Add overlap phase to existing WBR)	- Same		- Same		- Same	
		- Provide 2nd WB left turn lane	- Same		- Same		- Same	
8	I-10 EB Ramps / Cherry Valley Bl.	- Same as 2025 (Install TS)	- Same as 2025	3.9%	- Same as 2025	9.9%	- Same as 2025	11.5%
		- Same as 2025 (Add 1 SBR)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2028 (2nd EBT)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2025 (Add 1 WBL)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2028 (Add 2nd SBR)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Widen Cherry Valley Blvd. bridge to 4-lane roadway)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Add 2nd WBT)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Add 2nd WB left turn lane	- Same		- Same		- Same	
		- Add 1 EB right turn lane	- Same		- Same		- Same	
9	I-10 WB Ramps / Cherry Valley Bl.	- Same as 2025 (Install TS)	- Same as 2025	5.4%	- Same as 2025	12.9%	- Same as 2025	13.2%
		- Same as 2025 (Add 1 NBR)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2025 (Add 1 EBL)	- Same as 2025		- Same as 2025		- Same as 2025	
		- Same as 2028 (Reconstruct WBR to 2nd WBT lane)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Same as 2028 (Add 2nd EBL)	- Same as 2028		- Same as 2028		- Same as 2028	
		- Add 1 WB right turn lane	- Same		- Same		- Same	
		- Add 2nd EB through lane	- Same		- Same		- Same	
		- Modify NB L/T striping to NB L/T/R lane						



**TABLE 1-4: HORIZON YEAR IMPROVEMENTS AND PROJECT FAIR SHARE TRAFFIC CONTRIBUTIONS**

Intersection #	Location	Horizon Year (2045)						
		Without Project	With Project Scenario 1		With Project Scenario 2		Sunday Morning With Project Scenario 3	
			Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>
10	Calimesa Bl. / Cherry Valley Bl.	- Same as 2025 (Install TS) - Same as 2025 (Add 1 SBR) - Same as 2025 (Add 1 EBL) - Same as 2025 (Add 2nd WBT) - Modify traffic signal to implement overlap phasing on the SB right turn lane - Add 2nd EB through lane	- Same as 2025 - Same as 2025 - Same as 2025 - Same as 2025 - Same - Same	6.4%	- Same as 2025 - Same as 2025 - Same as 2025 - Same as 2025 - Same - Same	16.0%	- Same as 2025 - Same as 2025 - Same as 2025 - Same as 2025 - Same - Same	17.0%
11	Calimesa Bl. / I-10 WB off-ramp	- Same as 2028 (Install TS) - Provide 2nd NB receiving lane	- Same as 2028 - Same	1.2%	- Same as 2028 - Same	3.1%	- Same as 2028 - Same	19.2%
12	Roberts Rd. / Singleton Rd.	- Same as 2028 (Realign Roberts) - Same as 2028 (Install TS) - Same as 2028 (Provide 1 NBL, 1 NBT, 1 NBR) - Same as 2028 (Provide 1 SBL, 2 SBT, 1 SBR) - Same as 2028 (Provide 1 EBL, 2 EBT, 1 EBR) - Same as 2028 (Provide 1 WBL, 2 WBT, 1 WBR) - Same as 2028 (Add 2nd NBT) - Same as 2028 (Add overlap phase to previous NBR improvement) - Add 2nd WBL turn lane	- Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028	0.5%	- Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028	1.3%	- Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028 - Same as 2028	2.7%
13	Calimesa Bl. / PA-1 Dwy. 1		- Same as 2025 w/ Project (Provide Cross-Street Stop control) - Same as 2025 w/ Project (Add 1 SBL) - Same as 2025 w/ Project (Add shared WB L/R) - Same as 2025 w/ Project (Add 2nd NBT) - Same as 2028 w/o Project (Add 2nd SBT)	100.0%	- Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2028 w/o Project	100.0%	- Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2028 w/o Project	100.0%
14	Calimesa Bl. / PA-1 Dwy. 2		- Same as 2025 w/ Project (Provide Cross-Street Stop control) - Same as 2025 w/ Project (Add 1 SBL) - Same as 2025 w/ Project (Add shared WB L/R) - Same as 2025 w/ Project (Add 2nd NBT) - Same as 2028 (Add 2nd SBT)	100.0%	- Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2028 w/o Project	100.0%	- Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2025 w/ Project - Same as 2028 w/o Project	100.0%

