
5. ALTERNATIVES

5.1 Introduction

Section 15126.6 of the State California Environmental Quality Act (CEQA) Guidelines require that an Environmental Impact Report (EIR) include a discussion of a reasonable range of project alternatives that would “feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” Within that context, this chapter discusses alternatives to the proposed project.

Key provisions of the State CEQA Guidelines on alternatives (Section 15126.6(a) through (f)) are excerpted below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- ◆ “An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible²⁷⁰ alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible (15126.6(a)).”
- ◆ “...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (15126.6(b)).
- ◆ “The specific alternative of 'no project' shall also be evaluated along with its impact" (15126.6(e)(1)). "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (15126.6(e)(2)).
- ◆ "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making" (15126.6(f)).
- ◆ "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries,...and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6(f)(1)).
- ◆ For alternative locations, "[o]nly locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (15126.6(f)(2)(A)).
- ◆ "If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location" (15126.6(f)(2)(B)).

²⁷⁰ “Feasible” means capable of being accomplished within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. (State CEQA Guidelines Section 15364).

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- ◆ "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (15126.6(f)(3)).

The following sections discuss the significant impacts of the proposed project as identified in Chapter 4, *Environmental Impact Analysis*, the objectives of the proposed project, alternatives considered but rejected, and alternatives carried forward for further consideration in this EIR, and environmental impacts of such alternatives, including discussion as to whether such alternatives would avoid or substantially lessen any of the significant environmental impacts associated with the proposed project. Also included in this chapter is identification of the environmentally superior alternative.

5.2 Significant Impacts of the Project

The alternatives in this chapter have been selected to evaluate means for avoiding or substantially lessening the significant impacts of the proposed project identified in Chapter 4, *Environmental Impact Analysis*. As summarized in Table 1-1 in Chapter 1, *Introduction and Executive Summary*, impacts related to cultural resources (archaeological and paleontological resources) were determined to be less than significant with incorporation of mitigation measures. As described in Section 4.1.1, Air Quality, the proposed project would result in a net increase in temporary emissions of nitrogen oxides (NOx) associated with construction-related activities that represents a significant and unavoidable impact after implementation of mitigation measures and no other feasible mitigation measures were identified. As described in Section 4.4, *Construction Surface Transportation*, the proposed project would have a cumulatively considerable significant impact at two intersections (Imperial Highway and I-105 Ramp [Intersection #14], and Century Boulevard and Sepulveda Boulevard [Intersection #5]), assuming construction staging occurs at the proposed primary construction staging area. There are no feasible mitigation measures available to address the cumulatively considerable significant construction traffic impact at Imperial Highway and I-105 Ramp (Intersection #14) and Century Boulevard and Sepulveda Boulevard (Intersection #5). Therefore, the impacts at these intersections would be significant and unavoidable.

5.3 Project Objectives

As identified in the State CEQA Guidelines, the achievement of project objectives was considered in determining potentially feasible alternatives that would avoid or substantially lessen any significant effects of the proposed project.

The underlying purposes of improvements to the facilities at T2 and T3 are to provide improved security, passenger experience, operations, convenience, and quality of service. The specific objectives of the proposed project are to:

- ◆ Meet Transportation Security Administration (TSA) and U.S. Customs and Border Protection (CBP) requirements for security and customs screening and provide flexible space for next generation passenger and baggage security screening functions to improve safety and security;
- ◆ Modernize and revitalize existing T2 and T3 (including the apron area) in order to improve passenger level of service and amenities within the terminals and improve building systems, as has been previously done for other terminals within the CTA;
- ◆ Coordinate improvements to the aircraft apron areas (e.g., aircraft parking positions, passenger boarding bridge locations, aircraft fueling system hydrant locations, ground support equipment parking locations) at T2 and T3 to be compatible with proposed changes to the T2 and T3 buildings and anticipated airline fleets and uses;
- ◆ Enhance the interior and exterior of the terminals to benefit the overall appearance of the CTA;
- ◆ Provide a secure connector between T2 and T3 to allow passengers to connect from one terminal to the other without having to exit to the non-secure side of the terminal, and only go through security once; and

- ◆ Provide for improvements within each terminal (T2 and T3) that are common to the functions and operations of both terminals and therefore can be shared between terminals, which, in turn, would improve operational efficiency and flexibility, as well as enhance the quality of customer service by reducing redundancies in passenger and baggage processing by providing facilities that support multiple terminals, when feasible.

