Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
I. AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

SUBSTANTIATION: *(Check ☐ if project is located within the view shed of any Scenic Route listed in the General Plan):*

a) **No Impact.** Scenic views of the San Gabriel Mountains to the north and the Chino Hills to the south occur in portions of Chino. Goal CC-6, P1, *City of Chino 2025 General Plan,* Community Character Element (2010) states that "New development should not obstruct, detract from or negatively affect" these views. The proposed project will involve development on the Airport property only and will not adversely affect these scenic vistas. Building heights at the Airport are restricted by safety regulations and, thus, no future buildings are expected to block scenic views.

b) **No Impact.** There are no State-designated scenic highways in Chino (*City of Chino 2025 General Plan Draft EIR* 2010).

c) **Less than Significant.** Future build-out of the proposed *Airport Master Plan* will include the conversion of agricultural-related open space to aeronautical and revenue supporting land use. However, this change in land use has been planned within both the current *Airport Master Plan* (2003) and the *City of Chino 2025 General Plan* (2010). The proposed *Airport Master Plan* also includes future development of non-aeronautical (mixed commercial/light industrial) land uses along airport property frontage with Merrill, Euclid, and Kimball Avenues. The development of additional aeronautical or non-aeronautical land use will not substantially degrade the existing visual character or quality of the site, which is already developed as an airport, and its surroundings.

d) **Less than Significant with Mitigation.** New light sources (such as security lights, building interior lighting, parking lot lights, or signage) will be introduced as development of aeronautical and non-aeronautical land uses along airport frontage with Merrill, Euclid, and Kimball Avenues occurs. In addition, the installation of a medium intensity approach lighting system with runway indicator lights (MALSR) is planned for the approach end of Runway 26L and the 642-foot extension of Runway 8L-26R to the east. Runway end identifier lighting (REIL) is recommended on Runway 8L-26R and Runway 8R. REIL consists of high intensity strobe lights.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

The Airport is surrounded by agriculture or institutional land use on the north, east, west, and southwest sides of the site. Future land uses in those areas are planned as: commercial, low density residential, and agricultural preserve (north); public facilities, light industrial, and airport related (east); urban reserve (west); and industrial and airport related (southwest). Therefore, this analysis focuses on potential lighting and glare impacts to the residential neighborhood located south of the Airport within The Preserve Specific Planning Area. No substantial glare and lighting impacts to the less sensitive surrounding land uses are anticipated.

Lighting from the runway improvements will primarily affect lands to the east and west of the Airport. If constructed, the planned landside facilities will help to prevent on-ground light spillage from the runway lighting sources. No new sources of glare or lighting that would affect views in the area are anticipated from proposed airside improvements.

Proposed improvements in the vicinity of The Preserve residential area to the south of the Airport have been planned in part to help shield the residential development from the proposed expansion of hangar facilities. However, planned commercial or light industrial land use along the Kimball Avenue frontage could create additional lighting impacts. The following measure would mitigate potential lighting impacts to a less than significant level.

Mitigation Measure AESTHETICS-1. Any future Airport development that fronts on public thoroughfares surrounding the Airport shall comply with the policies of Objective CC-1.1, Community Character Element, *City of Chino 2025 General Plan* (2010), specifically Policy P5, which states, "Lighting on private and public property should be designed to provide safety, while minimizing light spillage to adjacent properties and the night sky."

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
II.	**AGRICULTURE AND FORESTRY RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

SUBSTANTIATION: *(Check ☐ if project is located in the Important Farmlands Overlay):*

a, e) **Less than Significant**. As shown on the City of Chino's Open Space and Conservation Element (2010), "Important Farmland" map, which is based on the State's Farmland Mapping and Monitoring Program, the Airport contains Prime Farmland and Farmland of Statewide Importance that will be converted to non-agricultural land use as the Airport builds out. This issue is discussed in the City of Chino's *General Plan Draft and Final EIR,* which concludes "the impacts to the conversion of farmland in the CIM *[i.e., the California Institute for Men]* and Chino Airport properties would be *less than significant*." (City of Chino 2010). This conclusion is based, in part, on the fact that the City of Chino General Plan contains policies to support the continuation of agricultural operations in the City overall. For example, agricultural lands within proposed land acquisition areas for RPZs will not be converted. In addition, due to the phasing of build-out of the

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

proposed *Airport Master Plan* over a 20-year planning period, agricultural operations at the Airport are likely to continue for some time.