**TABLE 1-4: HORIZON YEAR IMPROVEMENTS AND PROJECT FAIR SHARE TRAFFIC CONTRIBUTIONS**

Intersection #	Location	Horizon Year (2045)						
		Without Project	With Project Scenario 1		With Project Scenario 2		Sunday Morning With Project Scenario 3	
			Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>	Improvements	Fair Share (%) <sup>1</sup>
15	Calimesa Bl. / PA-1 Dwy. 3	- Same as 2025 w/ Project (Provide Cross-Street Stop control)	100.0%	- Same as 2025 w/ Project	100.0%	- Same as 2025 w/ Project	100.0%	
		- Same as 2025 w/ Project (Add 1 SBL)		- Same as 2025 w/ Project		- Same as 2025 w/ Project		
		- Same as 2025 w/ Project (Add shared WB L/R)		- Same as 2025 w/ Project		- Same as 2025 w/ Project		
		- Same as 2025 w/ Project (Add 2nd NBT)		- Same as 2025 w/ Project		- Same as 2025 w/ Project		
		- Same as 2028 (Add 2nd SBT)	- Same as 2028 w/o Project		- Same as 2028 w/o Project		- Same as 2028 w/o Project	
			- Same as 2025 with Project Scenario 2					
16	Calimesa Bl. / PA-1 Dwy. 4	- Same as 2025 w/ Project (Provide Cross-Street Stop control)	100.0%	- Same as 2025 w/ Project	100.0%	- Same as 2025 w/ Project	100.0%	
		- Same as 2025 w/ Project (Add 1 SBL)		- Same as 2025 w/ Project		- Same as 2025 w/ Project		
		- Same as 2025 w/ Project (Add shared WB L/R)		- Same as 2025 w/ Project		- Same as 2025 w/ Project		
		- Same as 2025 w/ Project (Add 2nd NBT)		- Same as 2025 w/ Project		- Same as 2025 w/ Project		
		- Same as 2028 (Add 2nd SBT)	- Same as 2028 w/o Project		- Same as 2028 w/o Project		- Same as 2028 w/o Project	
17	Calimesa Bl. / PA-2 Dwy.	- Same as 2028 w/ Project (Provide Cross-Street Stop control)	100.0%	- Same as 2028 w/ Project	100.0%	- Same as 2028 w/ Project	100.0%	
		- Same as 2028 w/ Project (Add 1 SBL)		- Same as 2028 w/ Project		- Same as 2028 w/ Project		
		- Same as 2028 w/ Project (Add shared WB L/R)		- Same as 2028 w/ Project		- Same as 2028 w/ Project		
		- Same as 2028 w/ Project (Add 2nd NBT)		- Same as 2028 w/ Project		- Same as 2028 w/ Project		
		- Same as 2028 w/o Project		- Same as 2028 w/o Project		- Same as 2028 w/o Project		

Z:\Shared\UJobs\13100-13500\13500\13594\02\_LOS\Excel\13594-08 - Report - JB.xlsx]1-4 HY



Attachment F  
SimTraffic Evacuation Time Worksheets – Existing with  
Project and Future Mitigation Conditions

1: Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.9	0.0	0.9
Total Del/Veh (s)	1.4	0.0	5.2	1.3	5.2
Stop/Veh	0.00	0.00	0.02	0.00	0.02
Travel Time (hr)	0.0	0.0	3.1	0.0	3.1
Vehicles Entered	4	2	632	4	642
Vehicles Exited	4	2	633	4	643
Hourly Exit Rate	4	2	633	4	643
Input Volume	6	2	1336	6	1350
% of Volume	67	100	47	64	48
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

2: I-10 WB Ramps & Singleton Rd Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.1	10.1	10.2
Denied Del/Veh (s)	0.0	0.0	533.8	197.4	44.8
Total Delay (hr)	0.2	0.4	0.2	23.4	24.1
Total Del/Veh (s)	148.4	2.0	547.2	526.1	108.2
Stop/Veh	0.50	0.00	2.00	0.85	0.18
Travel Time (hr)	0.2	1.3	0.3	34.2	36.0
Vehicles Entered	4	634	1	158	797
Vehicles Exited	3	634	1	116	754
Hourly Exit Rate	3	634	1	116	754
Input Volume	6	1340	2	193	1542
% of Volume	50	47	50	60	49
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	26	26

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.9	0.0	0.1
Total Delay (hr)	5.4	2.8	0.0	0.7	19.5	13.3	2.0	25.6	2.4	1.8	0.3	0.1
Total Del/Veh (s)	573.7	109.7	1.9	194.1	129.5	139.5	65.7	252.9	211.4	102.9	57.5	12.3
Stop/Veh	1.24	0.82	1.00	1.77	1.27	1.68	0.71	1.61	1.34	1.05	0.72	0.76
Travel Time (hr)	5.5	3.0	0.0	0.8	21.5	15.2	2.5	27.3	2.6	2.5	0.4	0.3
Vehicles Entered	30	88	1	13	517	327	112	339	39	62	17	21
Vehicles Exited	29	87	1	13	518	328	110	339	38	62	17	21
Hourly Exit Rate	29	87	1	13	518	328	110	339	38	62	17	21
Input Volume	47	152	1	22	952	608	393	1067	125	60	19	21
% of Volume	62	57	100	58	54	54	28	32	30	103	88	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.8
Total Delay (hr)	73.9
Total Del/Veh (s)	161.9
Stop/Veh	1.35
Travel Time (hr)	81.5
Vehicles Entered	1566
Vehicles Exited	1563
Hourly Exit Rate	1563
Input Volume	3466
% of Volume	45
Denied Entry Before	0
Denied Entry After	0