5.4 Alternatives Considered and Rejected

5.4.1 Construction Phasing Alternative

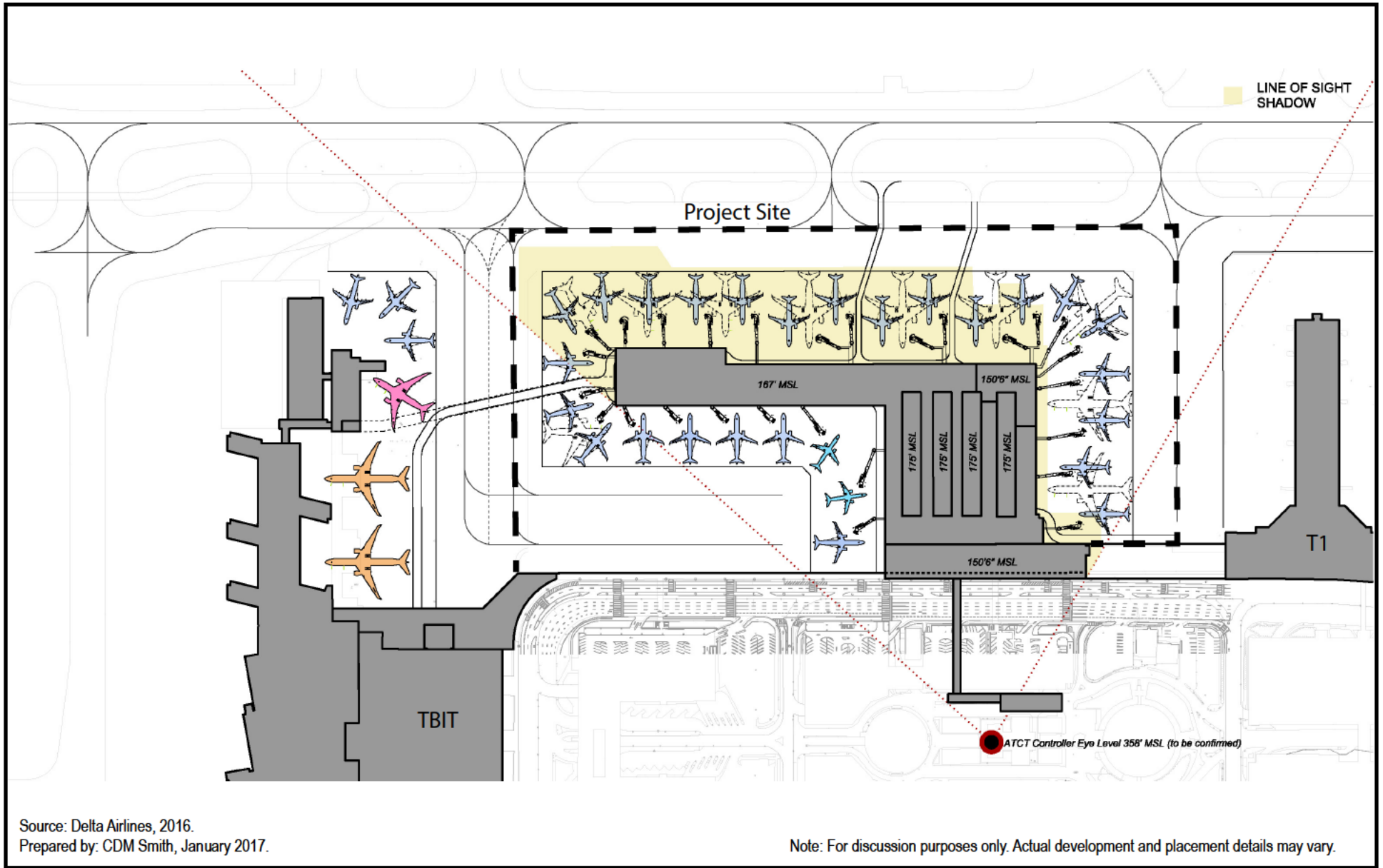
In order to reduce construction-related air pollutant emissions to a less than significant level (i.e., reduce the proposed project's 257 pounds per day of peak daily construction-related NO_x emissions, shown in Table 4.1.1-6, to less than the significance threshold of 100 pounds per day), the phasing of the proposed project would be greatly extended from the currently proposed 76 months (six years, four months) to over 195 months (16+ years) by reducing the daily construction activity levels by a factor of more than 2.57 (i.e., reduce the typical 8-hour daily construction work shifts to approximately 3-hour daily work shifts) (Appendix B.3). The extended phasing and construction approach was initially considered with regard to short-term air quality impacts associated with the proposed project. While this alternative would reduce daily emissions, it would increase the overall duration of air pollutant emissions. Additionally, this alternative would have substantially increased costs and would delay achievement of the project objectives and benefits. Therefore, this alternative was determined to be infeasible and was not carried forward for full evaluation.

5.4.2 Alternative Terminal Configuration

One alternative considered consists of an alternative terminal configuration that would reduce the total duration of construction by approximately 12 months (one year) compared to that of the proposed project. As shown on **Figure 5-1**, under this alternative configuration, the existing T3 terminal and concourse, including the satellite, would be demolished and not rebuilt. Instead, the existing T2 concourse would be demolished and rebuilt with an expanded footprint, extending westward to provide new terminal area, and a new linear concourse would be constructed at the north end, extending from the new T2 terminal west to where the T3 satellite concourse was formerly located. Overall, this alternative terminal configuration would have a smaller footprint than the existing T2 and T3. The new linear concourse would be parallel to Taxiway D with aircraft parking positions along the north side of the concourse being perpendicular to the Taxiway D.

This alternative would meet all the project objectives and would take less time overall (approximately one year) to build. It is likely that the intensity of daily construction activities would be comparable to those of the proposed project, even though the overall duration of construction would be comparatively less; consequently, it is likely that this alternative would not avoid the significant daily air quality impact or the cumulatively considerable significant construction traffic impact that would occur with the proposed project. In addition, operation of this alternative terminal configuration would require aircraft departing from the north side of the new concourse to be pushed back onto Taxiway D, which would interfere with aircraft taxi flows in that area and could pose a line-of-sight problem for the Air Traffic Control Tower (ATCT), with the visibility of aircraft pushing back from the gates and aircraft movements along Taxiway D being blocked or obscured by the new T2 terminal building and/or the new T2 concourse structure. Preliminary discussions with FAA and the ATCT²⁷¹ determined that the potential impacts on aircraft taxi flows on Taxiway D and line-of-sight would be unacceptable, and make this alternative infeasible. For this reason, and because it would not avoid or substantially lessen the proposed project's significant and unavoidable impacts, this alternative was not carried forward for full evaluation.

