
APPENDIX D

EMERGENCY EVACUATION ROUTE ANALYSIS

BACKGROUND

Assembly Bill (AB) 747¹, passed in August of 2019, requires the City to update the Safety Element of their General Plan to identify evacuation routes and assess the capacity, safety, and viability of those routes under a range of emergency scenarios. Senate Bill (SB) 99² similarly requires the City to identify residential developments in hazard areas that do not have at least two emergency evacuation routes. Authoritative state guidance has not yet been developed to determine the type and level of analysis needed under AB 747 and SB 99.

This supplemental evacuation analysis was prepared in support of the 2020 Local Hazard Mitigation Plan. It utilizes a methodology described below and identifies residential developments without sufficient evacuation routes, and evaluates the efficacy of existing evacuation routes under various hazard scenarios in compliance with these two statutes.

HAZARD SCENARIOS

Evacuation route viability is largely determined by the location of the hazard. Because the City of Watsonville is surrounded by moderate and high wildfire risk areas, the Planning Team considered three wildfire scenarios to evaluate the safety and capacity of evacuation routes for residents. A total of five hazard scenarios are considered in this analysis:

1. Baseline (no hazard location specified)
2. Wildfire originating in the area north of the City
3. Wildfire originating to the east of the City
4. Wildfire originating to the south of the City
5. Flood
6. Earthquake

DATA, ASSUMPTIONS & DEFINITIONS

The evacuation route analysis utilizes updated parcel data from CoreLogic, a leading provider of real estate data in the United States and 2017 TIGER road data from the U.S. Census, which includes all roads in the U.S. Census Bureau's Master Address File Integrated Geographic Encoding and Referencing database. This includes primary roads, secondary roads, local neighborhood roads, rural roads, city streets, vehicular trails, ramps, service drivers, walkways, stairways, alleys, and private roads.

¹ An act to add Section 65302.15 to the Government Code.

² An act to amend Section 65302 of the Government Code.

To develop a methodology that effectively evaluates the safety and capacity of evacuation routes, and identifies residential areas that lack two evacuation routes, the following definitions and assumptions apply:

1. “Evacuation route vulnerability” refers to the reduced ability of people to evacuate under emergency conditions. Evacuation route vulnerability scores are calculated for each residential parcel. Lower values indicate lower levels of vulnerability, while higher values indicate greater evacuation route vulnerability.
2. “Capacity” is defined by the ability of a road to accommodate traffic volume. In this analysis, road type (local, collector, arterial, or highway/freeway) is used as an indicator of road capacity. “Local” roads are streets that are primarily used to gain access to property. Proximity to local roads was not considered a significant determinant of evacuation vulnerability. “Collector” roads are considered low-to-moderate capacity roads which serve to move traffic from local streets to arterial roads. An “arterial” road is a high-capacity urban road. The primary function of an arterial road is to deliver traffic from collector roads to highways/freeways, which are the highest capacity evacuation route.
3. Evacuation proceedings are primarily reliant on “outbound” roads—roads that transport drivers away from the city. Outbound roads are either freeways or arterials. Outbound roads begin at the intersection closest to the City boundary.
4. “Proximity” is defined by the distance from a residential parcel to nearest road (for collector roads) or “nodes” —the nearest intersection on the following road types: arterial, out-bound, or highway/freeway.
5. All roads have a potential role in evacuations. Closer proximity to higher capacity roads and outbound roads reduce evacuation vulnerability.
6. Hazard scenarios influence the direction people evacuate (away from the hazard area).
7. Segments of roads with bridges under an earthquake scenario are not viable.

METHODOLOGY

Evacuation route vulnerability scores were assigned to each residential property based on several factors including proximity, capacity, and viability. The geospatial analysis included the following steps:

1. Map all residential parcels within the City, and all collector, arterial, outbound roads, and freeways.
2. Create nodes at the intersection of collector and local roads to arterial roads, and all intersections on out-bound roads, including on-ramps for highways/freeways.
3. Determine the proximity of each residential parcel to the nearest evacuation route (highway/freeway or outbound road) by:
 - a. Calculate the distance from the parcel to the nearest collector road.
 - b. Calculate the distance to the nearest arterial, outbound road, or highway/freeway node.³

³ To account for the assumption that drivers would take the route that leads them out of the City most efficiently, if the distance from a parcel to a higher capacity road is less than the distance to a lower capacity road, the distance to the lower capacity road is assigned a value of 0.

- c. Each distance value is weighted (see step 4). Add weighted distance values together to calculate the “Evacuation Route Vulnerability Score”. Lower values indicate lower levels of evacuation route vulnerability; higher values indicate greater vulnerability.
- 4. Apply the following weights to the road capacity (type) as follows to reflect the higher vulnerability of lower capacity roads and roads with bridges:

Road Type	Vulnerability Weight
Freeway	1
Outbound Road	2
Arterial Road	3
Collector Road	4
Road segment with bridge	10

- 5. For each hazard scenario⁴, identify residential parcels whose evacuation route vulnerability has changed (increased or decreased) from the baseline, and determine if there are less than two evacuation routes for residential areas.