4: Beckwith Ave & Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	12.6	209.2	0.9	222.6
Denied Del/Veh (s)	0.0	0.0	0.0	51.8	1916.6	3098.5	551.2
Total Delay (hr)	0.1	0.0	0.1	54.7	80.5	0.9	136.2
Total Del/Veh (s)	1.2	1.1	169.6	217.6	3081.6	3234.6	412.1
Stop/Veh	0.00	0.00	1.00	1.46	0.02	0.00	1.11
Travel Time (hr)	1.1	0.1	0.1	74.7	289.8	1.8	367.6
Vehicles Entered	178	8	2	849	13	0	1050
Vehicles Exited	179	8	2	843	14	0	1046
Hourly Exit Rate	179	8	2	843	14	0	1046
Input Volume	325	11	3	1221	360	2	1922
% of Volume	55	71	67	69	4	0	54
Denied Entry Before	0	0	0	3	39	0	42
Denied Entry After	0	0	0	23	380	1	404

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	14.2
Denied Del/Veh (s)	0.4	0.0	0.0		0.1	0.1	0.1	0.1	5.9	104.7	1.4	109.9
Total Delay (hr)	0.1	0.8	0.0	0.1	150.6	2.0	0.1	0.0	0.0	1.2	0.0	27.1
Total Del/Veh (s)	22.0	16.0	3.9		700.5	595.1	50.1	22.3	5.9	200.0	129.5	231.8
Stop/Veh	0.95	0.64	1.00		1.61	1.50	1.00	1.00	1.00	1.45	2.00	1.59
Travel Time (hr)	0.2	1.3	0.0	0.1	161.7	2.2	0.1	0.0	0.0	2.0	0.0	43.9
Vehicles Entered	22	169	2	0	748	12	7	1	1	22	1	417
Vehicles Exited	22	168	2	0	475	8	7	1	1	20	1	381
Hourly Exit Rate	22	168	2	0	475	8	7	1	1	20	1	381
Input Volume	32	290	4	1	755	12	7	1	1	20	1	443
% of Volume	69	58	50	0	63	65	100	100	100	99	100	86
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	1
Denied Entry After	0	0	0	0	0	0	0	0	0	1	0	49

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	14.9
Denied Del/Veh (s)	37.0
Total Delay (hr)	182.0
Total Del/Veh (s)	457.6
Stop/Veh	1.47
Travel Time (hr)	211.6
Vehicles Entered	1402
Vehicles Exited	1086
Hourly Exit Rate	1086
Input Volume	1567
% of Volume	69
Denied Entry Before	1
Denied Entry After	50

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	2.4	0.4	2.5	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	1.6	0.9	0.1	0.3	5.9	1.0	4.4	3.8	0.2	0.3	0.3	2.7
Total Del/Veh (s)	42.7	18.3	7.3	64.9	32.7	15.0	32.1	27.3	8.0	46.7	48.1	32.2
Stop/Veh	0.84	0.50	0.48	1.29	0.70	0.77	0.77	0.61	0.61	0.88	0.90	0.92
Travel Time (hr)	3.7	3.4	0.7	0.4	10.3	3.1	6.3	5.3	0.4	1.0	0.9	11.1
Vehicles Entered	134	173	41	17	634	242	488	503	70	22	20	288
Vehicles Exited	136	172	42	16	634	243	491	503	71	23	20	283
Hourly Exit Rate	136	172	42	16	634	243	491	503	71	23	20	283
Input Volume	123	171	40	16	632	253	1102	1165	153	22	23	290
% of Volume	111	101	106	98	100	96	45	43	46	103	86	98
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.4
Total Delay (hr)	21.5
Total Del/Veh (s)	28.8
Stop/Veh	0.72
Travel Time (hr)	46.6
Vehicles Entered	2632
Vehicles Exited	2634
Hourly Exit Rate	2634
Input Volume	3991
% of Volume	66
Denied Entry Before	0
Denied Entry After	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	14.3	17.7	20.9	0.2	0.2	0.2
Total Delay (hr)	7.2	187.4	8.6	2.1	1.2	0.1	0.3	0.8	4.2	28.8	4.4	10.0
Total Del/Veh (s)	1171.5	1249.2	1244.2	158.7	33.5	5.5	108.3	123.8	136.2	676.8	691.9	657.2
Stop/Veh	1.55	1.54	1.40	1.06	0.47	0.63	0.80	0.87	0.92	1.29	1.30	1.29
Travel Time (hr)	7.5	196.0	9.1	2.2	1.4	0.2	0.4	1.0	5.2	31.0	4.8	10.9
Vehicles Entered	20	479	22	47	126	34	10	21	108	144	22	52
Vehicles Exited	8	172	9	48	127	35	10	22	102	82	12	32
Hourly Exit Rate	8	172	9	48	127	35	10	22	102	82	12	32
Input Volume	21	482	20	120	336	83	11	22	114	143	20	51
% of Volume	38	36	44	40	38	42	89	99	89	57	59	63
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	1	4	0	0	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.8
Denied Del/Veh (s)	2.7
Total Delay (hr)	255.1
Total Del/Veh (s)	782.1
Stop/Veh	1.25
Travel Time (hr)	269.5
Vehicles Entered	1085
Vehicles Exited	659
Hourly Exit Rate	659
Input Volume	1425
% of Volume	46
Denied Entry Before	0
Denied Entry After	5