²⁷¹ Jeff Cunyningham, FAA LAX Tower Operations Manager, email to David Vogt, Delta: Subject: New DAL Gate Plan for Terminal 2 and 3, November 25, 2016.



LAX Terminals 2 and 3 Modernization Project

Alternative Terminal Configuration

Figure
5-1

5.4.3 Other LAX Sites

In this alternative, construction of a new concourse, Concourse 0²⁷² for example, as an alternative to the T2/T3 Modernization Project was considered. Because it is likely that the intensity of daily construction activities would be comparable to those of the proposed project, this alternative would not avoid or substantially lessen the significant air quality impacts of the proposed project or avoid the cumulatively considerable significant construction traffic impact (i.e., construction of a new concourse would still involve major construction activities), nor would it meet any of the project objectives described above in Section 5.3. As no improvements would occur at T2 and T3 under this alternative, no flexible space for next generation passenger and baggage security screening functions to improve safety and security would be provided at T2 and T3, no modernization and revitalization of the existing T2 and T3 (including the apron area), or improvement of passenger level of service or amenities at T2 and T3 would occur, no secure corridor between T2 and T3 would be provided, and no operational efficiencies at T2 and T3 would occur. As such, this alternative was not carried forward for full evaluation.

5.5 Alternatives Carried Forward for Further Consideration

The alternatives to the proposed project were formulated in an attempt to avoid or substantially lessen the significant impacts of the project. As required by CEQA, a "no project" alternative is also addressed in this section. The no-project alternative was evaluated under two scenarios: 1) a No Project-No Build (Alternative 1), that represents conditions that would occur if the project site would retain the existing physical conditions with future regional growth occurring, such as changes in operations at LAX, and; 2) a No Project-Limited Interior Improvements Only (Alternative 2), which represents the improvements reasonably expected to occur in the foreseeable future if the proposed project was not approved, such as tenant and infrastructure improvements within the existing building footprints.

An additional alternative presented in this section is a Reduced-Scale Project (Alternative 3). The Reduced-Scale Project Alternative was selected to evaluate means for reducing the magnitude of the significant impacts that would occur under the proposed project.

The alternatives evaluated in this chapter are described below and evaluated in Section 5.6, Evaluation of Project Alternatives.

5.5.1 Alternative 1: No Project – No Build

Under Alternative 1, none of the proposed improvements under the proposed project would occur. The project site would retain the existing physical conditions and the existing terminals would continue to operate as they do today, with future projected passenger growth occurring. The project site is currently developed with approximately 788,018 square feet of existing structures (not including the apron area) which would remain. Further, under Alternative 1, no new infrastructure or other site improvements at T2 and T3 would occur.

5.5.2 Alternative 2: No Project – Limited Interior Improvements Only

Under Alternative 2, the airline terminal operations would continue and T2 and T3 would undergo improvements reasonably expected to occur in the foreseeable future if the proposed project is not approved. Such improvements could include updating the interior infrastructure (i.e., minor amounts of interior and building system renovations) and tenant improvements (i.e., signage, wiring for technology,

²⁷² As described in Table 3-1 in Chapter 3, *Overview of Project Setting*, Concourse 0 would be constructed to the east of Terminal 1, in the current location of the Park One surface parking lot. Concourse 0 would provide up to 660,000 square feet of floor space, including 11 aircraft gates.

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modifications to layout of holding areas, etc.), all within the existing building footprints. To the extent that remodeling of interior spaces could occur to accommodate changes in security requirements, this would be reasonably expected to occur under this alternative. The amount of square footage at the project site would remain at 788,018 square feet (not including the apron area).

5.5.3 Alternative 3: Reduced-Scale Project

Under Alternative 3, only certain elements of the proposed project would be implemented, resulting in a reduced-scale project. In particular, Alternative 3 would modernize T3, including updates to the interior and exterior of the terminal, the building systems, and some enhancements to amenities and operations within the terminal; however, only very limited improvements would be made at T2. The following elements that are included in the proposed project would be implemented under Alternative 3:

- ◆ The T3 existing ticketing building would be completely demolished and rebuilt. The new ticketing building would be constructed in the existing area of the T3 ticketing building, and would extend towards the Tom Bradley International Terminal (TBIT) in the paved open area to the southwest of T3. Additionally, the eastern portion of the existing T3 ticketing building would be extended into the western portion of the T2 existing ticketing building.
- ◆ The T3 existing concourse building would be completely demolished and rebuilt. The southern appendages to the T3 satellite would be demolished. The new T3 concourse would be wider than the existing concourse.
- ◆ The Security Screening Checkpoint (SSCP) at T3 would be reconfigured in the new space created by reconstructing the ticketing building and concourse.
- ◆ A Secure T2/T3 Connector would be built to connect the concourses; however, the design of this connector under Alternative 3 would eliminate the office level at the T2 ticketing building.
- ◆ The T2 Federal Inspection Station (FIS) would be renovated (interior renovation only).