It should be also noted that Prime Farmland and Farmland of Statewide Importance on-site would eventually be converted to non-agricultural land use under the current planning documents applicable to the area, i.e., *Airport Master Plan* (2003) and *City of Chino 2025 General Plan* (2010). No additional conversions to non-agricultural land use will occur with the proposed *Airport Master Plan*.

b) **No Impact**. As shown on the City of Chino's Open Space and Conservation Element (2010), "Williamson Act Contracts" map, there are no Williamson Act contracts located on the Airport or the proposed RPZ acquisition areas.

c, d) **No Impact**. There is no forest land or timberland located on the Airport or the proposed RPZ acquisition areas.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
III.	**AIR QUALITY** - Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

SUBSTANTIATION: *(Discuss conformity with the South Coast or Mojave Desert Air Quality Management Plan, if applicable):*

General Discussion: The proposed *Airport Master Plan* includes updated forecasts for the Airport. **Table 3** compares the forecasts for Airport operations for the years 2009/10, 2015, 2020, 2025, and 2030 between the currently approved and proposed *Airport Master Plans*. As shown in this table, existing 2009 Airport operations were slightly higher than what was projected for 2010 in the 2003 *Airport Master Plan*; however, projections for the year 2015 are slightly higher in the 2003 *Airport Master Plan* than what are now forecast in the proposed *Airport Master Plan*. This trend continues the farther out in the planning horizon one goes, i.e., for the year 2020, the 2003 *Airport Master Plan* forecasts that the Chino Airport would have total annual operations of 209,400, while the proposed *Airport Master Plan* anticipates only 190,600. The proposed *Airport Master Plan* forecasts total annual operations of 220,800 by the year 2030.

Since the forecasts for the Airport have decreased, it is anticipated that impacts to air quality will be less than were originally anticipated from the 2003 *Airport Master Plan.* Mitigation measures, however, that were incorporated into the 2003 *Airport Master Plan* are still recommended since the South Coast Air Basin of the County of San Bernardino is designated as a non-attainment area for the 8-hour ozone and particulate matter ($PM_{2.5}$ and PM_{10}) standards. These measures are as follows:

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

TABLE 3
Comparison of Forecast Annual Operations
2003 *Airport Master Plan* vs. 2010 *Airport Master Plan* Update
Chino Airport

	2009[1]/2010[2]	2015	2020	2025	2030
2003 *Airport Master Plan*	166,100[2]	180,100	209,400	N/A	N/A
2010 Proposed *Airport Master Plan*	169,209[1]	179,100	190,600	205,000	220,800

[1] Base year for existing conditions in proposed *Airport Master Plan.*
[2] Forecast year for future conditions in 2003 *Airport Master Plan.*

Mitigation Measure AIR QUALITY-1: Measures that will be implemented at the Airport to further decrease the impact of Airport operations on air quality include: reducing the use of remote auxiliary power units whenever possible; considering the use of alternative fuel vehicles for on-airport use; and encouraging employees at the Airport to utilize car pools whenever possible.

Mitigation Measure AIR QUALITY-2: A number of measures will also be incorporated during the construction phase of the various projects including: measures to minimize fugitive dust; and discontinuing grading activities when winds exceed 30 miles per hour.

a) **Less than Significant**. The Chino Airport is an existing facility that has been incorporated into the development of the air quality management plan for the region, i.e., the South Coast Air Quality Management Plan (SCAQMP). Implementation of the proposed *Airport Master Plan* will not conflict with or obstruct implementation of any of the transportation control measures (TCMs) or regional transportation strategy and control measures listed in the SCAQMP, Appendix IV-C (2006).

b) **Less than Significant with Mitigation.** *Operational Emissions*: An airport operational emissions inventory for the proposed improvements was calculated using the FAA's Emissions and Dispersion Modeling System (EDMS), Version 5.1.3. EDMS is listed among the Environmental Protection Agency's (EPA) preferred guideline models and has been identified by the FAA as the only acceptable model for estimating aircraft emissions at airports. It calculates emissions of pollutants associated with an airport, including aircraft, ground support equipment, and automobiles.