8: Cherry Valley Blvd & I-10 EB Ramps Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBR	All
Denied Delay (hr)	2.0	0.5	0.0	0.0	85.3	179.5	267.4
Denied Del/Veh (s)	24.6	26.1	0.0	0.0	1660.8	1595.9	704.1
Total Delay (hr)	12.1	2.2	2.2	1.0	12.7	17.8	48.0
Total Del/Veh (s)	142.0	119.4	27.7	28.0	802.0	639.3	182.1
Stop/Veh	0.75	0.60	0.73	0.57	0.96	0.94	0.74
Travel Time (hr)	14.5	2.8	3.4	1.5	98.2	197.7	318.1
Vehicles Entered	294	63	348	129	44	82	960
Vehicles Exited	296	63	283	127	44	82	895
Hourly Exit Rate	296	63	283	127	44	82	895
Input Volume	603	140	449	202	162	339	1895
% of Volume	49	45	78	63	27	24	51
Denied Entry Before	1	0	0	0	28	52	81
Denied Entry After	2	1	0	0	141	323	467

9: I-10 WB Ramps & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	12.7	1.1	18.1	32.0
Denied Del/Veh (s)	1.2	0.6	0.0	0.0	374.7	435.9	370.7	78.2
Total Delay (hr)	14.5	7.8	1.3	0.5	16.4	1.1	25.1	66.7
Total Del/Veh (s)	208.2	244.9	13.6	4.0	656.4	660.3	678.9	168.9
Stop/Veh	1.53	1.55	0.22	0.20	1.50	1.67	1.23	0.73
Travel Time (hr)	15.6	8.2	1.7	1.3	29.5	2.2	43.9	102.3
Vehicles Entered	234	107	346	479	78	5	113	1362
Vehicles Exited	236	105	346	480	71	5	103	1346
Hourly Exit Rate	236	105	346	480	71	5	103	1346
Input Volume	514	252	518	695	132	10	167	2288
% of Volume	46	42	67	69	54	49	62	59
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	44	4	63	111

10: Cherry Valley Blvd & Calimesa Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	34.2	13.3	0.0	0.3	47.8
Denied Del/Veh (s)	0.0	0.0	120.1	120.2	12.3	24.1	102.3
Total Delay (hr)	5.5	2.8	85.8	34.1	4.3	13.0	145.5
Total Del/Veh (s)	146.7	123.0	342.5	344.0	738.3	565.7	332.2
Stop/Veh	1.10	0.94	1.57	1.64	0.90	0.95	1.47
Travel Time (hr)	5.8	2.9	134.4	53.6	4.5	14.1	215.2
Vehicles Entered	129	78	881	347	8	45	1488
Vehicles Exited	128	78	743	292	20	82	1343
Hourly Exit Rate	128	78	743	292	20	82	1343
Input Volume	248	170	1030	404	34	183	2069
% of Volume	52	46	72	72	59	45	65
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	145	51	0	0	196

11: Calimesa Blvd & I-10 WB Ramp Performance by movement

Movement	EBL	NBT	SBT	All
Denied Delay (hr)	8.7	45.2	0.0	53.9
Denied Del/Veh (s)	96.8	197.2	0.0	158.0
Total Delay (hr)	6.9	101.2	0.2	108.4
Total Del/Veh (s)	79.3	421.7	10.4	309.9
Stop/Veh	0.33	1.48	0.97	1.16
Travel Time (hr)	16.2	155.2	0.5	171.9
Vehicles Entered	308	755	79	1142
Vehicles Exited	307	755	79	1141
Hourly Exit Rate	307	755	79	1141
Input Volume	305	2115	80	2500
% of Volume	101	36	98	46
Denied Entry Before	8	20	0	28
Denied Entry After	16	70	0	86

12: Roberts Rd & Singleton Rd Performance by movement

Movement	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.6	0.0	1.8	0.0	0.6
Stop/Veh	1.00	0.00	1.00	0.00	0.29
Travel Time (hr)	0.0	0.0	0.0	0.0	0.0
Vehicles Entered	1	3	1	2	7
Vehicles Exited	1	3	1	2	7
Hourly Exit Rate	1	3	1	2	7
Input Volume	2	2	2	3	9
% of Volume	50	150	50	67	78
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