As the Alternative 3 elements focus primarily on T3 (the oldest of the two terminals), as well as providing security and customs screening to improve safety and security, the elements that are included in the proposed project but would not be implemented under Alternative 3 are as follows:

- ◆ Demolishing and rebuilding the T2 ticketing building (and the associated additional square footage)
- ◆ T2 apron work and passenger boarding bridges
- ◆ T3 Control Center
- ◆ Consolidated Checked Baggage Inspection Systems (CBIS) for T2 and T3
- ◆ Consolidated SSCP for T2 and T3

As shown on **Table 5-1**, the Reduced-Scale Project Alternative would include approximately 170,000 square feet of renovation to existing building area and the addition of approximately 400,000 square feet of new building area for a total of approximately 1,200,000 square feet of building area. This would represent a building area reduction of approximately 25 percent compared to the proposed project, which proposes a total of approximately 1,600,000 square feet of building area.

**Table 5-1
Alternative 3: Reduced-Scale Project Total Building Area**

Facility		Existing Area (square feet - sf)	Existing Area Renovation (sf)	Existing Area Demolition (sf)	Existing Area Rebuild (sf)	New Construction (sf)	Total Area (sf)
T2.5 Ticketing Building	Mechanical Space	0	0	0	0	5,000	5,000
	Office Level	2,725	0	0	0	0	2,725
	SSCP/Office	40,123	0	-6,378	6,378	0	40,123
	Ticketing Level	89,210	0	-23,095	23,095	12,405	101,615
	Arrivals Level	91,107	0	-29,911	29,911	25,089	116,196
	Total	223,165	0	-59,384	59,384	42,494	265,659
Terminal 2 Concourse Building	Mechanical Space	0	0	0	0	0	0
	Lounge Level	36,727	0	0	0	0	36,727
	Concourse Level	86,048	0	0	0	0	86,048
	Ramp Level	84,130	0	0	0	0	84,130
	FIS Level	87,796	42,400	0	0	0	87,796
	Total	294,701	42,400	0	0	0	294,701
T2/T3 Secure Connector	1,000 linear feet from T2 Centerline to T3 Centerline X 35' wide	0	0	0	0	35,000	35,000
	Total	0	0			35,000	35,000
Terminal 3 Concourse Building	Control Center	0	0	0	0	0	0
	Mechanical Space	0	0	0	0	15,000	15,000
	Lounge Level	15,164	0	0	0	47,336	62,500
	Concourse Level	96,744	58,394	-38,350	38,350	28,256	125,000
	Ramp Level	95,435	46,537	-48,898	48,898	29,565	125,000
	Tunnel Level	23,800	23,800	0	0	0	23,800
	Total	231,143	128,731	-87,248	87,248	120,157	351,300
Terminal 3.5 Ticketing Building	Mechanical Space	0	0	0	0	12,000	12,000
	Office Level	0	0	0	0	45,000	45,000
	SSCP/Office Level	0	0	0	0	45,000	45,000
	Ticketing Level	16,779	0	-16,779	16,779	53,221	70,000
	Arrivals Level	22,230	0	-22,230	22,230	37,770	60,000
	Total	39,009	0	-39,009	39,009	192,991	232,000
Grand Total	788,018	171,131	-185,641	185,641	390,642	1,178,660	

Source: LAWA and CDM Smith, 2017

5.6 Evaluation of Project Alternatives

5.6.1 Alternative 1: No Project – No Build

5.6.1.1 Environmental Impact Evaluation

Air Quality

Under Alternative 1, no physical changes would occur at the project site and the current operation of the airline terminals would continue. With respect to construction air pollutant emissions, Alternative 1 would not involve any construction, and thus, it would avoid the significant unavoidable impact that would occur under the proposed project with respect to construction-related regional emissions of NO_x. Because the proposed project includes an increase in operational square footage, operational energy-related air pollutant emissions were evaluated and impacts were determined to be less than significant. Under Alternative 1, there would be no replacement of older less energy efficient fixtures and appliances with those that are newer and more energy efficient; however, Alternative 1 would not increase the terminal square footage. Thus, operational air pollutant emissions under Alternative 1 would be less than operational air pollutant emissions under the proposed project. Therefore, Alternative 1 would avoid the significant unavoidable impact associated with construction air pollutant emissions that would occur under the proposed project and would have reduced operational air pollutant emissions, and thus, Alternative 1 would have less overall impact than the proposed project on air quality.

Human Health Risk

As discussed in Section 4.1.2, Human Health Risk Assessment, the Human Health Risk Assessment (HHRA) conducted for the proposed project addresses construction-related toxic air contaminants (TAC) emissions and determined that the proposed project would have a less than significant impact with respect to human health risk. Because no construction would occur under Alternative 1, this alternative would not result in any increase in TAC emissions associated with construction activities and thus would have no health risk impact associated with construction. Therefore, there would be no change in localized TAC emissions at the project site and no impact would occur. Impacts under Alternative 1 would be less than the proposed project.

Greenhouse Gas Emissions

Under Alternative 1, no physical changes would occur at the project site and the current operation of the airline terminals would continue. As discussed in Section 4.2, *Greenhouse Gas Emissions*, the proposed project would have a less than significant impact relative to greenhouse gas (GHG) emissions during the proposed project's construction and operation. As Alternative 1 entirely avoids the proposed project's construction GHG emissions, it would avoid the short-term GHG emissions that would occur under the proposed project with respect to construction-related GHG emissions. Relative to operations, while under Alternative 1, there would be no replacement of older less energy efficient fixtures and appliances with those that are newer and more energy efficient, no increase the terminal square footage would occur. Therefore, operational GHG emissions under Alternative 1 would be slightly less than operational GHG emissions under the proposed project. Thus, Alternative 1 would have less impact than the proposed project relative to GHG emissions.