EDMS does not calculate lead emissions; however an estimate of lead emissions can be made using methodology described in the EPA's *Documentation for Aircraft Component of the National Emissions Inventory Methodology*, April 2010. Additionally, ozone emissions are not calculated by EDMS; however, volatile organic compounds (VOC) and nitrogen (NO_X) are precursors to ozone. Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between NO_x and VOCs in the presence of sunlight. As a result, NO_x and VOCs, also referred to as reactive organic gases (ROGs), are a precursor to ozone. VOCs combine with sunlight and NO_x to form ozone emissions and are used to estimate ozone emissions. The fleet mix and operations levels utilized for the preparation of noise contours (**Appendix D**) were utilized for the emissions analysis.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Automobile trips associated with Chino Airport were also included in the analysis. For purposes of this study, the annual vehicle trips associated with the airport were calculated according to the *Institute of Transportation Engineer's Trip Generation Manual*, 7th Edition, based on average daily operations at the airport.

Output data from the EDMS program are in pounds per day. **Table 4** provides the projected air pollutant emissions associated with the operations at Chino Airport under the existing condition (2010) and five-year forecast (2015). This includes emissions from aircraft, automobiles, ground support equipment, and fueling operations. EDMS output tables depicting emissions by source (aircraft, automobiles, ground support equipment) are included in **Appendix A**.

Chino Airport, as an existing facility, accommodates 169,209 operations annually. For the purposes of this analysis, the existing emissions are considered as the baseline to which the projected changes in emissions will be compared. Based on the Master Plan forecasts, operations at the airport are projected to increase to 179,100 in the year 2015. **Table 4** also includes the *SCAQMD CEQA Regional Significance Thresholds* for operational emissions. As noted in the table, operational emissions for all pollutants will not exceed the regional significance thresholds.

TABLE 4
Operational Emissions Inventory[1]
Chino Airport

	Operational Emissions (pounds per day)						
	CO	**VOC[2]**	**NO_x**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**Pb[3]**
2010 (Baseline Condition, 169,209 operations)	5,770.1	171.1	52.6	14.4	1.8	1.8	3.9
2015 (Forecast, 179,100 operations)	6,068.4	185.4	57.0	16.2	2.0	2.0	4.1
Difference	298.3	14.3	4.4	1.8	0.2	0.2	0.2
SCAQMD CEQA Regional Significance Threshold, Operation (pounds per day)	550	55	55	150	150	55	3
Yearly Emissions Exceeds Threshold?	No	No	No	No	No	No	No

[1] - Includes emissions from aircraft, automobiles, ground support equipment, and fueling operations based on 2009 Chino Airport Master Plan operations estimates.
[2] - Also referred to as Reactive Organic Gases (ROGs).
[3]-Lead emissions modeled using methodology described in EPA's *Documentation for Aircraft Component of the National Emissions Inventory Methodology*, April 2010
Source: Coffman Associates analysis

Construction Emissions: Air emissions occurring due to construction activity vary based on the project's duration and level of activity. Construction emissions occur mostly as exhaust products from the operation of construction equipment and vehicles, but can also occur as fugitive dust emissions from land disturbance during material staging, demolition, and movement.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Table 5 presents the estimated construction emissions for projects scheduled to occur within the first five years of the capital improvement program as outlined in the proposed *Airport Master Plan*. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod). Based on project-specific inputs, CalEEMod calculates emissions related to all phases of construction (demolition, grading, site preparation, building construction, paving). Additionally, the model accounts for fugitive dust related to ground disturbance and vehicle operation on unpaved areas. Based on the magnitude of a project, estimates for the number of hours for off-road equipment activity are used for the CalEEMod calculations. On-road vehicle activity is also evaluated with CalEEMod and includes on-site watering truck trips and pickup truck activity, and off-site trips for dump trucks hauling material to the disposal facility and laborer trips to the site. A summary of the construction emissions assumptions used for this analysis is included in **Appendix A**.