13: Calimesa Blvd & PA-1 Drwy 1 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	134.7	0.3	0.0	135.1
Denied Del/Veh (s)	1932.5	2.5	0.0	644.9
Total Delay (hr)	31.1	19.4	0.0	50.5
Total Del/Veh (s)	2382.4	141.1	1.8	318.3
Stop/Veh	0.00	1.42	0.00	1.23
Travel Time (hr)	165.9	21.1	0.1	187.1
Vehicles Entered	16	473	30	519
Vehicles Exited	16	474	30	520
Hourly Exit Rate	16	474	30	520
Input Volume	224	1362	42	1628
% of Volume	7	35	71	32
Denied Entry Before	25	0	0	25
Denied Entry After	235	0	0	235

14: Calimesa Blvd & PA-1 Drwy 2 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	79.9	0.0	0.0	79.9
Denied Del/Veh (s)	1701.6	0.3	0.0	439.2
Total Delay (hr)	24.7	22.4	0.0	47.1
Total Del/Veh (s)	2223.5	167.8	0.0	308.4
Stop/Veh	0.00	1.31	0.00	1.15
Travel Time (hr)	104.6	24.0	0.1	128.7
Vehicles Entered	15	457	29	501
Vehicles Exited	15	458	29	502
Hourly Exit Rate	15	458	29	502
Input Volume	168	1193	41	1402
% of Volume	9	38	71	36
Denied Entry Before	7	0	0	7
Denied Entry After	154	0	0	154

15: Calimesa Blvd & PA-1 Drwy 3 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	24.6	0.0	0.0	24.6
Denied Del/Veh (s)	540.7	0.0	0.0	162.1
Total Delay (hr)	21.8	23.9	0.0	45.7
Total Del/Veh (s)	633.1	226.6	1.2	308.3
Stop/Veh	0.94	1.33	0.07	1.17
Travel Time (hr)	46.8	25.3	0.1	72.2
Vehicles Entered	110	354	29	493
Vehicles Exited	100	357	29	486
Hourly Exit Rate	100	357	29	486
Input Volume	168	1025	41	1234
% of Volume	60	35	71	39
Denied Entry Before	3	0	0	3
Denied Entry After	54	0	0	54

16: Calimesa Blvd & PA-1 Drwy 4 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	106.5	0.6	0.0	107.1
Denied Del/Veh (s)	1703.3	6.6	0.0	648.9
Total Delay (hr)	27.0	32.7	0.0	59.7
Total Del/Veh (s)	2371.4	313.7	0.4	483.9
Stop/Veh	0.07	1.35	0.00	1.15
Travel Time (hr)	133.5	34.8	0.1	168.4
Vehicles Entered	17	339	29	385
Vehicles Exited	14	340	29	383
Hourly Exit Rate	14	340	29	383
Input Volume	224	802	41	1066
% of Volume	6	42	71	36
Denied Entry Before	3	0	0	3
Denied Entry After	208	1	0	209

17: Calimesa Blvd & PA-2 Drwy 1 Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	74.1	81.6	0.0	0.0	155.7
Denied Del/Veh (s)	1569.4	1578.7	0.0	0.0	696.2
Total Delay (hr)	9.0	9.1	83.7	0.0	101.8
Total Del/Veh (s)	1353.8	1315.3	681.5	0.1	703.7
Stop/Veh	0.17	0.08	1.79	0.00	1.53
Travel Time (hr)	83.2	90.8	88.7	0.1	262.7
Vehicles Entered	18	19	420	29	486
Vehicles Exited	16	16	336	29	397
Hourly Exit Rate	16	16	336	29	397
Input Volume	168	168	652	41	1029
% of Volume	10	10	52	71	39
Denied Entry Before	2	2	0	0	4
Denied Entry After	152	167	0	0	319

1: Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	2.9	0.0	3.1
Total Del/Veh (s)	5.1	1.1	16.0	1.6	10.5
Stop/Veh	0.00	0.09	0.84	0.00	0.56
Travel Time (hr)	0.0	2.1	5.2	0.0	7.3
Vehicles Entered	5	377	704	4	1090
Vehicles Exited	5	378	707	4	1094
Hourly Exit Rate	5	378	707	4	1094
Input Volume	6	378	955	6	1344
% of Volume	83	100	74	67	81
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