Cultural Resources

As discussed in Section 4.3, *Cultural Resources*, the proposed project would have a less than significant impact on archaeological resources and paleontological resources with incorporation of standard control measures as mitigation. Given that no construction would occur under Alternative 1, this alternative would avoid the proposed project's impacts on archaeological resources and paleontological resources. Therefore, Alternative 1 would have less impact on archaeological resources and paleontological resources than the proposed project.

Construction Surface Transportation

Alternative 1 would not involve any of the construction activities associated with the development of the proposed project. Construction traffic associated with demolition, construction of new facilities, delivery of materials and hauling, and employee trips that would be required for the construction of the proposed project would not occur. Thus, Alternative 1 would avoid the proposed project's cumulatively considerable significant construction traffic impacts at the Imperial Highway and I-105 Ramp (Intersection #14) and Century Boulevard and Sepulveda Boulevard (Intersection #5). Therefore, as Alternative 1 entirely avoids the proposed project's construction traffic impacts, it would have less impact than the proposed project on traffic conditions in the area.

Energy

Alternative 1 would not involve construction; therefore, no energy impacts from construction would occur. However, because no modernization of the infrastructure or building systems would occur under Alternative 1, the terminals would not comply with current state water and energy efficiency standards and regulations; therefore, although total energy demands would be less due to less building space, energy conservation would also be less when compared to the proposed project.

5.6.1.2 Relationship of Alternative 1: No Project – No Build to Proposed Project Objectives

Alternative 1 would not result in the modernization of T2 and T3 and associated apron, thereby not improving security or the quality of service and customer experience provided to passengers. As no development would occur and the physical conditions associated with the site and its activities would remain essentially the same as under current conditions, Alternative 1 would not meet any of the proposed project's objectives listed above under Section 5.3. Specifically, Alternative 1 would not meet the proposed project's objective to meet TSA and CBP requirements for security and customs screening or provide flexible space for next generation passenger and baggage security screening functions to improve safety and security. Further, Alternative 1 would not improve passenger level of service and amenities, or improve buildings systems and aircraft apron areas (e.g., aircraft parking positions, passenger boarding bridge locations, aircraft fueling system hydrant locations, ground support equipment parking locations), nor improve the interior and exterior appearance. It would not provide a secure connector between T2 and T3 or provide for the shared functions between terminals to improve efficiency, flexibility, and enhance customer service.

5.6.2 Alternative 2: No Project – Limited Interior Improvements Only

5.6.2.1 Environmental Impact Evaluation

Air Quality

Under Alternative 2, only limited physical changes within the building footprint would occur at the project site and the current operation of the airline terminals would continue. With respect to construction air pollutant emissions, Alternative 2 would involve only interior construction within the building footprint. Given the limited amount of construction that would occur, which would primarily involve interior improvements that do not require much, if any, large heavy-duty diesel-powered construction equipment, Alternative 2 would avoid the significant unavoidable impact that would occur under the proposed project with respect to construction-related regional emissions of NOx. Relative to operations, no increase in square footage would occur under Alternative 2 and therefore, energy-related air pollutant emissions would be less than the proposed project. Further, the interior improvements would likely include replacement of older less energy efficient appliances and fixtures with those that are newer and more energy efficient. Thus, operational air pollutant emissions under Alternative 2 would be less than operational air pollutant emissions under the proposed project. Therefore, Alternative 2 would avoid the significant unavoidable impact that would occur under the proposed project associated with construction air pollutant emissions and would

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have reduced operational air pollutant emissions, and thus, Alternative 2 would have less overall impact than the proposed project on air quality.

Human Health Risk

As discussed in Section 4.1.2, Human Health Risk Assessment, the HHRA conducted for the proposed project addresses construction-related TAC emissions and determined that the proposed project would have a less than significant impact with respect to human health risk. Because only limited interior construction would occur under Alternative 2, this alternative would result in a smaller increase in TAC emissions associated with construction activities as compared to the proposed project. Therefore, no significant impacts would occur and impacts under Alternative 2 would be less than the proposed project.

Greenhouse Gas Emissions

Under Alternative 2, only limited physical changes within the building footprint would occur at the project site and the current operation of the airline terminals would continue. As discussed in Section 4.2, *Greenhouse Gas Emissions*, the proposed project would have a less than significant impact relative to GHG emissions during the proposed project's construction and operation. However, as Alternative 2 involves only a limited amount of interior construction, it would have reduced short-term GHG emissions than would occur under the proposed project with respect to construction-related GHG emissions. Relative to operations, no increase in square footage would occur under Alternative 2 and therefore, energy-related GHG emissions would be less than the proposed project. Further, the interior improvements would likely include replacement of older less energy efficient appliances and fixtures with those that are newer and more energy efficient. Thus, operational GHG emissions under Alternative 2 would be less than operational GHG emissions under the proposed project. Therefore, GHG emissions under Alternative 2 would be less than the proposed project.

Cultural Resources

As discussed in Section 4.3, *Cultural Resources*, the proposed project would have a less than significant impact on archaeological resources and paleontological resources with incorporation of standard control measures as mitigation. Given that only interior construction would occur under Alternative 2, this alternative would avoid the proposed project's impacts on archaeological resources and paleontological resources. Therefore, Alternative 2 would have less impact on archaeological resources and paleontological resources than the proposed project.

