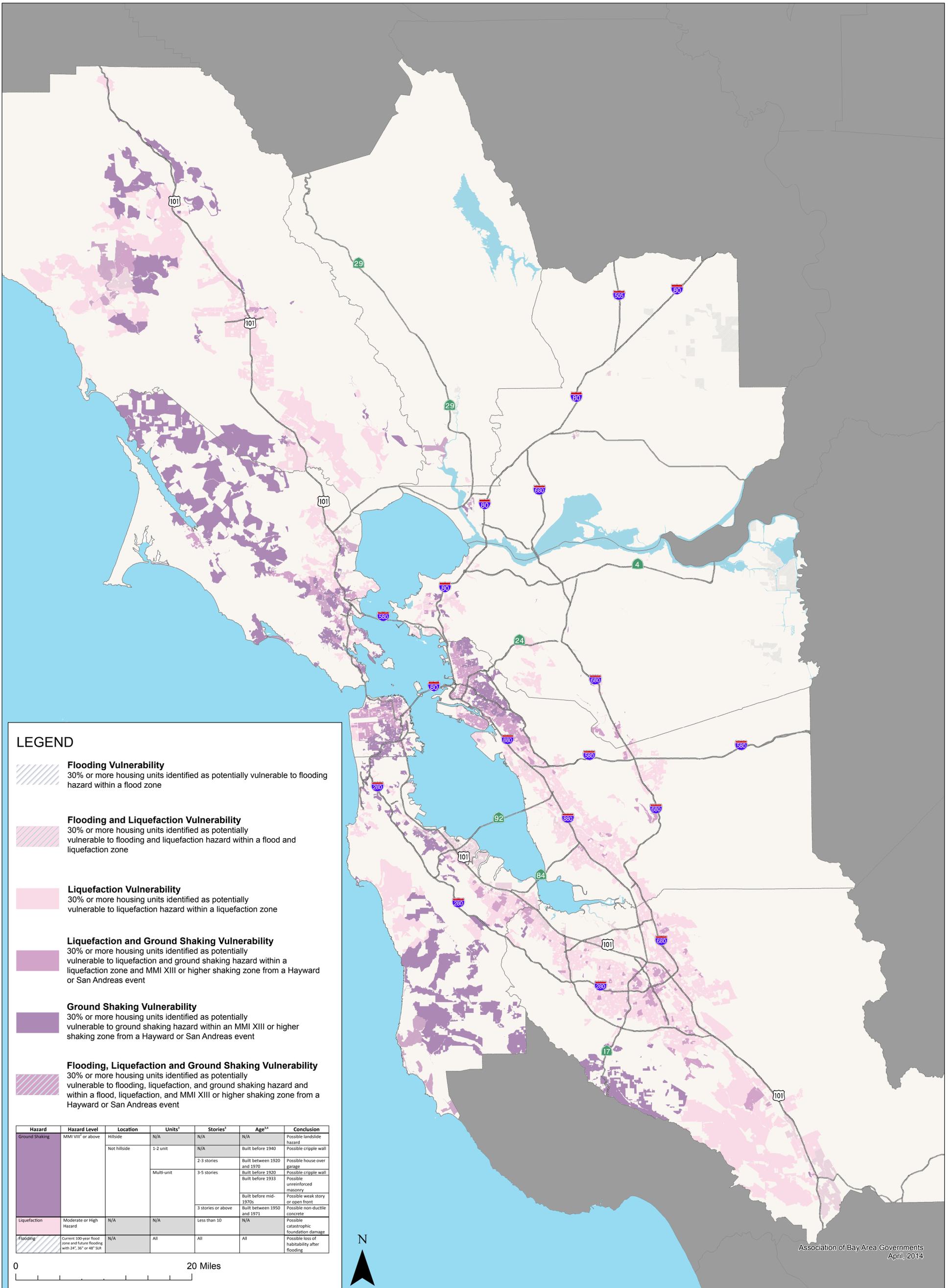
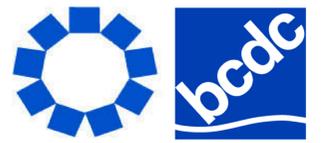


# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



**LEGEND**

- Flooding Vulnerability**  
30% or more housing units identified as potentially vulnerable to flooding hazard within a flood zone
- Flooding and Liquefaction Vulnerability**  
30% or more housing units identified as potentially vulnerable to flooding and liquefaction hazard within a flood and liquefaction zone
- Liquefaction Vulnerability**  
30% or more housing units identified as potentially vulnerable to liquefaction hazard within a liquefaction zone
- Liquefaction and Ground Shaking Vulnerability**  
30% or more housing units identified as potentially vulnerable to liquefaction and ground shaking hazard within a liquefaction zone and MMI XIII or higher shaking zone from a Hayward or San Andreas event
- Ground Shaking Vulnerability**  
30% or more housing units identified as potentially vulnerable to ground shaking hazard within an MMI XIII or higher shaking zone from a Hayward or San Andreas event
- Flooding, Liquefaction and Ground Shaking Vulnerability**  
30% or more housing units identified as potentially vulnerable to flooding, liquefaction, and ground shaking hazard and within a flood, liquefaction, and MMI XIII or higher shaking zone from a Hayward or San Andreas event

Hazard	Hazard Level	Location	Units <sup>1</sup>	Stories <sup>2</sup>	Age <sup>3,4</sup>	Conclusion	
Ground Shaking	MMI VIII <sup>5</sup> or above	Hillside	N/A	N/A	N/A	Possible landslide hazard	
		Not hillside	1-2 unit	N/A	Built before 1940	Possible cripple wall	
			2-3 stories		Built between 1920 and 1970	Possible house over garage	
			Multi-unit	3-5 stories		Built before 1920	Possible cripple wall
						Built before 1933	Possible unreinforced masonry
			Built before mid-1970s	Possible weak story or open front			
Liquefaction	Moderate or High Hazard	N/A	N/A	Less than 10	N/A	Possible catastrophic foundation damage	
Flooding	Current 100-year flood zone and future flooding with 24", 36" or 48" SLR	N/A	All	All	All	Possible loss of habitability after flooding	

0 20 Miles

N

Association of Bay Area Governments  
April, 2014