Table 5 summarizes construction project emissions by year and includes the *SCAQMD CEQA Regional Significance Thresholds* for construction emissions. As indicated in the table, construction emissions do not exceed the regional significance thresholds for any of the years evaluated.

TABLE 5
Construction Emissions Inventory Summary (Years 1-4)
Chino Airport

	Construction Emissions (Pounds Per Day)					
	CO	**VOC**	**NO_x**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2012	38.03	9.14	67.81	0.07	7.26	4.12
2014	42.46	9.86	74.93	0.09	4.63	3.83
2016	56.28	12.56	92.35	0.14	5.79	4.17
Regional Significance Threshold Construction (Pounds per Day)	550	75	100	150	150	55
Exceeds Threshold	No	No	No	No	No	No

Source: Coffman Associates analysis

Construction-related emissions will be short term and localized to the construction area and are less than significant with mitigation incorporated. Best management practices (BMPs) will be implemented to reduce particulate emissions and were not considered as part of this analysis.

<u>Mitigation Measure AIR QUALITY-3:</u> To reduce fugitive dust emissions (PM_{10}) during project implementation, the following mitigation techniques will be employed: application of water to disturbed areas every three hours and all trucks hauling dirt, sand, soil, or other loose materials will be tarped with a fabric cover and will maintain a freeboard height of 12 inches. These measures are outlined in Table XI-A - Mitigation Measure Examples: Fugitive Dust From Construction and Demolition of the SCAQMD *Air Quality Handbook*.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Mitigation Measure AIR QUALITY-4: To mitigate for potential adverse impacts resulting from construction activities, development projects must abide by the SCAQMD's Rule 403 concerning Best Management Practices for construction sites in order to reduce emissions during the construction phase. Measures shall include:

- **Development of a construction traffic management program that includes, but is not limited to, rerouting construction related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from the site;**
- **Sweep streets at the end of the day if visible soil material is carried onto adjacent paved public roads;**
- **Wash off trucks and other equipment leaving the site;**
- **Replace ground cover in disturbed areas immediately after construction;**
- **Keep disturbed/loose soil moist at all times;**
- **Suspend all grading activities when wind speeds exceed 25 miles per hour;**
- **Enforce a 15 mile per hour speed limit on unpaved portions of the construction site.**

Mitigation Measure AIR QUALITY-5: To reduce diesel emissions associated with construction, construction contractors shall provide temporary electricity to the site to eliminate the need for diesel-powered electric generators, or provide evidence that electrical hook-ups at construction sites are not cost-effective or feasible.

Mitigation Measure AIR QUALITY-6: To reduce construction-related particulate matter air quality impacts of City projects, the following measures shall be required:

1. **the generation of dust shall be controlled as required by the SCAQMD;**
2. **grading activities shall cease during periods of high winds (greater than 25 mph);**
3. **trucks hauling soil, dirt, or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the City Engineer; and**
4. **the contractor shall prepare and maintain a traffic control plan, prepared, stamped and signed by either a licensed Traffic Engineer or a Civil Engineer. The preparation of the plan shall be in accordance with Chapter 5 of the latest edition of the Caltrans Traffic Manual and the State Standard Specifications. The plan shall be submitted for approval, by the engineer, at the preconstruction meeting. Work shall not commence without an approved traffic control plan.**

c) **Less than Significant.** As previously discussed, the South Coast Air Basin is currently a federal non-attainment area for the 8-hour ozone and particulate matter ($PM_{2.5}$ and PM_{10}) standards. **Table 6** summarizes the projected net increase in emissions resulting from implementation of the proposed improvements. The table includes the federal *de minimis* threshold to which the net increase is

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

compared. As indicated in the table, implementation of the proposed improvements will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is designated as a non-attainment area. Additionally, as previously discussed, the operational and construction emissions related to the proposed improvements do not exceed the SCAQMD regional significance thresholds.