Construction Surface Transportation

Alternative 2 would involve only limited construction activities associated with interior improvements. Therefore, construction traffic would be greatly reduced as compared to the proposed project (i.e., traffic associated with demolition and construction of new square footage facilities would not occur, and the number of traffic trips for delivery of materials, hauling, and construction employee trips would be substantially reduced). Thus, Alternative 2 would avoid the proposed project's cumulatively considerable significant construction traffic impacts at the Imperial Highway and I-105 Ramp (Intersection #14) and Century Boulevard and Sepulveda Boulevard (Intersection #5). Therefore, as Alternative 2 would have reduced construction traffic impacts, it would have less impact than the proposed project on existing traffic conditions in the area.

Energy

Alternative 2 would have limited construction; therefore, energy impacts would be less than the proposed project. Because of the limited amount of modernization that could occur under Alternative 2, the terminals would not comply with current state water and energy efficiency standards and regulations; therefore, although total energy demands would be less due to less building space, energy conservation would also be less when compared to the proposed project.

5.6.2.2 Relationship of Alternative 2: No Project – Limited Interior Improvements Only to Proposed Project Objectives

As only limited interior improvements would occur, Alternative 2 would not result in improvements to safety and security to meet long-term TSA and CBP security and customs screening (such as space enough to provide next generation passenger and baggage security screening functions), nor the modernization of T2 and T3 and associated apron. Although limited interior improvements within existing footprints of T2 and T3 could provide minimal improvements in level of service, amenities, and building systems, these improvements would not be sufficient to significantly upgrade the building and building systems, both of which are at or beyond their useful lives. In addition, although limited interior improvements would occur, no improvements to the aircraft apron areas (e.g., aircraft parking positions, passenger boarding bridge locations, aircraft fueling system hydrant locations, ground support equipment parking locations) or exterior improvements would occur, and no benefit to the overall appearance of the CTA would occur. Finally, under Alternative 2 there would be no opportunity to provide a secure connector between T2 and T3 nor would there be the opportunity for shared functions between the two terminals to improve efficiency, flexibility, and enhance customer service. Therefore, Alternative 2 would not meet the project objectives listed above under Section 5.3.

5.6.3 Alternative 3: Reduced-Scale Project

5.6.3.1 Environmental Impact Evaluation

Air Quality

Under Alternative 3, total construction air pollutant emissions and the duration of impacts associated with these emissions would be less than the proposed project given the reduced amount of demolition and construction that would occur. However, although implementation of Alternative 3 would result in less development, it is likely that this alternative would still result in similar maximum daily emissions given that the intensity of construction activity would likely remain the same (i.e., the reduced development could reduce the overall duration of development, but daily activity levels would likely be similar to those of the proposed project). As stated in Section 4.1.1, Air Quality, the thresholds of significance are based on maximum daily emissions and the proposed project would have significant construction-related impacts with respect to maximum daily regional NO_x emissions. As Alternative 3 would have a similar intensity of construction activity, this alternative would result in similar significant impacts with respect to maximum daily NO_x emissions as compared to the proposed project. Construction air pollutant emissions from this alternative would still exceed the regional daily emissions significance threshold for NO_x following implementation of the same standard control and mitigation measures implemented under the proposed Project (see Section 4.1.1, Air Quality).

With regard to operational air pollutant emissions, Alternative 3 would have approximately 25 percent less total terminal square footage than the proposed project; therefore, energy-related operational air pollutant emissions would be less than the proposed project. Further, while fewer building renovations would be implemented under Alternative 3 as compared to the proposed project, the renovations that would occur would include replacement of many of the older less energy efficient appliances and fixtures with those that are newer and more energy efficient.

Therefore, under Alternative 3, total construction-related air pollutant emissions and the duration of emissions would be reduced as compared to the proposed project (due to reduced project size and shorter construction period, compared to the proposed project), although peak daily construction air pollutant emissions would be similar. Long-term operational-related air quality impacts would be reduced compared to the proposed project. Therefore, overall, this alternative would reduce air pollutant emissions as compared to the proposed project; however, peak construction air pollutant emissions from this alternative would still result in a significant and unavoidable impact as it would still exceed the daily regional significance threshold for NO_x following implementation of standard control and mitigation measures.

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Human Health Risk

As discussed in Section 4.1.2, Human Health Risk Assessment, the HHRA conducted for the proposed project addresses construction-related TAC emissions and determined that the proposed project would have a less than significant impact with respect to human health risk. Because less construction would occur under Alternative 3, there would be fewer days of construction activity and this alternative would result in a smaller increase in TAC emissions associated with construction activities as compared to the proposed project. Therefore, no significant impacts would occur, and impacts under Alternative 3 would be less than the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.2, *Greenhouse Gas Emissions*, the proposed project would have a less than significant impact relative to GHG emissions during the proposed project's construction and operation. Implementation of Alternative 3 would result in less development and fewer total construction GHG emissions. Although Alternative 3 would result in a similar intensity of construction activity, the total duration of construction would be reduced. Therefore, under this alternative, impacts related to construction GHG emissions would be less than the proposed project. Relative to operations, a smaller increase in square footage would occur under Alternative 3 than would occur under the proposed project and therefore, energy-related GHG emissions would be less than the proposed project. Further, as with the proposed project, Alternative 3 would include replacement of older less energy efficient appliances and fixtures with those that are newer and more energy efficient. Thus, operational GHG emissions under Alternative 3 would be less than operational GHG emissions under the proposed project. Therefore, under Alternative 3, construction-related GHG impacts would be less than the proposed project and long-term operational-related GHG impacts would be slightly less than the proposed project. Overall, this alternative would have a less than significant impact and less impacts than the proposed project related to GHG emissions.