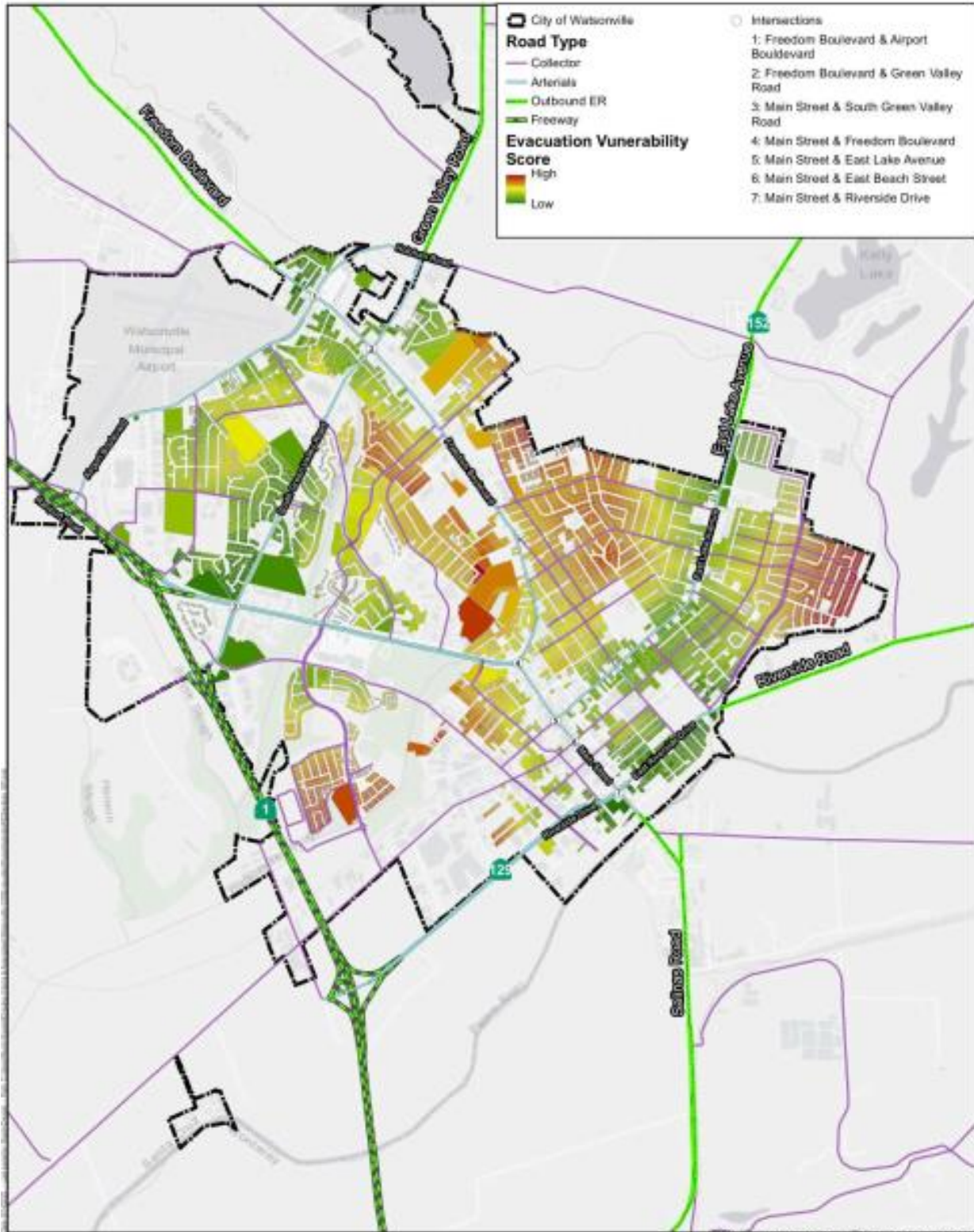
RESULTS

1. Baseline

The baseline scenario evaluates the evacuation route vulnerability of residential parcels absent a hazard event. In the baseline scenario, all outbound roads are available to residents for evacuation. Key intersections within the City boundary (where arterial roads connect) are labeled on the map below. These intersections are necessary to efficiently route residents to outbound roads. Residential parcels with the highest evacuation route vulnerability score are highlighted in red. Assuming all evacuation routes are viable, residents in the city center have the highest evacuation route vulnerability, as they have the furthest to travel to access outbound evacuation routes. The Pajaro Village and Stone Creek Apartment locations also show evacuation vulnerability in this scenario.

In addition to considering evacuation route vulnerability, the vulnerability of residents should be considered in determining which areas may need to be prioritized by first responders during an evacuation. Areas within the City with a greater percentage of elderly people, disabled people, households that do not own a vehicle (i.e. transit dependent populations), and institutionalized populations require greater levels of support during an evacuation. For example, the following areas have the highest percentage of elderly (over 65): (a) southeast portion of the City between Salsipuedes Creek, East Lake Ave. and Beck St.; (b) the Northeast corner between Corralitos Creek, Freedom Blvd. and Airport Blvd; (c) and the area between Main St., South Green Valley Rd., and the Struve Slough. Areas with a higher percent of institutionalized people include: (a) the western boundary and southwest corner of the City; and (b) the city center near the Portola Heights Mobile Home Park. Other vulnerable groups should be examined relative to evacuation route vulnerability.

⁴ Except Earthquake scenario, which follows its own methodology as described on page 217.



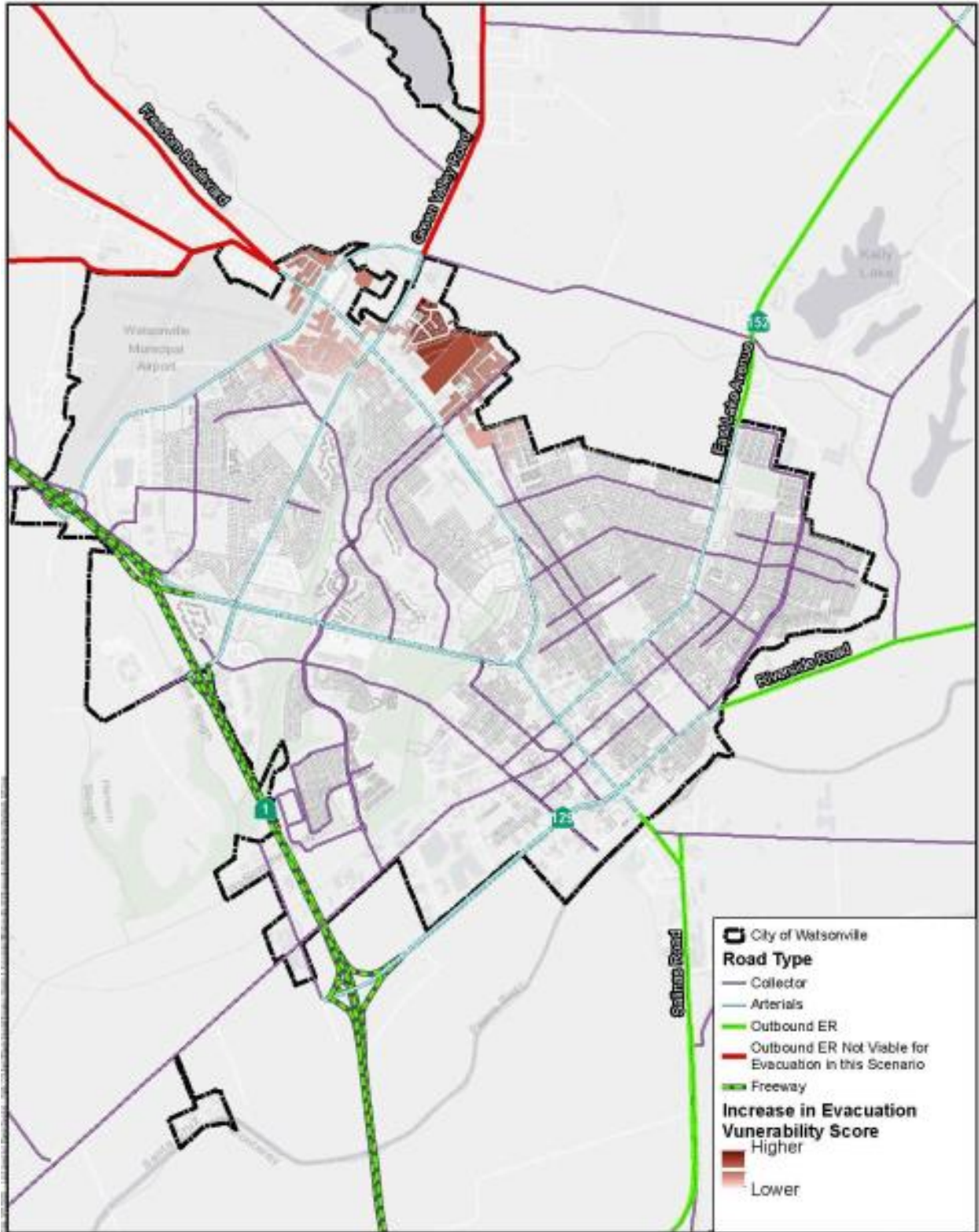
Source: County of Santa Cruz 2020; ESRI 2020.