The EMFAC2007 and OFFROAD2007 models do not calculate lead emissions; therefore, an assessment of these impacts cannot be made. Additionally, ozone emissions are not calculated by the emissions models; however, VOCs are a precursor to ozone. VOCs combine with sunlight and NOx to form ozone. Therefore, VOC emissions are used to estimate ozone emissions. Additionally, according to EPA, direct $PM_{2.5}$ and SO_2 must be considered when evaluating $PM_{2.5}$ conformity.

*Note: When comparing the results presented in **Table 6** to previous tables, please note that **Table 6** results are expressed in tons per year rather than pounds per day.*

TABLE 6
Proposed Operational Emissions Compared to De Minimis Thresholds (Tons per Year)
Chino Airport

NAAQS[1] Pollutant	Evaluated Pollutant/Precursor	Proposed Action Alternative (tons/year)	De Minimis Threshold (tons/year)	Exceeds Threshold
Ozone	VOC	2.602	100	No
	NO_X	0.8	100	No
$PM_{2.5}$	$PM_{2.5}$	0.043	100	No
	SO_x	0.335	100	No
PM_{10}	PM_{10}	0.042	100	No

Source: Coffman Associates analysis.

d,e) **Less than Significant**. Since the approval of the 2003 *Airport Master Plan*, the area to the south of the Airport has been developed with residential land uses. Directly across Kimball Avenue from the southeastern corner of the Airport are Medium High Density residential units. The proposed *Airport Master Plan* includes mixed use, non-aeronautical development in its plan for the Kimball Avenue frontage across from this residential neighborhood. This planned land use is intended to help buffer the neighboring residential area from the aviation-related land uses on the Airport. No significant air quality impacts are anticipated as a result of the presence of more sensitive receptors to potential pollutant concentrations or potentially objectionable odors related to aviation land uses.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
IV. BIOLOGICAL RESOURCES - Would the project:				
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database ☒)*

General Discussion: A general Habitat Assessment was completed on the Airport in March 2012 by SWCA Environmental Consultants (SWCA) to provide background information regarding sensitive biological resources at the Chino Airport and to aide in completing the above environmental checklist. The Habitat Assessment report followed guidelines recommended by the Advanced Planning Division of the County of San Bernardino's Land Use Services Department and is included in this IS as **Appendix B**.

As a result of the Habitat Assessment, a total of 50 plant and 52 wildlife special-status species were identified from federal, state, and local lists and databases and found to occur near the project area. Biologists also completed site visits to facilitate vegetative mapping at the Airport. The Airport is composed of three anthropogenically (man-made) disturbed habitats: maintained, developed, and ruderal (**Figure 7**).

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Due to the Airport's lack of natural vegetation communities, special-status species potentially occurring in the project area are limited to the burrowing owl and California horned lark. These species are known to occur in disturbed and ruderal areas of non-native grasses. The remaining 50 plant and 50 wildlife special-status species originally identified by the database searches have been assessed as not likely to occur in the project area or absent from the project area. There are no federally-listed species of concern in the project area.

Two drainage ditches are located within the Airport property, as shown on **Figure 7**. A formal delineation was not conducted, but no wetland plant species were observed during the Habitat Assessment.

a) **Less than Significant with Mitigation.** As discussed in more detail in **Appendix B**, there is the potential for two special-status species to be adversely affected as development called out by the proposed *Airport Master Plan* occurs.