Cultural Resources

Under Alternative 3, less demolition and construction would occur as compared to the proposed project, resulting in a smaller amount of ground disturbance and, thus, a lesser potential to encounter previously unknown archaeological and paleontological resources. However, as with the proposed project, since Alternative 3 would include excavations of varying depths across portions of the project site, including excavations at depths where native soils would be encountered, previously unknown buried archaeological resources and/or paleontological resources could be impacted. As with the proposed project, impacts to cultural resources would be less than significant with incorporation of standard control measures as mitigation.

Construction Surface Transportation

Similar to the proposed project, construction employee parking would occur just east of the CTA and material staging for deliveries associated with the construction of Alternative 3 would occur on either an existing industrial parcel located on La Cienega Boulevard, just north of Imperial Highway (proposed primary construction staging area) or on a portion of an existing LAWA-owned construction staging area along the south side of Westchester Parkway, east of the southern terminus of La Tijera Boulevard (optional primary construction staging area). Therefore, while there would be less construction traffic over the entire duration of construction, because Alternative 3 would involve less development, construction employee trips, material deliveries, and truck haul trips on a daily basis would likely be similar to those of the proposed project. As such, implementation of Alternative 3 would likely have a cumulatively considerable significant construction traffic impact at the Imperial Highway and I-105 Ramp (Intersection #14) and Century Boulevard and Sepulveda Boulevard (Intersection #5), similar to the proposed project.

Energy

Alternative 3 would involve less construction than the proposed project; therefore, energy impacts would be less than the proposed project. Because modernization would be focused on T3 and limited for T2, only T3 would fully comply with current state water and energy efficiency standards and regulations; therefore,

although total energy demands would be less due to less building space, energy conservation would also be less when compared to the proposed project.

5.6.3.2 Relationship of Alternative 3: Reduced-Scale Project to Proposed Project Objectives

Alternative 3 would result in some modernization of T2 and T3 and associated apron (at T3 only), thereby implementing some improvement in security and the quality of service and customer experience provided to passengers. However, the improvements would occur on a more limited basis than the proposed project and would only partially meet the project objectives presented in Section 5.3. Specifically, Alternative 3 would include improvements to meet TSA and CBP requirements for security and customs screening to improve safety and security by reconfiguring the SSCP at T3 and making interior renovations to the T2 FIS. Safety and security improvements would not be made in T2 and the CBIS and SSCP would not be consolidated for the two terminals, thereby, reducing efficient use of limited space. Alternative 3 would make some improvements to passenger level of service and amenities, as well as some improvements to buildings systems, the aircraft apron area (e.g., aircraft parking positions, passenger boarding bridge locations, aircraft fueling system hydrant locations, ground support equipment parking locations) and the interior and exterior appearance at T3 only. Very limited improvements would occur at T2 which would greatly limit the opportunities and the space available for improvements to services and amenities between T2 and T3. As such, this alternative would not achieve the improvements in operational efficiency and flexibility that would occur with the proposed project, nor would it provide for the types of improvements that have been previously done for other terminals within the CTA. Alternative 3 would provide a secure connector between T2 and T3 and provide for some shared functions between terminals, however, there would not be adequate space or design to provide consolidated CBIS or SSCP for T2 and T3.

5.7 Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The State CEQA Guidelines also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this EIR, the range of alternatives includes Alternative 1: No Project – No Build, Alternative 2: No Project – Limited Interior Improvements Only, and Alternative 3: Reduced-Scale Project.

A comparative summary of the environmental impacts under each alternative with the environmental impacts associated with the proposed project is provided in **Table 5-2**. A more detailed description of the potential impacts associated with each alternative is provided above. Pursuant to Section 15126.6(c) of the State CEQA Guidelines, the analysis below addresses the ability of the alternatives to “avoid or substantially lessen one or more of the significant effects” of the project.

As discussed above, and as depicted in **Table 5-2**, the Alternative 1: No Project – No Build is considered to be the environmentally superior alternative as it would avoid all construction and operational impacts of the proposed project. However, as indicated above, this alternative would not meet any of the objectives established for the proposed project. Additionally, Alternative 2: No Project – Limited Interior Improvements would be environmentally superior to the proposed project through the reduction in significant and unavoidable construction-related air quality and surface transportation impacts, as well as reduced impacts to human health risks and GHG emissions due to less construction, no impacts to cultural resources, and reduced operational air pollutant emissions associated with energy, as further described above and summarized in **Table 5-2** below. Also, because Alternative 2 would have limited construction and reduced building space, energy impacts would be less than the proposed project. Because of the limited amount of modernization that could occur under Alternative 2, the terminals would not comply with current state water and energy efficiency standards and regulations; therefore, energy conservation would be less when compared to the proposed project.

5. Alternatives

In accordance with the State CEQA Guidelines requirement to identify an environmentally superior alternative other than the No Project Alternative, Alternative 3 – Reduced-Scale Project would be the environmentally superior alternative. Due to the reduced project size and shorter construction period, compared to the proposed project, Alternative 3 would result in a reduction in overall duration of construction related air pollutant emissions, although daily peak NO_x emissions would still be significant; reduced operational air pollutant emissions associated with energy; and reduced construction related impacts to health risks, GHG emissions, cultural resources and construction surface transportation, although there would still be a cumulatively considerable significant construction traffic impact. Alternative 3 would involve less construction and building space than the proposed project; therefore, energy impacts would be less than the proposed project. Alternative 3 would also involve less modernization; therefore, energy conservation would be less when compared to the proposed project.