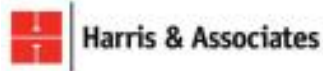
Residential Evacuation Vulnerability Score for All Directions

2. Wildfire (North)

This scenario assumes a wildfire north of the City. Outbound roads leading north are not viable, including Freedom Boulevard and Green Valley Road. Evacuation route vulnerability scores are recalculated to account for the increased distance to the next closest, viable outbound road. The map below highlights residential parcels with evacuation route vulnerability scores that increased as a result of the two northbound evacuation routes being closed. It is likely that the most utilized evacuation routes will be Highway 1 and Salinas Road, because eastbound outbound roads lead to other high fire risk areas. Parcels highlighted on the map will likely depend on South Green Valley Road to access Highway 1, or Freedom Blvd. to access the Salinas Rd. evacuation routes. The intersections of Main St./S. Green Valley Rd., Main St./Freedom Blvd, and Main St./Riverside Dr. may get congested as residents try to access Highway 1 and Salinas Rd. evacuation routes. Emergency responders should consider activating evacuation traffic management at these intersections and as contra-flow lane reversal on the highway to allow both lanes to be used for southbound evacuation, though this requires extensive coordination and should be reserved for extreme wildfire threats.



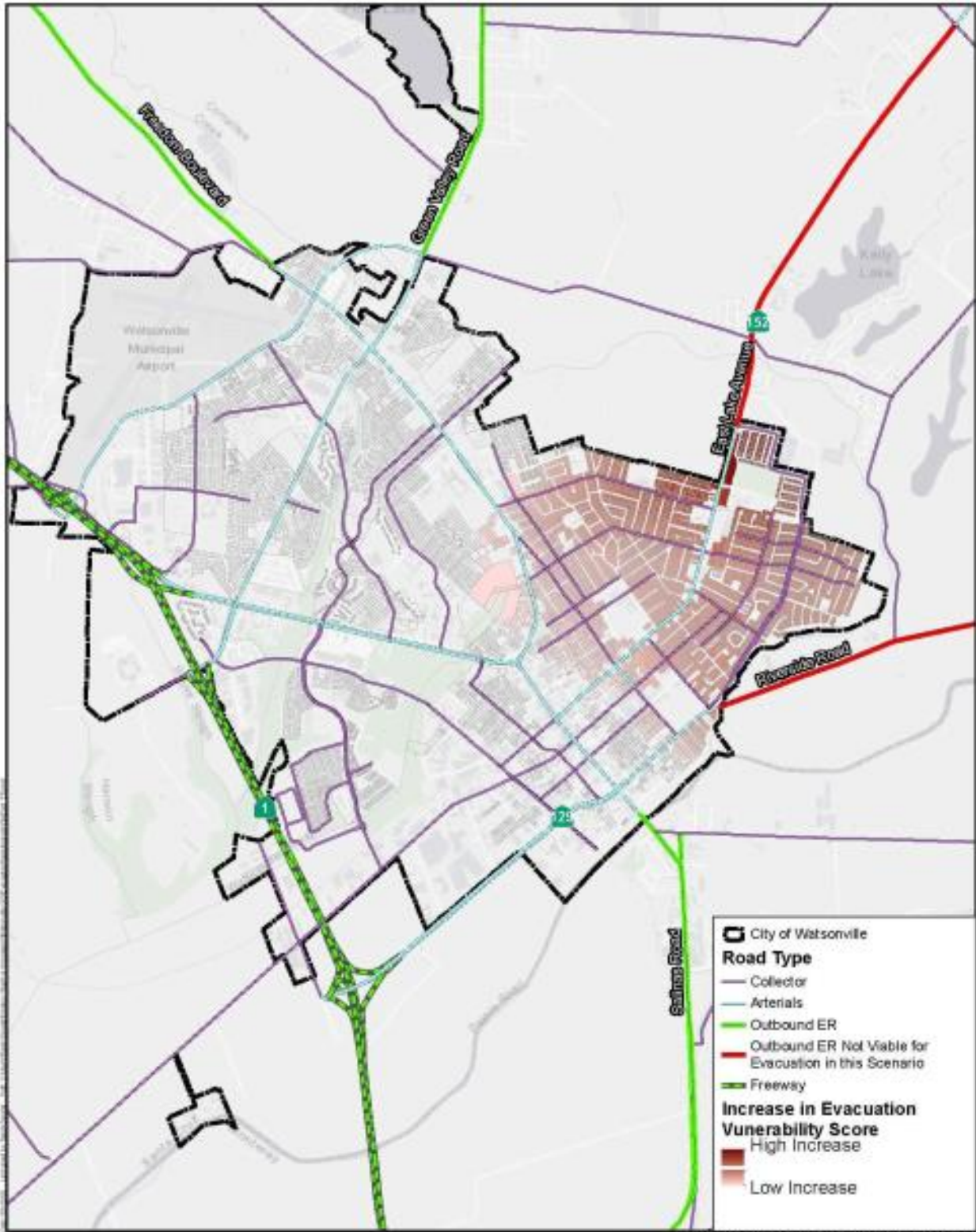
Source: County of Santa Cruz 2020; ESRI 2020.