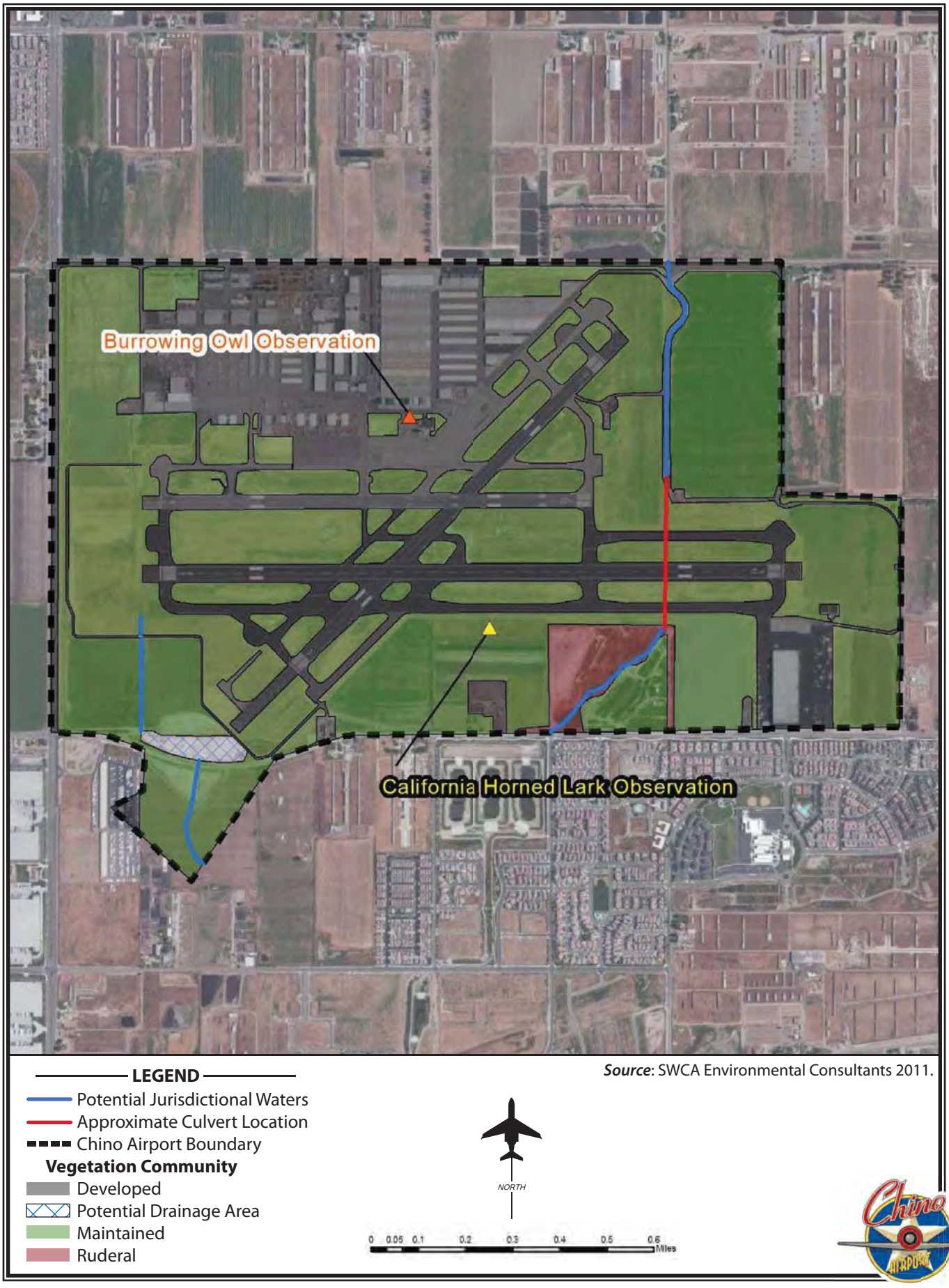
The burrowing owl is a California Species of Special Concern and its nests are protected under the *Migratory Bird Treaty Act* (MBTA). Two burrowing owls were observed by biologists during a survey of the Airport (**Figure 7**). Additionally, there was one previously recorded observation of this species at the Airport and an additional 37 occurrences within ten miles. Habitats on the Airport where burrowing owls may occur and nest include both the maintained and ruderal habitats. Multiple burrowing mammal species were also observed in the project area.

