



## 5.0 ANALYSIS OF ALTERNATIVES

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### 5.1 INTRODUCTION

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of alternatives to the proposed project which could reasonably attain the same basic goals, and a significant nexus to the Statement of Objectives of the proposed project, and reduce the degree and intensity of environmental impact.

This section identifies and analyzes potential alternatives to the proposed project. Emphasis is placed upon the identification of those alternatives that would eliminate and/or reduce the intensity of potential significant impacts associated with the proposed project.

The objective of the proposed project is to fulfill the State of California mandate to provide the continuation of railroad service to Northwestern California and to help alleviate the growing concerns for efficient goods movements in California. The goals of the project are, therefore, to reestablish reliable and cost effective rail service to the businesses and public utility entities within the service area, and resume service to former customers whose businesses have been adversely impacted by the lack of a cost effective means of goods transportation.

Several requirements have been identified in order to feasibly meet the proposed project goals and objectives. These requirements include the following:

- The existing NWP track must be used in order to make the proposed project feasible and meet the State mandate.
- The frequency/number of train movements and size of the trains must be sufficient to make the proposed project economically feasible.
- The frequency/number of train movements and size of the trains must be sufficient to meet the needs of the businesses along the rail corridor.
- The type of goods that will be hauled must be consistent with the demand of businesses along the rail corridor.
- The rail must operate in a safe manner and in accordance with FRA and environmental regulations.



## 5.2 NO PROJECT ALTERNATIVE

As required by CEQA, the No-Project alternative is included in order to evaluate the potential environmental consequences if no action is taken. This action assumes that NCRA will not resume operations of the NWP railroad. The railroad tracks, embankments, and other rail-oriented improvements would remain in place with minimal management. The consequences of this No-Project alternative are the following:

- It does not have a “significant nexus” in support of the Statement of Project Objectives.
- The State of California mandate to reopen the railroad would not be met.
- Several city and county goals directed at resuming freight service and enhancing transportation options along the Highway 101 corridor would be impaired.
- The businesses and public utility entities would not receive a more cost effective mode of goods transportation.
- The air quality in the region would not feel the benefit of displacing numerous diesel trucks from the highways and local roadways. Therefore, an air quality benefit would not be achieved.
- The GHG currently being generated in the region as a result of the heavy demand on diesel trucks will not be reduced. Therefore, an air quality benefit would not be achieved.
- Increased delays at certain intersections may be eliminated by a no action alternative; however, the current traffic congestion problem associated with the volume of heavy diesel trucks would not be improved by the reduction of diesel trucks associated with the project implementation.
- Safety concerns associated with the operation of the railroad would be reduced by the No-Project alternative; however, the current safety concerns associated with the volume of heavy diesel trucks on the local roadways would not be improved. The comparison between the safety concerns associated with the current volume of heavy diesel trucks operating throughout the communities and the concerns associated with an established railroad resuming operations under FRA safety procedures indicates that the No-Project alternative would not result in a substantially safer environment.



- Safety issues associated with minimal management of a non-operating railroad would not be significantly improved. Whereas an operating railroad would routinely address maintenance and repair activities of the existing railroad tracks, bridges, culverts, tunnels, drainage, embankments, weed maintenance and other activities.
- The No-Project alternative would eliminate the noise and vibration associated with resuming the railroad; however, the noise associated with the current diesel truck traffic would be unchanged or increased as the demand for goods transportation increases in the area.

### 5.3 REDUCED FREIGHT TRAINS ALTERNATIVE

This alternative assumes that either less trains per day or fewer cars per train would be proposed as the project. The consequences of this alternative are as follows:

- It does not have a “significant nexus” in support of the Statement of Project Objectives.
- A reduced number of trains would make the proposed project economically unfeasible.
- A reduced number of trains would not meet the needs of the businesses in the service area to find a more cost effective mode of goods transportation.
- A reduced number of trains would not meet the objectives of the Mandate of California.
- A reduced number of cars per train would reduce the delay time at railroad crossings; however, the delay time would not be significantly different than the delay time associated with the purposed number of cars.
- A reduction in the number of cars per train would reduce the efficiency of train transportation.
- A reduced number of trains or cars per train would not result in as many heavy diesel trucks being removed from the roadways. Therefore, the air quality benefit would not be as significant and GHG would not be reduced to the same level as in the proposed project.



- More fuel would be consumed by the trucks carrying the freight not being transported by the more fuel efficient locomotives.

#### **5.4 BIOFUEL REPLACING DIESEL FUEL PROJECT ALTERNATIVE**

This alternative assumes that traditional diesel fuel would be replaced with biofuels for the purpose of reducing air impacts. The proposed project will meet or exceed all air quality standards. However, the use of biofuel instead of diesel will not result in an increased air quality impact to the project corridor because according to the SMART EIR, the use of 20% biofuel does not have a substantial effect on certain criteria pollutants because it is not as fuel efficient as traditional diesel fuel. The consequences of this alternative are as follows:

- It does not have a “significant nexus” in support of the Statement of Project Objectives.
- Redesigning the proposed project to use biofuel would have a negative economic impact to the project with out a beneficial air quality impact.
- Biofuel is a sustainable fuel; however, if the cost to redesign the proposed project and construct the infrastructure to allow for the use of biofuel would result in the proposed project no longer being economically feasible, the objectives of the proposed project would not be met.
- The use of biofuel requires construction of additional infrastructure that may have additional environmental impacts.

#### **5.5 RELOCATION OF THE RAILROAD ALTERNATIVE**

The railroad is an existing railroad. It has been present in the communities along the rail corridor for over a hundred years. The tracks are established within the railroad right-of-way on already disturbed non-native land. Resuming the operations of the railroad will result in minimal, if any, new construction outside of the existing rail right-of-way. The consequences of this alternative are as follows:

- It does not have a “significant nexus” in support of the Statement of Project Objectives.



- Identification of an alternative linear area for the railroad which meets the needs of the businesses in the communities along the current railroad corridor would be extremely difficult if not impossible.
- This alternative would not meet the State of California's mandate.
- New construction outside of the existing rail right-of-way would generate numerous additional significant impacts, some that may be unmitigable to water resources, biological resources, and perhaps others.
- Significant additional expense would be required to evaluate, design, assess impacts, and build the new line would be prohibitive.
- Significant additional costs would be required to decommission the part of the line that would no longer be needed.



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