Increase in Evacuation Vulnerability Score for Northern Fire Scenario

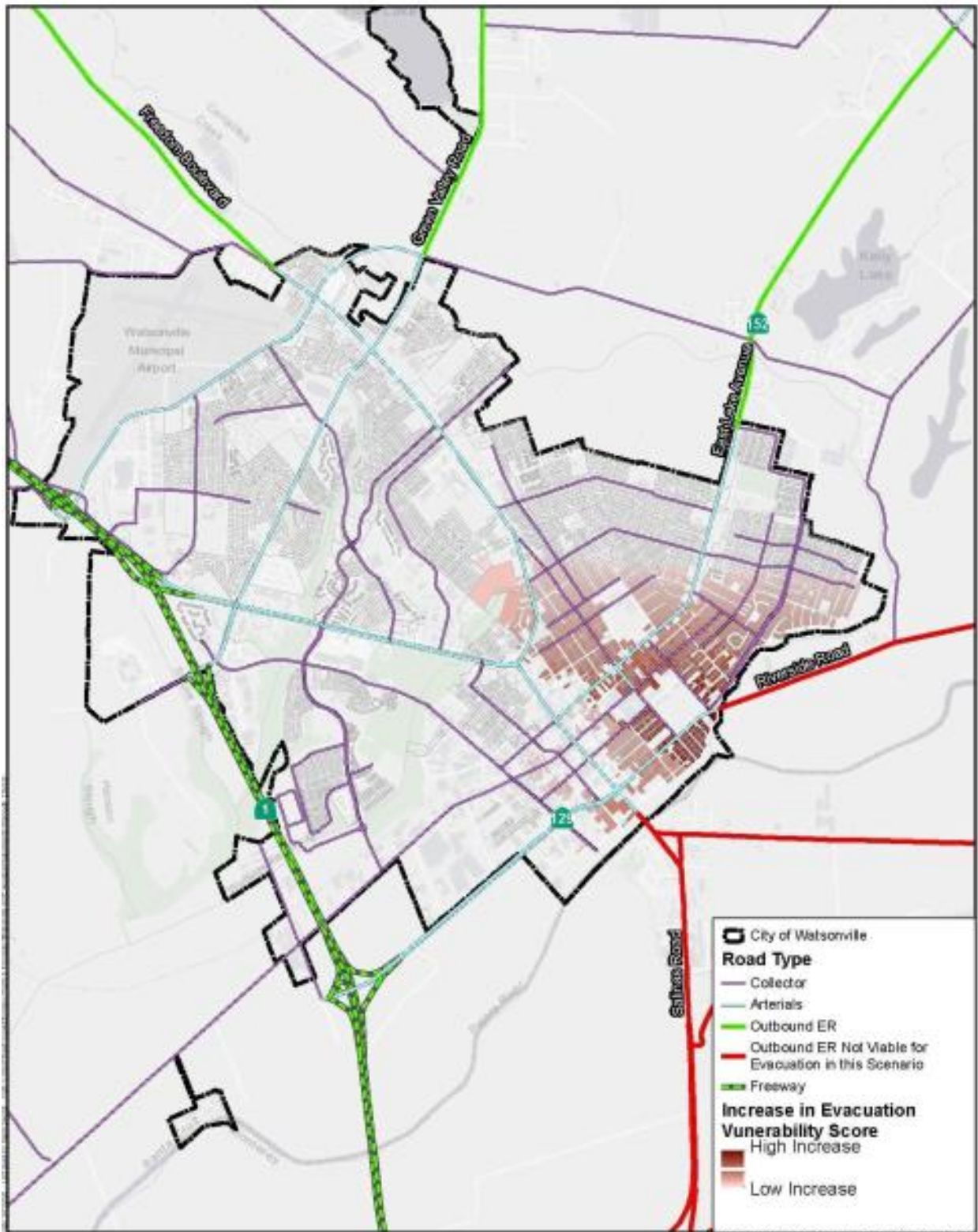
3. Wildfire (East)

This scenario assumes a wildfire east of the City. Outbound roads leading East are not viable, including East Lake Ave. and Riverside Road. Evacuation vulnerability scores are re-calculated to account for the increased distance to the next closest, viable outbound road. The map below highlights residential parcels with evacuation route vulnerability score that increased as a result of the two eastbound evacuation routes being closed. Freedom Blvd., Salinas Rd., and Highway 1 are the outbound roads most likely to be utilized in this scenario, because eastbound outbound roads lead to other high fire risk areas. Both directions of Highway 1 (North/South) are likely to be viable under this scenario, which increases overall evacuation capacity. However, it may take more resources to evacuate those in the Pajaro Village area because of the reduced mobility of the population that resides in those neighborhoods. The critical intersections in this scenario are likely to be Main Street and Freedom Blvd., Main Street and East Riverside Drive.



4. Wildfire (South)

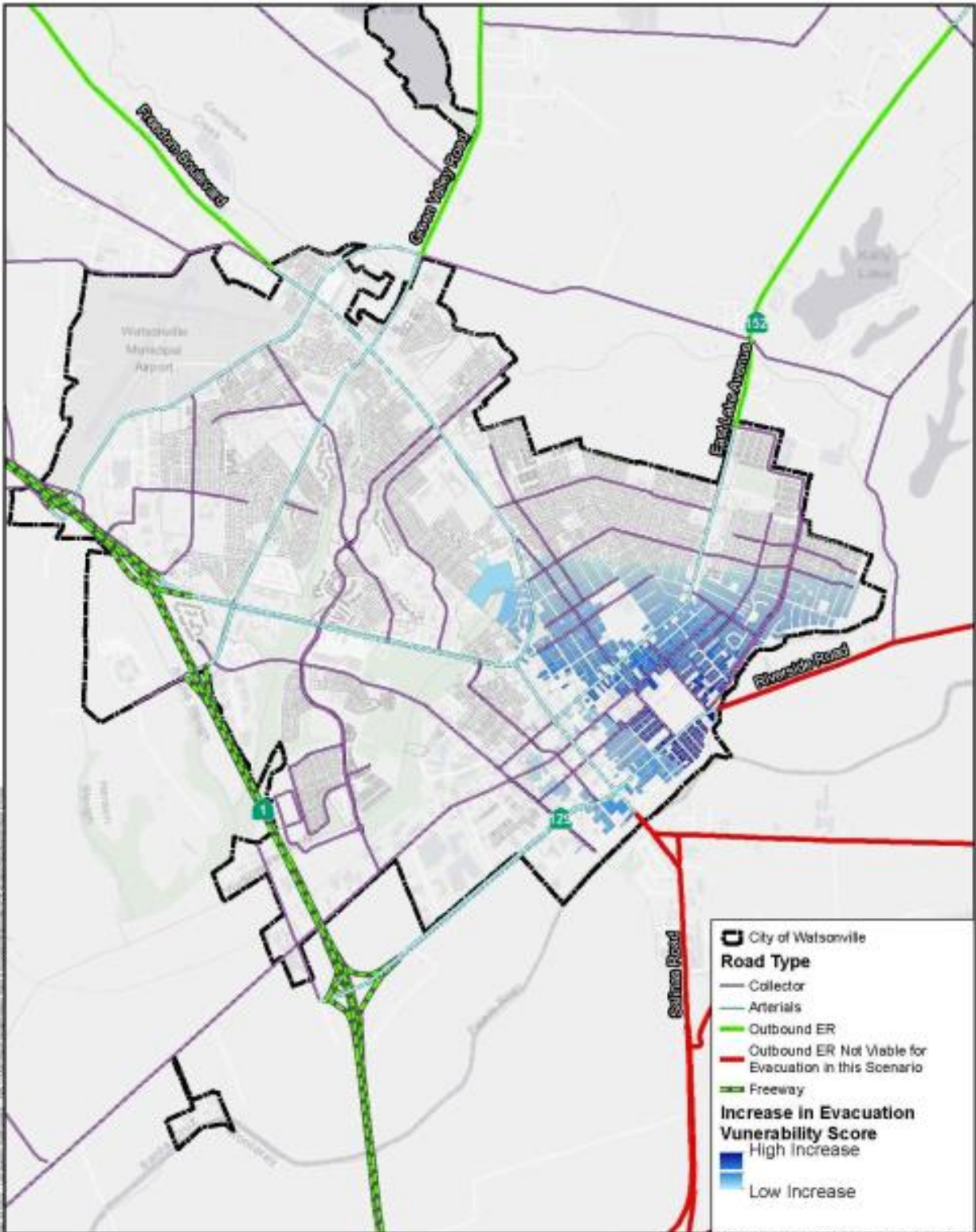
This scenario assumes a wildfire to the south of the City. Outbound roads leading South are not viable, including Riverside Road and Salinas Road. Evacuation route vulnerability scores are recalculated to account for the increased distance to the next closest, viable outbound road. The map below highlights residential parcels with evacuation route vulnerability score that increased as a result of the two southbound evacuation routes being closed. Freedom Blvd and northbound Highway 1 are the outbound roads most likely to be utilized in this scenario, because eastbound outbound roads lead to other high fire risk areas. The intersections of Main St./S. Green Valley Rd., Main St./Freedom, and Freedom/Green Valley Rd. may get congested as residents try to access Highway 1 and Freedom Rd. evacuation routes. Emergency responders should consider activating evacuation traffic management at these intersections and as contra-flow lane reversal on the highway to allow both lanes to be used for northbound evacuation, though this requires extensive coordination and should be reserved for extreme wildfire threats.