It is important to note, while Alternative 3 is considered the environmentally superior alternative, it would only lessen the significant impacts of the proposed project, but would not avoid the significant unavoidable impact that would occur under the proposed project with respect to construction-related regional NO_x emissions and with respect to making a cumulatively considerable significant construction traffic impact. Thus, the environmentally superior Alternative 3 would not eliminate any significant and unavoidable impacts.

While Alternative 3: Reduced-Scale Project is considered the environmentally superior alternative, it would not fully meet four of the five project objectives. It would meet the objective to provide a secure connector between T2 and T3. It would partially meet the objective to provide for TSA and CBP requirements for security and customs screening and increase the amount of flexible space for next generation passenger and baggage security screening functions, as it would provide 45,000 square feet of SSCP/Office space for security in T3, as is also the case for the proposed project; however, the amount of SSCP/Office area for security in T2 would be over 70 percent less under Alternative 3 than it would be under the proposed project (i.e., 40,123 square feet compared to 145,000 square feet – see Tables 5-1 and 2-1, respectively) and the amount of FIS area in T2 would be approximately 13 percent less under Alternative 3 than it would be under the proposed project (i.e., 87,796 square feet compared to 101,000 square feet – see Tables 5-1 and 2-1, respectively). It would partially meet the objective to modernize and revitalize existing T2 and T3 to improve passenger level of service and amenities. Although Alternative 3 would improve the aircraft apron area at T3 to be compatible with proposed changes at the T3 building and anticipated airline fleets and uses, and enhance the interior and exterior of T3, it would only partially meet the objective to enhance the interior and exterior of the terminals to the benefit of the overall appearance of the CTA as the apron area and exterior of T2 would remain unimproved. It would not meet the objective to provide improvements and functions that can be shared between terminal to improve the operational efficiency and flexibility, as well as enhance customer service.

Therefore, although the Reduced-Scale Project Alternative is the environmentally superior alternative, it would not avoid or substantially lessen the significant cumulative traffic impact. Furthermore, the Reduced-Scale Project Alternative would not fully meet most of the objectives of the proposed project.

Table 5-3 is a summary of the proposed project and project alternatives' responsiveness to the project objectives.

**Table 5-2
Comparison of Impacts Associated with the Alternatives
and Impacts of the Proposed Project**

	Proposed Project Impact	Alternative 1 No Project-No Build	Alternative 2 No Project-Limited Interior Improvements Only	Alternative 3: Reduced-Scale Project
Air Quality				
Construction	Significant and Unavoidable	No Impact	Less Than Significant	Significant and Unavoidable
Operation (Energy)	Less Than Significant	Less Than Significant	Less Than Significant	Less Than Significant
Health Risk Assessment				
Construction	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Greenhouse Gas Emissions				
Construction	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Operation	Less Than Significant	Less Than Significant	Less Than Significant	Less Than Significant
Cultural Resources				
Construction	Less Than Significant with mitigation	No Impact	No Impact	Less Than Significant with mitigation
Construction Surface Transportation				
Construction Surface Transportation	Cumulatively Considerable (Significant and Unavoidable)	No Impact	Less Than Significant	Cumulatively Considerable (Significant and Unavoidable)
Energy Impacts and Conservation (Construction and Operation)				
Wasteful, Inefficient or Unnecessary Consumption	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Reliance on Fossil Fuels	Less Than Significant	Less Than Significant	Less Than Significant	Less Than Significant
Source: CDM Smith, 2017. Note: All the alternatives would have impacts similar to, or less than, the proposed project.				

5. Alternatives

**Table 5-3
Summary of Project's and Alternatives' Responsiveness to Project Objectives**

Objective	Does the Project or Alternative Meet the Objective?			
	Proposed Project	Alt. 1: No Project- No Build	Alt. 2: No Project-Limited Interior Improvements Only	Alt. 3: Reduced-Scale Alternative
Meet Transportation Security Administration (TSA) and U.S. Customs and Border Protection (CBP) requirements for security and customs screening and provide flexible space for next generation passenger and baggage security screening functions to improve safety and security.	Yes	No	No	Only Partially
Modernize and revitalize existing T2 and T3 (including the apron areas) in order to improve passenger level of service and amenities within the terminals and improve building systems, as has been previously done for other terminals within the CTA.	Yes	No	No	Only Partially (T3 only)
Coordinate improvements to the aircraft apron areas (e.g., aircraft parking positions, passenger boarding bridge locations, aircraft fueling system hydrant locations, ground support equipment parking locations) at T2 and T3 to be compatible with proposed changes to the T2 and T3 buildings and anticipated airline fleets and uses;	Yes	No	No	Only Partially (T3 only)
Enhance the interior and exterior of the terminals to benefit the overall appearance of the CTA.	Yes	No	No	Only Partially (T3 only)
Provide a secure connector between T2 and T3 to allow passengers to connect from one terminal to the other without having to exit to the non-secure side of the terminal, and only go through security once.	Yes	No	No	Yes
Provide for improvements within each terminal (T2 and T3) that are common to the functions and operations of both terminals and therefore can be shared between terminals, which, in turn, would improve operational efficiency and flexibility, as well as enhance the quality of customer service by reducing redundancies in passenger and baggage processing by providing facilities that support multiple terminals, when feasible.	Yes	No	No	No