2: I-10 WB Ramps & Singleton Rd Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.2
Denied Del/Veh (s)	0.0	0.0	0.4	3.8	0.9
Total Delay (hr)	0.0	0.5	0.1	5.1	5.7
Total Del/Veh (s)	28.2	2.6	103.1	87.8	23.4
Stop/Veh	0.00	0.02	1.00	1.00	0.25
Travel Time (hr)	0.1	1.7	0.1	6.5	8.3
Vehicles Entered	5	655	2	208	870
Vehicles Exited	5	657	2	205	869
Hourly Exit Rate	5	657	2	205	869
Input Volume	6	959	2	193	1160
% of Volume	83	68	100	106	75
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.6	0.2	0.2
Total Delay (hr)	3.1	2.6	0.0	0.8	14.3	20.1	5.1	16.6	6.5	2.0	0.3	0.1
Total Del/Veh (s)	228.1	56.5	3.4	196.8	165.7	172.9	50.5	101.4	79.3	104.1	55.1	15.6
Stop/Veh	1.35	0.72	1.00	1.86	1.52	1.87	0.77	1.41	1.14	1.07	0.68	0.75
Travel Time (hr)	3.2	2.9	0.0	0.8	15.4	22.5	6.7	18.8	7.9	2.5	0.4	0.3
Vehicles Entered	47	162	1	13	299	398	361	570	285	65	19	24
Vehicles Exited	46	159	1	11	293	398	359	569	287	67	18	24
Hourly Exit Rate	46	159	1	11	293	398	359	569	287	67	18	24
Input Volume	47	152	1	22	420	579	543	876	412	60	18	21
% of Volume	98	105	100	49	70	69	66	65	70	112	99	113
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: Calimesa Blvd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	71.4
Total Del/Veh (s)	111.0
Stop/Veh	1.30
Travel Time (hr)	81.4
Vehicles Entered	2244
Vehicles Exited	2232
Hourly Exit Rate	2232
Input Volume	3151
% of Volume	71
Denied Entry Before	0
Denied Entry After	0

4: Beckwith Ave & Singleton Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	6.2	20.5	0.2	26.9
Denied Del/Veh (s)	0.0	0.0	0.0	29.9	449.2	334.6	67.6
Total Delay (hr)	0.1	0.0	0.2	49.0	60.6	0.7	110.6
Total Del/Veh (s)	0.8	0.7	195.7	233.6	2226.1	2685.6	290.5
Stop/Veh	0.00	0.00	1.33	1.59	0.83	1.00	0.94
Travel Time (hr)	3.2	0.1	0.2	61.5	81.6	0.9	147.5
Vehicles Entered	503	9	3	738	87	1	1341
Vehicles Exited	502	9	2	692	18	0	1223
Hourly Exit Rate	502	9	2	692	18	0	1223
Input Volume	612	11	3	853	168	2	1649
% of Volume	82	80	67	81	11	0	74
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	14	77	1	92

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.1	0.0	0.0		0.1	0.1	0.1	0.1	5.0	0.6	0.9	3.0
Total Delay (hr)	0.1	1.4	0.0	0.0	15.1	0.3	0.1	0.0	0.0	0.1	0.0	2.8
Total Del/Veh (s)	16.0	10.2	4.2		100.4	91.9	43.4	21.3	6.6	26.4	17.8	34.7
Stop/Veh	0.90	0.41	0.33		0.77	0.82	0.80	1.00	1.00	0.75	1.00	0.85
Travel Time (hr)	0.2	3.0	0.0	0.0	24.3	0.5	0.1	0.0	0.0	0.3	0.0	4.9
Vehicles Entered	20	499	3	0	531	11	5	1	2	20	1	286
Vehicles Exited	20	498	3	0	487	10	5	1	2	20	1	283
Hourly Exit Rate	20	498	3	0	487	10	5	1	2	20	1	283
Input Volume	32	577	4	1	536	12	7	1	1	20	1	294
% of Volume	63	86	75	0	91	82	71	100	200	99	100	96
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

5: Singleton Canyon Rd & Singleton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.7
Total Delay (hr)	19.9
Total Del/Veh (s)	52.0
Stop/Veh	0.67
Travel Time (hr)	33.2
Vehicles Entered	1359
Vehicles Exited	1310
Hourly Exit Rate	1310
Input Volume	1486
% of Volume	88
Denied Entry Before	0
Denied Entry After	0



6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	2.8	0.3	3.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay (hr)	1.5	0.8	0.1	0.2	2.3	0.0	2.9	2.8	0.2	0.2	0.2	1.2
Total Del/Veh (s)	28.2	15.5	6.2	40.4	26.0	6.8	22.5	18.5	7.6	33.4	36.3	14.7
Stop/Veh	0.78	0.54	0.55	1.00	0.70	0.83	0.68	0.51	0.55	0.88	0.92	0.76
Travel Time (hr)	4.2	3.3	0.7	0.3	4.4	0.2	4.6	4.3	0.5	0.9	0.9	10.0
Vehicles Entered	184	173	39	15	306	18	456	533	77	25	23	294
Vehicles Exited	181	172	39	16	309	18	456	533	77	23	23	295
Hourly Exit Rate	181	172	39	16	309	18	456	533	77	23	23	295
Input Volume	188	171	40	16	300	19	914	1047	153	22	23	290
% of Volume	96	101	98	98	103	94	50	51	50	103	99	102
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Calimesa Blvd & Sandalwood Dr Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	12.3
Total Del/Veh (s)	20.3
Stop/Veh	0.65
Travel Time (hr)	34.3
Vehicles Entered	2143
Vehicles Exited	2142
Hourly Exit Rate	2142
Input Volume	3184
% of Volume	67
Denied Entry Before	0
Denied Entry After	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	7.5	707.6	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1127.0	1138.7	1139.4	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.4	0.3
Total Delay (hr)	5.8	493.3	5.6	5.1	1.7	0.1	0.2	0.4	0.2	25.0	1.2	3.0
Total Del/Veh (s)	1225.1	1239.3	1252.3	173.1	22.1	3.9	60.1	71.2	6.6	187.2	203.0	187.2
Stop/Veh	1.94	2.05	1.94	1.35	0.42	0.53	0.78	0.86	0.96	1.77	1.86	1.79
Travel Time (hr)	13.6	1223.3	13.1	5.4	2.1	0.3	0.2	0.5	0.6	34.0	1.6	4.1
Vehicles Entered	10	915	11	103	278	74	9	20	117	459	20	55
Vehicles Exited	10	924	12	103	275	73	9	20	117	441	20	53
Hourly Exit Rate	10	924	12	103	275	73	9	20	117	441	20	53
Input Volume	21	2167	20	120	336	83	11	22	114	456	20	51
% of Volume	47	43	59	86	82	88	80	90	103	97	99	104
Denied Entry Before	1	81	1	0	0	0	0	0	0	0	0	0
Denied Entry After	14	1322	12	0	0	0	0	0	0	0	0	0