Source: County of Santa Cruz 2020, ESRI 2020

5. Flood

The flood scenario assumes that people will evacuate away from the flood zone. Since the flood zone is along the South side of the City along the Pajaro River, the two Southbound evacuation routes are assumed to be non-viable. Therefore, the results are the same as Scenario #4. The time it takes to evacuate is not as critical during a flood event because it is a slower-onset hazard. However, it may be more difficult for first responders to access vulnerable populations that need to be evacuated once the water inundates the area. Roads may be inundated, further hampering evacuation. Residents may not need to evacuate out of the City but only away from the flood zone. Therefore, there is likely to be less evacuation route congestion compared to other hazard scenarios.



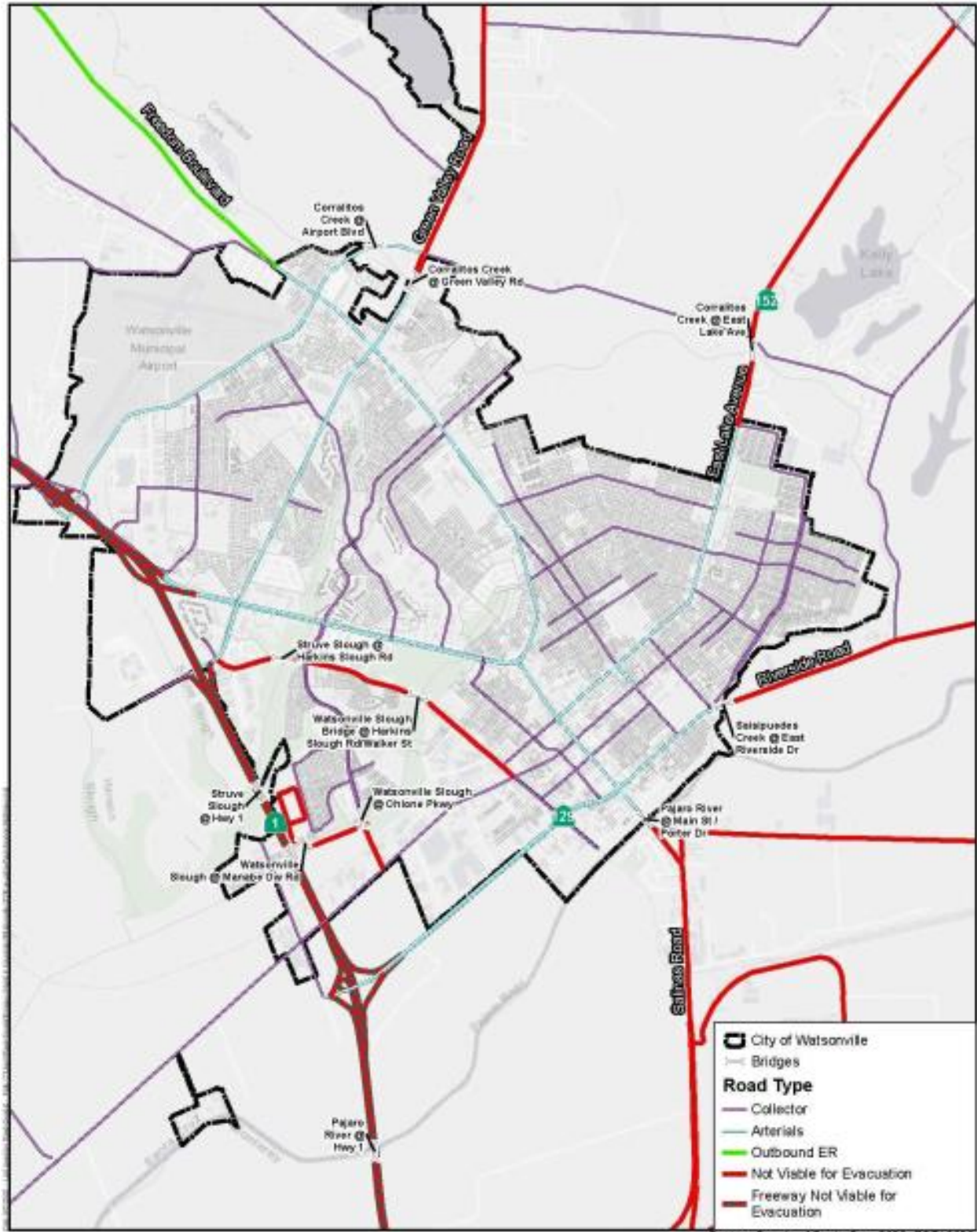
Source: County of Santa Cruz 2020; ESRI 2020



Increase in Evacuation Vulnerability Scores for Flood Scenario

6. Earthquake

Unlike other scenarios, earthquakes have the potential to damage any part of the City. For this reason, it is difficult to predict which evacuation routes will be available post-earthquake. Because earthquakes can damage bridges, one key assumption was made for evaluating evacuation route capacity: outbound roads that require a bridge crossing may not be viable evacuation routes after an earthquake. This assumption removes all but one evacuation route from the analysis—Freedom Blvd. All the other outbound roads have bridge crossings. Though emergency responders should consider the possibility of bridge failure, it is unlikely that all bridges would fail in the event of an earthquake occurrence. While it is likely two evacuation routes will still be available under this scenario, it is theoretically possible that all bridges are damaged and less than two emergency evacuation routes are available to residents in the event of a severe earthquake. Post-earthquake, emergency responders should be prepared to inspect bridges efficiently and effectively in the event of an earthquake event so that evacuation routes can be established and communicated safely and quickly.



