In light of the environmental laws passed in 1969 and 1970, these criteria were expanded to require a consideration of the following criteria:

- Historical and architectural considerations
- Visual and aesthetic impacts
- Cost effectiveness

On April 11, 1997, the Board, by Resolution #97-106, authorized a fencing company to design and develop a prototype for a physical suicide deterrent system.

After thorough review of the prototype the Board rejected the proprietary fence system because it did not meet the criteria for total effectiveness, visual impact, and cost.

The current project, including the engineering design work and environmental evaluation associated with development of a physical suicide deterrent system, was initially authorized by Resolution #2005-15, adopted by the District's Board at its March 11, 2005 meeting.

1.2 PURPOSE AND NEED

1.2.1 PURPOSE OF THE PROPOSED PROJECT

The purpose of the Golden Gate Bridge Physical Suicide Deterrent Project is to consider a physical suicide deterrent system that reduces the number of injuries and deaths associated with individuals jumping off the Bridge. The proposed physical suicide deterrent system must meet the revised criteria as set forth by the District, by Resolution 2005-033, adopted on April 22, 2005, as identified below.

1. Must impede the ability of an individual to jump off the Bridge
2. Must not cause safety or nuisance hazards to sidewalk users including pedestrians, bicyclists, District staff, and District contractors or security partners
3. Must be able to be maintained as a routine part of the District's ongoing Bridge maintenance program and without undue risk of injury to District employees
4. Must not diminish ability to provide adequate security of the Bridge

5. Must continue to allow access to the underside of the Bridge for emergency response and maintenance activities

6. Must not have a negative impact on the wind stability of the Bridge

7. Must satisfy requirements of state and federal historic preservation laws

8. Must have minimal visual and aesthetic impacts on the Bridge

9. Must be cost effective to construct and maintain

10. Must not in and of itself create undue risk of injury to anyone who comes in contact with the suicide deterrent system

11. Must not prevent construction of a moveable median barrier on the Bridge

1.2.2 NEED FOR THE PROPOSED PROJECT

The specific need for the proposed physical suicide deterrent system on the Bridge stems from the following:

- The Bridge's sidewalks are open to the public, and the existing outside railing along the sidewalks is four (4) feet high. Individuals of varying heights, weights, ages, and sexes, who were not using the Bridge sidewalks for their intended purpose, have climbed over the existing railing and jumped to their death. There is no other physical barrier preventing an individual from jumping, once the railing has been scaled.
- In 2005, there were 622 known suicides in the nine Bay Area counties, of which 23 were estimated to occur at the Bridge. Further, in that same year, 58 persons contemplating suicide were successfully stopped. In 2006, 31 suicides are known to have occurred at the Bridge, while 57 individuals were stopped. Similarly, in 2007, 39 suicides occurred and 90 were stopped. The individuals taken off of the Bridge are transported to a local hospital for a psychiatric evaluation pursuant to Section 5150 of the California Welfare and Institutions Code.
- As described in Section 1.5.2, a variety of non-physical measures to deter suicides on the Bridge have been in place for many years. However, there are still approximately two dozen deaths that occur each year as a result of individuals jumping off the Bridge. The non-physical measures have stopped approximately two-thirds of those individuals with the intent to commit suicide at the Bridge; despite these measures one-third are not prevented.

- Although official figures have not been maintained through the years, since 1937 it is estimated that approximately 1,300 individuals have committed suicide by jumping off of the Bridge.

1.3 PROJECT DESCRIPTION

This section describes the proposed action and the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts. The alternatives are Alternative 1A – Add Vertical System to Outside Handrail, Alternative 1B – Add Horizontal System to Outside Handrail, Alternative 2A – Replace Outside Handrail with Vertical System, Alternative 2B – Replace Outside Handrail with Horizontal System, Alternative 3- Add Net System that Extends Horizontally from Bridge (Add Net System), and the No-Build Alternative.

The project is located in the City and County of San Francisco and Marin County on the Bridge from the Marin abutment (north viaduct) to the San Francisco abutment (south viaduct). The Bridge connects Highway 101 in San Francisco with Highway 101 in Marin. The project covers a distance of 1.7 miles. Within the limits of the proposed project, the roadway is a six-lane undivided highway with four 10-foot and two 11-foot wide lanes, and a 10-foot sidewalk on both sides.

The purpose of the proposed project is to consider a physical suicide deterrent system on the Bridge that reduces the number of injuries and deaths associated with individuals jumping off the Bridge. The specific need for the project stems from the fact that the 4-foot height of the outside handrail does not sufficiently deter individuals, who are not using the sidewalk for its intended purposes, from climbing over the outside handrail. There is no other physical barrier beyond the outside handrail preventing an individual from jumping, once the outside handrail is scaled.

1.4 PROJECT COSTS AND FUNDING

The preliminary design and environmental studies are being funded with monies from outside agencies and individuals. At the present time the District has not programmed construction funds for any build alternatives in its Capital Plan. After the conclusion of the public comment period for the Draft EIR/EA, the Board may select a Locally Preferred Alternative at which time a funding plan will be developed for the selected alternative. Based on the current concept level design and preliminary estimates, the net alternative costs are approximately $25 million, while the other build alternatives cost approximately $40 to $50 million.