The County presently has a field biologist under contract to conduct burrowing owl surveys as needed at Chino Airport. Protocol for airport staff is to contact the field biologist prior to activities that may potentially disturb borrowing owl habitat. The field biologist assesses the potential for impact and recommends mitigation measures when necessary. This protocol will continue to be followed at Chino Airport.

To avoid potentially significant impacts to the burrowing owl, follow-up surveys are required prior to actual development. In addition, mitigation measures for biological resources were included in the 2005 *Initial Study for Improvements Outlined within the Chino Airport Master Plan* for potential impacts to sensitive biological resources of the 2003 *Airport Master Plan*. These measures will also be applied to development occurring under the proposed *Airport Master Plan*, as listed below:

Mitigation Measure BIOLOGICAL RESOURCES-1: If construction activities associated with proposed projects must occur during the burrowing owl nesting season (February 1 through August 31), burrowing owl surveys shall be conducted per CDFG-recommended burrowing owl protocol to determine whether the action area and its immediate vicinity are occupied by breeding season burrowing owls. Based on CDFG-protocol, focused breeding season surveys and pre-construction surveys may then be necessary. If burrowing owl is determined to occupy the action area or its

09MP09-7-7/26/12



Source: SWCA Environmental Consultants 2011.

Figure 7
VEGETATION COMMUNITIES
AT THE CHINO AIRPORT

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

vicinity, including a buffer area of 500 feet around the action area, a mitigation and monitoring plan shall be prepared and implemented prior to, during, and after project activities, as necessary.

The California horned lark is also a California Species of Special Concern and its nests are protected under the MBTA. Although there are no previously recorded occurrences of this species with ten miles of the Airport, a flock of approximately ten individuals was observed in a recently plowed agricultural field in the maintained habitat at the Airport (**Figure 7**). To mitigate potentially significant impacts to this protected species, the following mitigation will be required prior to actual development:

Mitigation Measure BIOLOGICAL RESOURCES-2: When possible, the removal of potential nesting vegetation for migratory birds, including the California horned lark, shall occur outside the nesting season. A qualified biologist shall conduct a nesting bird study if this is not feasible. Surveys should be conducted no more than three days prior to removal date. If active nests are found, buffers shall be established around the vegetation (300 feet for raptors, 50 feet for all other birds). Construction activities impacting the nests shall be postponed until the nest is no longer active.

The above mitigation measures (BIOLOGICAL RESOURCES-1 & 2) will reduce potential impacts to special status species below a level of significance.

b, c) **Less than Significant with Mitigation.** There is no riparian habitat or other sensitive natural communities, as defined by Section 404 of the *Clean Water Act*, present on the Airport other than a potential for wetlands. On-site drainages have not been formally surveyed for the presence of wetland species, although no wetland species were observed during the overall Habitat Assessment for the Airport. The proposed *Airport Master Plan* does include development along Kimball Avenue in areas where the southerly segments of the drainage ditches are located. Therefore, the following measure is required to mitigate potential impacts to wetlands:

Mitigation Measure BIOLOGICAL RESOURCES-3: Prior to the development of areas where drainage ditches are located, particularly along Kimball Avenue, formal wetland surveys shall be conducted. If wetland species are found, consultation with the U.S. Army Corp of Engineers (USCOE) would be required as part of the permitting process. Consultation with the CDFG may also be necessary if a Section 1600 Streambed Alteration Agreement is needed. Permit conditions required by these agencies as part of their respective permitting processes shall be implemented into the development projects, as appropriate, to mitigate potential impacts below a level of significance.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

d) **Less than Significant with Mitigation.** There are no migratory wildlife corridors or native wildlife nursery sites present on the Airport. However, migratory species are known to occasionally move across the Airport. See the above mitigation measures (BIOLOGICAL RESOURCES-1 & 2), which will reduce potential impacts to migratory species that may be moving across or nesting at the Airport below a level of significance.

e) **No Impact.** The City of Chino's Open Space and Conservation Element contains two general objectives for protecting biological resources within the City:

Objective OSC-1.1 Protect and enhance habitats that could support rare, endangered, or threatened plant and animal species.

Objective OSC-1.2 Locate urban development away from identified sensitive species habitats.