Source: County of Santa Cruz 2020; ESRI 2020.


Harris & Associates




Residential Evacuation Vulnerability Score for No Bridge Scenario

CONCLUSION & RECOMMENDATIONS

The evacuation route analysis did not identify any residential parcels that lack two evacuation routes (it remains theoretically possible, but highly unlikely, that all evacuation routes are blocked in the event of a severe earthquake). The baseline scenario suggests that residents closest to the city center are most vulnerable given the distance they would need to travel to access an outbound road. The results for the five hazard scenarios were as expected: residential parcels located near outbound roads that were assumed to be non-viable under the hazard scenario saw an increase in their evacuation route vulnerability score, reflecting the greater distance residents would travel to access the next nearest outbound evacuation route. There are a greater percentage of socially vulnerable groups in the southwest, southeast, and northwest corner of the city, as well as pockets of vulnerability around the Watsonville Slough that may require a greater level of assistance during evacuation proceedings.

The analysis suggests that emergency responders must be flexible in emergency scenarios, considering the location and extent of a hazard may disrupt established evacuation routes. Given the potential for congestion when certain evacuation routes are closed, emergency responders should consider contraflow lane reversal as one strategy to efficiently evacuate residents. All but one outbound evacuation routes rely on a bridge. These bridges should be inspected prior and post hazard events to ensure the evacuation routes remain viable. Social vulnerability indicators, including age, disability, and other mobility factors should be further examined to determine other potential barriers to evacuation besides distance to and capacity of evacuation routes. These recommended strategies require advanced coordination across departments to ensure an efficient and well-communicated process for evacuation in response to various hazard scenarios.

RESOLUTION NO. 42-21 (CM)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WATSONVILLE APPROVING THE TWENTY-FIFTH (25TH) AMENDMENT TO THE WATSONVILLE 2005 GENERAL PLAN AMENDING CHAPTER 12 (PUBLIC SAFETY) TO INCORPORATE BY REFERENCE THE 2020 LOCAL HAZARD MITIGATION PLAN (LHMP)

WHEREAS, in September 2020, the City of Watsonville submitted a draft Local Hazard Mitigation Plan (LHMP) to California Office of Emergency Services and the Federal Emergency Management Agency (FEMA) for approval; and

WHEREAS, the draft LHMP was approved by both agencies, pending adoption of the Plan by the City Council; and

WHEREAS, on December 1, 2020, the Planning Commission adopted Resolution No. 21-20 (PC), recommending the City Council approve a general plan text amendment to incorporate by reference the LHMP into the City's General Plan; and

WHEREAS, pursuant to Section 14-12.700 of the Watsonville Municipal Code, the General Plan text and General Plan Land Use Diagram may be amended whenever public necessity, general community welfare, and good zoning practices permit such amendment; and

WHEREAS, the proposed text amendment to Chapter 12 (Public Safety) of the Watsonville 2005 General Plan is exempt from the California Environmental Quality Act (CEQA), pursuant to State CEQA Guidelines Section 15061(b)(3) (Common Sense Exemption). The LHMP guides future hazard mitigation strategies but does not implement any specific project, action, or funding. A Notice of Exemption will be filed in accordance with CEQA Guidelines; and

WHEREAS, a twenty-fifth (25th) amendment to the *Watsonville 2005 General Plan* is proposed which will change Chapter 12 (Public Safety) to incorporate by reference the 2020 Local Hazard Mitigation Plan; and

WHEREAS, the requested General Plan Text Amendment would satisfy the requirement of State law applicable to General Law cities for zoning and General Plan consistency; and

WHEREAS, pursuant to Section 65358(b) of the Government Code, the General Plan may only be amended four (4) times during any calendar year; and

WHEREAS, on May 24, 1994, the *Watsonville 2005 General Plan* was adopted by Resolution No. 137-94 (CM); and

WHEREAS, on November 7, 1995, the *Watsonville 2005 General Plan* was amended by Resolution No. 299-95 (CM) adopting GPA-1-95 thereby affecting 451 East Beach Street. GPA-1-95 was the first (1st) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 1995 calendar year; and

WHEREAS, on March 25, 1997, the *Watsonville 2005 General Plan* was amended by Resolution No. 89-97 (CM) adopting GPA-2-94 thereby affecting certain lands west of Lee Road owned by Vincent Tai. GPA-2-94 was the second (2nd) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 1997 calendar year; and

WHEREAS, on July 22, 1997, the *Watsonville 2005 General Plan* was amended by Resolution No. 235-97 (CM) adopting GPA-2-97 thereby affecting certain property at 527 Center Street Watsonville, owned by John Fiorovich. GPA-2-97 was the third (3rd) amendment to the *Watsonville 2005 General Plan* and the second (2nd) amendment of the 1997 calendar year; and

WHEREAS, on November 4, 1997, the *Watsonville 2005 General Plan* was amended by Resolution No. 335-97 (CM) adopting GPA-3-97 thereby affecting certain property at 567 Auto Center Drive owned by Robert Erickson. GPA-3-97 was the fourth (4th) amendment to the *Watsonville 2005 General Plan* and the third (3rd) amendment of the 1997 calendar year; and

WHEREAS, on April 28, 1998, the *Watsonville 2005 General Plan* was amended by Resolution No. 132-98 (CM) adopting GPA-1-98 to re-designate 98 parcels in the vicinity of Airport Boulevard and Loma Prieta Avenue. GPA-1-98 was the fifth (5th) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 1998 calendar year; and

WHEREAS, on April 28, 1998, the *Watsonville 2005 General Plan* was amended by Resolution No. 134-98 (CM) adopting GPA-2-98 to re-designate 141.2 acres outside the City Limits of the City of Watsonville (Freedom/Carey Annexation). GPA-2-98 was the sixth (6th) amendment to the *Watsonville 2005 General Plan* and the second (2nd) amendment of the 1998 calendar year; and

WHEREAS, on December 8, 1998, the *Watsonville 2005 General Plan* was amended by Resolution No. 311-98 (CM) adopting GPA-3-98 to amend the Land Use Diagram of the Land Use and Community Development Element of the *Watsonville 2005 General Plan* requesting re-designation of Assessor's Parcel Numbers 019-861-20 & 21 as part of a mixed use hospital re-use development project (298 Green Valley Road, Watsonville). GPA 3-98 was the seventh (7th) amendment to the *Watsonville 2005 General Plan* and the third (3rd) amendment of the 1998 calendar year; and

WHEREAS, on July 27, 1999, the City Council adopted Resolution No. 224-99 (CM) approving the eighth (8th) amendment to the *Housing Element, 1991 - 1996* of the *Watsonville 2005 General Plan* (GPA-2-99) and the first (1st) amendment of 1999 calendar year; and