7: Roberts Rd & Cherry Valley Blvd Performance by movement

Movement	All
Denied Delay (hr)	722.4
Denied Del/Veh (s)	760.6
Total Delay (hr)	541.5
Total Del/Veh (s)	741.3
Stop/Veh	1.69
Travel Time (hr)	1298.7
Vehicles Entered	2071
Vehicles Exited	2057
Hourly Exit Rate	2057
Input Volume	3423
% of Volume	60
Denied Entry Before	83
Denied Entry After	1348

8: Cherry Valley Blvd & I-10 EB Ramps Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	18.7	37.8	56.5
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	397.4	394.3	90.5
Total Delay (hr)	5.2	1.5	5.8	12.1	10.9	17.3	52.8
Total Del/Veh (s)	18.2	11.5	268.5	229.5	267.7	208.9	86.1
Stop/Veh	0.31	0.28	1.64	1.25	1.67	1.59	0.70
Travel Time (hr)	6.7	2.8	6.1	12.8	30.1	56.3	114.8
Vehicles Entered	1027	458	74	176	134	283	2152
Vehicles Exited	1027	456	72	177	138	279	2149
Hourly Exit Rate	1027	456	72	177	138	279	2149
Input Volume	1883	858	77	201	162	339	3520
% of Volume	55	53	93	88	85	82	61
Denied Entry Before	0	0	0	0	2	5	7
Denied Entry After	0	0	0	0	35	62	97

9: I-10 WB Ramps & Cherry Valley Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	6.5	0.6	8.2	15.3
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	175.1	171.5	167.7	27.7
Total Delay (hr)	5.6	3.7	1.9	0.3	15.2	1.6	14.4	42.7
Total Del/Veh (s)	28.1	28.9	48.5	2.8	409.5	442.5	308.5	77.0
Stop/Veh	1.07	0.93	0.51	0.20	1.62	1.77	1.69	0.94
Travel Time (hr)	8.4	5.4	2.1	0.9	22.4	2.3	23.5	65.0
Vehicles Entered	706	459	138	365	123	12	160	1963
Vehicles Exited	704	459	137	364	113	11	147	1935
Hourly Exit Rate	704	459	137	364	113	11	147	1935
Input Volume	1213	832	146	373	132	10	167	2874
% of Volume	58	55	94	98	85	107	88	67
Denied Entry Before	0	0	0	0	4	0	4	8
Denied Entry After	0	0	0	0	11	1	15	27

10: Cherry Valley Blvd & Calimesa Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.0	0.1	0.1
Total Delay (hr)	0.9	0.7	3.9	0.7	0.4	0.6	7.1
Total Del/Veh (s)	9.7	8.7	30.6	19.9	40.9	34.2	19.9
Stop/Veh	0.71	0.36	0.11	0.17	1.00	0.97	0.39
Travel Time (hr)	1.7	1.1	11.6	3.1	0.8	1.4	19.6
Vehicles Entered	332	276	429	123	32	58	1250
Vehicles Exited	333	276	443	124	34	60	1270
Hourly Exit Rate	333	276	443	124	34	60	1270
Input Volume	542	458	448	124	34	71	1677
% of Volume	61	60	99	100	101	84	76
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

11: Calimesa Blvd & I-10 WB Ramp Performance by movement

Movement	EBL	NBT	SBT	All
Denied Delay (hr)	7.1	410.1	0.0	417.2
Denied Del/Veh (s)	85.9	1034.5	0.0	833.0
Total Delay (hr)	6.5	91.2	0.2	97.9
Total Del/Veh (s)	80.3	372.1	10.4	281.5
Stop/Veh	0.38	1.41	0.96	1.14
Travel Time (hr)	14.1	509.4	0.5	524.1
Vehicles Entered	284	783	78	1145
Vehicles Exited	284	782	77	1143
Hourly Exit Rate	284	782	77	1143
Input Volume	305	1809	80	2194
% of Volume	93	43	96	52
Denied Entry Before	2	177	0	179
Denied Entry After	14	644	0	658