WHEREAS, on March 10, 2000, the City Council adopted Resolution No. 71-00 (CM) approving the ninth (9th) amendment to the *Watsonville 2005 General Plan* (GPA-1-00) and the first (1st) amendment of 2000 to eliminate the Lands West of Lee Road as a “Special Study Area”; and

WHEREAS, on August 22, 2000, the Council adopted Resolution No. 245-00 (CM) approving the tenth (10th) and the second (2nd) amendment to the *Watsonville 2005 General Plan* (GPA-2-00) to amend the *Watsonville 2005 Local Coastal Program* to allow development of the New Millennium High School; and

WHEREAS, on June 12, 2001, the Council adopted Resolution No. 142-01 (CM) approving the eleventh (11th) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 2001 calendar year by amending the Housing Element of such General Plan; and

WHEREAS, on June 26, 2001, the Council adopted Resolution No. 170-01 (CM) approving the twelfth (12th) amendment to the *Watsonville 2005 General Plan* and the second (2nd) amendment of the 2001 calendar year by amending the *Watsonville 2005 Local Coastal Program Land Use plan* to make minor modifications to Figure 2A, Sections III C.3 (p) and C.4; and

WHEREAS, on January 8, 2002, the Council adopted Resolution No. 10-02 (CM) amending the twelfth (12th) amendment and (1st) amendment of the 2002 calendar year to the *Watsonville 2005 General Plan*; and

WHEREAS, on February 26, 2002, the Council adopted Resolution No. 52-02 (CM) approving the thirteenth (13th) amendment to the *Watsonville 2005 General Plan* and the second (2nd) amendment of the 2002 calendar year to re-designate Assessor's Parcel Numbers 018-151-14, 28, 29, and 30 (640, 646, and 652 Main Street) from Central Commercial to Public/Quasi-Public; and

WHEREAS, on March 12, 2002, the Council adopted Resolution No. 63-02 (CM) approving the fourteenth (14th) Amendment to the *Watsonville 2005 General Plan* and the third (3rd) amendment of the 2002 calendar year, to re-designate Assessor's Parcel Number 015-321-04 (20 Holm Road) from Industrial to Residential Medium Density on the *Land Use Diagram* of the *Land Use and Community Development Element* to allow the construction of a twenty-five (25) unit townhouse development; and

WHEREAS, on September 24, 2002, the Council adopted Resolution No. 245-02 (CM) approving the fifteenth (15th) Amendment to the *Watsonville 2005 General Plan*, and the fourth (4th) amendment of the 2002 calendar year to re-designate a portion of Assessor's Parcel Number 015-201-04 from Public/Quasi Public to Residential - Low Density (comprising 12,000 square feet) and Environmental Management - Open Space (EM-OS) on the *Land Use Diagram* of the *Land Use and Community Development Element*); and

WHEREAS, on November 5, 2002, the voters of the City of Watsonville approved the Orderly Growth and Agricultural Protection measure to amend the *Watsonville 2005 General Plan* which became the sixteenth (16th) amendment to the General Plan and the fifth (5th) amendment of the 2002 calendar year; and

WHEREAS, on February 23, 2010, the City Council adopted Resolution No. 27-10 (CM) approving the seventeenth (17th) amendment to the *Watsonville 2005 General Plan*

(GPA-1-10) and the first (1st) amendment of the 2010 calendar year from (R-LD) Residential Low Density to (CG) General Commercial for a parcel located at 813 Freedom Boulevard (APN: 016-143-09), Watsonville, California; and

WHEREAS, on November 8, 2011, the City Council adopted Resolution No. 196-11 (CM) approving the eighteenth (18th) amendment to the *Watsonville 2005 General Plan* (GPA-1-11) and the first (1st) amendment of the 2011 calendar year from (R-LD) Residential Low Density to (P/QP) Public/Quasi-Public, for parcels located at 320 and 332 East Beach Street (APN: 017-141-05 and 017-141-15), Watsonville, California; and

WHEREAS, on March 22, 2016, the City Council adopted Resolution No. 32-16 (CM) approving the nineteenth (19th) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 2016 calendar year from (GC) General Commercial to (CC) Central Commercial and a text amendment to page 52 (Central Commercial) of Chapter 4 (Land Use and Community Development) to allow additional intensification in the downtown if adequate on-site parking can be provided for Assessor's Parcel Number 016-153-03 located at 1 Western Drive, Watsonville, California; and

WHEREAS, on April 26, 2016, the City Council adopted Resolution No. 58-16 (CM) approving the twentieth (20th) amendment to the *Watsonville 2005 General Plan* and the second (2nd) amendment of the 2016 calendar year re-designating Assessor's Parcel Number 018-302-03 located at 1715 West Beach Street, Watsonville, California from (I) Industrial to (GC) General Commercial to allow the development of two four-story hotels and associated retail uses on a 7.3 acre parcel located at 1715 West Beach Street,; and

WHEREAS, on July 5, 2016, the City Council adopted Resolution No. 129-16 (CM) approving the twenty-first (21st) amendment to the *Watsonville 2005 General Plan* and the third (3rd) amendment of the 2016 calendar year re-designating Assessor's Parcel Number

015-371-01 located at 221 Airport Boulevard, Watsonville, California, from (N) Institutional to (R-HD) High-Density Residential to allow the construction of 48 townhome units and the relocation and rehabilitation of an existing school house to a residential unit on a 2.65 acre parcel; and

WHEREAS, on August 28, 2018, the City Council adopted Resolution No. 140-18 (CM) approving the twenty-second (22nd) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 2018 calendar year re-designating (APN: 018-372-14) from (I) Industrial to (RH-D) High Density Residential for 551 Ohlone Parkway, Watsonville California; and

WHEREAS, on April 23, 2019, the City Council adopted Resolution No. 59-19 (CM) approving the twenty-third (23rd) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 2019 calendar year re-designating from (R-MD) Medium Density Residential to Public/Quasi Public for a parcel located at 376 A South Green Valley Road (APN: 016-221-06) and (R-LD) Low Density Residential to Public/Quasi Public and Environmental Management, for a portion of parcel located at 0 South Green Valley Road (APN:014-052-01) Watsonville, California; and

WHEREAS, on August 27, 2019, the City Council adopted Resolution No. 132-19 (CM) approving the twenty-fourth (24th) amendment to the *Watsonville 2005 General Plan* and the second (2nd) amendment of the 2019 calendar year re-designating Assessor's Parcel Number 015-11-36 located at 58 Hangar Way and Assessor's Parcel Number 015-111-37 located at 5 Nielson Street, from Industrial to Public/Quasi Public, to allow construction of a 11,424± square foot medical office building on a 1.01± acre site; and

WHEREAS, the proposed General Plan Text Amendment, if adopted, will be the twenty-fifth (25th) amendment to the *Watsonville 2005 General Plan* and the first (1st) amendment of the 2021 calendar year; and

WHEREAS, notice of time and place of the hearing to consider approval of the General Plan Text Amendment was given at the time and in the manner where appropriate public noticing procedures have been followed and a public hearing was held according to Section 14-10.900 of the Watsonville Municipal Code; and

WHEREAS, the City Council has considered all evidence received, both oral and documentary, and the matter was submitted for decision.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATSONVILLE, CALIFORNIA, AS FOLLOWS:

1. Good cause appearing and upon the Findings, attached hereto and incorporated herein as Exhibit "A," the City Council does hereby approve the text amendment to Chapter 12 (Public Safety) of the Watsonville 2005 General Plan, incorporating the Local Hazard Mitigation Plan.

2. That the text amendment to Chapter 12 (Public Safety) of the Watsonville 2005 General Plan is to read in words and figures as follows (***bold italic*** text represents new text):

EMERGENCY PREPAREDNESS

The policies for environmental constraint management and public safety have been developed in an effort to protect lives and property by preventive measures. Watsonville also recognizes the need to remain prepared should disaster strike. The City has prepared a state-approved *Emergency Preparedness Plan* and has identified evacuation routes for the relocation of residents from any part of the Planning Area experiencing hazardous conditions. As illustrated in Figure 12-5, routes have been selected to move the population toward any point of the compass depending on the nature of the emergency.

In addition, the *Hazard Mitigation Plan*, developed **in 1990** after the Loma Prieta Earthquake, identifies several emergency preparedness improvements that are of benefit in emergencies other than earthquakes. The implementation of the recommendations in that Plan will improve that City's overall emergency response capability.

The City has developed and adopted a *Community-based Disaster Response Plan*, which describes a method of organizing the efforts of the entire community around disasters. This Plan includes coordinating the efforts of governmental agencies as well as schools, hospitals, businesses, non-profit agencies, and other community groups and addresses short-term and long-term recovery needs.

In 2020, the City developed a LHMP in accordance with the federal Disaster Mitigation Act of 2000. Following FEMA's 2011 Local Hazard Mitigation Plan guidance, the LHMP provides a process that enables the City to identify and assess: 1) natural hazards, including those that are created or exacerbated by climate change; 2) people and facilities that are at risk to hazard impacts; and 3) mitigation actions that reduce or eliminate hazard impacts.

The Plan's risk assessment summarizes the vulnerability and potential impacts of hazards including flooding, earthquakes, landslides, liquefaction, drought, wildfire, extreme heat, and sea-level rise. The risk assessment addresses climate risks by including climate projections from Cal-adapt and discussing how the frequency and magnitude of hazard events may increase due to climate change.

The LHMP provides short- and long-term strategies, which involve policy changes, programs, projects, and other activities aimed at reducing the City's vulnerability to these hazards. The Plan's mitigation strategy also includes adaptation and resilience goals, policies, and objectives.

Examples of identified mitigation actions include protecting essential infrastructure from sea-level rise, improving existing stormwater infrastructure to reduce flood risk, strengthening and stabilizing public facilities and infrastructure against fire and earthquake risk, developing back-up communications systems for essential infrastructure, and improving urban natural habitats to increase resilience and promote climate change adaptation.

In 2006, the state adopted Assembly Bill (AB) 2140—known as the California Disaster Assistance Act—which authorizes and incentivizes local jurisdictions to incorporate by reference their LHMP into the safety element of their general plan if it meets applicable state requirements. By adopting its LHMP by reference in the General Plan, the City is compliant with AB 2140 and is therefore potentially eligible for additional disaster relief funding.

In 2015, California passed Senate Bill (SB) 379, which requires the City to update the safety element to address applicable climate adaptation and resiliency strategies. Specifically, SB 379 requires the City to develop goals, policies, and

objectives based on a vulnerability assessment, identifying the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts. The bill also states that if a local jurisdiction has adopted the LHMP that fulfills commensurate goals and objectives and contains information related to climate change vulnerability and adaptation policies, separate from the general plan, an attachment of, or reference to, the local hazard mitigation plan is sufficient in complying with SB 379. Therefore, by summarizing and incorporating by reference the City’s 2020 LHMP into the safety element of the general plan, the City is compliant with SB 379.

As part of this effort, the City also prepared an emergency evacuation route analysis in accordance with AB 747 (2019) and SB 99 (2019). This analysis provides an assessment of the transportation network’s capacity, safety, and viability under a range of emergency scenarios, and is attached as Appendix D to the General Plan.

In addition, the proposed text amendment includes updates to the following implementation measures under Policy 12.L (Emergency Preparedness), as follows:

- 12.L.3 Planning – The City shall annually update the Emergency Preparedness Plan **and Local Hazard Mitigation Plan (LHMP)** and coordinate planning efforts with the local community and the Santa Cruz County Office of Emergency Services.
- 12.L.4 Evacuation – The City shall designate evacuation routes for the Planning Area, according to the planning format outlined in the Emergency Preparedness Plan **and emergency evacuation route analysis in Appendix D.**
- 12.L.5 **Local** Hazard Mitigation Plan – The City of Watsonville shall actively pursue the implementation of the recommendations included in the **2020 LHMP and subsequent updates** ~~Hazard Mitigation Plan for the City of Watsonville that was developed after the 1989 Loma Prieta Earthquake, including preparation of the Community-based Disaster Response Plan.~~

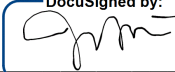
Lastly, the proposed text amendment includes the aforementioned emergency evacuation route analysis as a new Appendix D, which is attached hereto and incorporated herein by this reference.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Watsonville, held on the 19th day of January, 2021, by Member Montesino, who moved its adoption, which motion being duly seconded by Mayor Pro Tempore Parker, was upon roll call carried and the resolution adopted by the following vote:

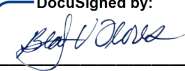
AYES: COUNCIL MEMBERS: **Estrada, García, Gonzalez, Hurst, Montesino, Parker, Dutra**

NOES: COUNCIL MEMBERS: **None**

ABSENT: COUNCIL MEMBERS: **None**

DocuSigned by:

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Jimmy Dutra, Mayor

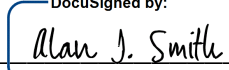
ATTEST:

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City Clerk

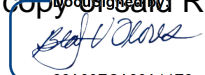
1/25/2021 | 10:12 AM PST

Date

APPROVED AS TO FORM:

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City Attorney

I, Beatriz Vázquez Flores, City Clerk of the City of Watsonville, do hereby certify that the foregoing Resolution No. 42-21 (CM) was duly and regularly passed and adopted by the Watsonville City Council at a meeting thereof held on the 19th day of January, 2021, and that the foregoing is a full, true and correct copy of said Resolution.

DocuSigned by:

26A00ECA30A14E3...
Beatriz Vázquez Flores, City Clerk

Date 1/25/2021 | 10:12 AM PST