12: Roberts Rd & Singleton Rd Performance by movement

Movement	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	2.6	0.0	2.2	0.8	0.8
Stop/Veh	1.00	0.00	1.00	0.00	0.01
Travel Time (hr)	0.0	0.0	0.0	6.0	6.1
Vehicles Entered	1	2	1	375	379
Vehicles Exited	1	2	1	379	383
Hourly Exit Rate	1	2	1	379	383
Input Volume	2	2	2	379	385
% of Volume	50	100	50	100	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

13: Calimesa Blvd & PA-1 Drwy 1 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	113.3	0.0	0.0	113.3
Denied Del/Veh (s)	1405.9	0.0	0.0	270.6
Total Delay (hr)	31.1	12.9	0.0	44.0
Total Del/Veh (s)	1695.3	39.0	1.7	122.7
Stop/Veh	0.20	0.56	0.00	0.52
Travel Time (hr)	144.5	16.4	0.1	161.0
Vehicles Entered	42	1185	32	1259
Vehicles Exited	35	1181	32	1248
Hourly Exit Rate	35	1181	32	1248
Input Volume	280	1551	42	1874
% of Volume	12	76	75	67
Denied Entry Before	0	0	0	0
Denied Entry After	248	0	0	248

14: Calimesa Blvd & PA-1 Drwy 2 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	34.3	0.0	0.0	34.3
Denied Del/Veh (s)	725.7	0.0	0.0	92.3
Total Delay (hr)	18.9	10.6	0.0	29.5
Total Del/Veh (s)	838.4	33.5	0.0	84.7
Stop/Veh	0.65	0.48	0.00	0.48
Travel Time (hr)	53.4	14.5	0.1	68.0
Vehicles Entered	80	1135	31	1246
Vehicles Exited	56	1128	31	1215
Hourly Exit Rate	56	1128	31	1215
Input Volume	168	1383	41	1592
% of Volume	33	82	76	76
Denied Entry Before	0	0	0	0
Denied Entry After	90	0	0	90

15: Calimesa Blvd & PA-1 Drwy 3 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	9.3	0.0	0.0	9.3
Denied Del/Veh (s)	147.3	0.0	0.0	27.7
Total Delay (hr)	14.3	3.6	0.0	17.9
Total Del/Veh (s)	246.5	13.5	0.0	53.8
Stop/Veh	0.56	0.25	0.00	0.30
Travel Time (hr)	24.5	7.3	0.1	31.9
Vehicles Entered	208	953	31	1192
Vehicles Exited	191	946	30	1167
Hourly Exit Rate	191	946	30	1167
Input Volume	224	1160	41	1425
% of Volume	85	82	74	82
Denied Entry Before	0	0	0	0
Denied Entry After	20	0	0	20

16: Calimesa Blvd & PA-1 Drwy 4 Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Delay (hr)	0.4	0.9	0.0	1.3
Total Del/Veh (s)	8.0	4.1	1.1	4.7
Stop/Veh	0.80	0.16	0.07	0.26
Travel Time (hr)	1.1	4.6	0.1	5.9
Vehicles Entered	162	791	30	983
Vehicles Exited	162	791	29	982
Hourly Exit Rate	162	791	29	982
Input Volume	168	992	41	1201
% of Volume	96	80	71	82
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

17: Calimesa Blvd & PA-2 Drwy 1 Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.1
Total Delay (hr)	0.2	1.2	0.2	0.0	1.6
Total Del/Veh (s)	14.8	12.4	1.5	0.5	6.6
Stop/Veh	1.00	0.99	0.00	0.00	0.45
Travel Time (hr)	0.4	2.4	6.2	0.1	9.1
Vehicles Entered	55	350	457	29	891
Vehicles Exited	54	350	455	29	888
Hourly Exit Rate	54	350	455	29	888
Input Volume	56	344	666	41	1107
% of Volume	96	102	68	71	80
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0



## Attachment G

# SimTraffic Intersection Delay Results – Existing with Project and Future Mitigation Conditions



---

Total Network Performance

---

Denied Delay (hr)	1349.8
Denied Del/Veh (s)	560.9
Total Delay (hr)	1585.2
Total Del/Veh (s)	786.3
Stop/Veh	3.01
Travel Time (hr)	3155.1
Vehicles Entered	6007
Vehicles Exited	4949
Hourly Exit Rate	4949
Input Volume	43601
% of Volume	11
Denied Entry Before	243
Denied Entry After	2656

---

Total Network Performance

---

Denied Delay (hr)	1519.6
Denied Del/Veh (s)	564.9
Total Delay (hr)	1217.9
Total Del/Veh (s)	537.6
Stop/Veh	2.91
Travel Time (hr)	3023.6
Vehicles Entered	6870
Vehicles Exited	6560
Hourly Exit Rate	6560
Input Volume	48558
% of Volume	14
Denied Entry Before	304
Denied Entry After	2815