The Airport is not mapped within a Biological Resources Overlay District for the County of San Bernardino. The County's Conservation Element does state, however, the following overall goal for protecting biological resources:

GOAL CO 2. The County will maintain and enhance biological diversity and healthy ecosystems throughout the County.

Implementation of the proposed *Airport Master Plan* will not conflict with these objectives and goals and their associated policies. As discussed in IV a-d), other than the burrowing owl and California horned lark, the Airport does not support any sensitive species or habitats. The Airport is an existing urban land use with limited potential for sensitive biological resources due to its disturbed and developed characteristics.

f) **No Impact.** There are no Habitat Conservation Plans or Natural Community Conservation Plans present on or near the Airport.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
V.	**CULTURAL RESOURCES** - Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if the project is located in the Cultural ☐ or Paleontologic ☐ Resources overlays or cite results of cultural resource review):*

a) **Less than Significant with Mitigation.** Coordination with the Archaeological Information Center of the San Bernardino County Museum as part of the proposed *Airport Master Plan*, coordination with the local California Historical Resources Information System (CHRIS) office undertaken for the *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005), and a *Cultural Resource Assessment* conducted as part of an EIR done on the Airport in 1988, indicate that historic structures related to the Cal-Aero Flight Academy are located on Airport property. These buildings are eligible, but not currently listed, on the National Register of Historic Places (NRHP). The Cal-Aero Flight Academy operated from 1940 until 1945 as a pilot training facility.

Several of these historic structures are located within development or re-development areas on the north side of the Airport in the proposed *Airport Master Plan*. Potential impacts to these historic resources will be mitigated through the following:

Mitigation Measure CULTURAL RESOURCES-1: Prior to design and engineering of development in parcels where potentially eligible historic structures are located, a qualified historian shall be retained to prepare a detailed assessment of the history and integrity of the individual buildings to be affected and to recommend appropriate mitigation, which could include, but is not limited to, the following options:

a. Include structures determined to be historically significant into proposed development plans in a manner that would leave them in place;

b. Relocate historic structures within the existing Airport grounds; or

c. Complete appropriate documentation and photography of the structures prior to demolition or removal of the structures, if permitted under applicable historic preservation regulations.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

The closest NRHP-listed properties to the Airport are the Yorba-Slaughter Adobe, located approximately 2½ miles southwest of the Airport and the Moyse Building, located just over 3½ miles northwest of the Airport. These resources will not be impacted by development of the proposed *Airport Master Plan*.

b) **Less than Significant with Mitigation.** The *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005) indicated that previous cultural resource surveys at the Airport did not identify the presence of archaeological resources. The San Bernardino County Museum confirmed that the potential for the presence of prehistoric archaeological resources on the Airport property is low (Archaeological Information Center 2011). However, the Museum also advised that archaeological field surveys should be required to inventory, evaluate, and if necessary, propose mitigation to ensure that no adverse impacts to cultural resources occur. Therefore, areas projected to be developed within the short term (1-5 years) under the proposed *Airport Master Plan* update were surveyed as part of this Initial Study. Based on the results of those surveys, no cultural resources were identified, although visibility in some of the surveyed areas was poor (see **Appendix C)**.

Although the potential for archaeological resources at the Airport is low, there is always the chance that unexpected resources could be uncovered during site development. The following mitigation measures will be implemented to ensure that potential impacts to unknown archaeological resources would be less than significant:

Mitigation Measure CULTURAL RESOURCES-2: In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, an archaeologist who meets the Secretary of the Interior's professional qualification standards in archaeology shall be retained. Construction activities (e.g., grading, grubbing, vegetation clearing) within 9 meters (25 feet) of the discovery shall be halted while the resources are evaluated for significance under the NRHP and the California Register of Historic Resources (CRHR). Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and would be discussed in consultation with the San Bernardino County Museum.

Mitigation Measure CULTURAL RESOURCES-3: For intermediate and long term development projects of the proposed *Airport Master Plan* update, where not previously surveyed, field surveys shall be undertaken prior to development to determine the presence of unidentified historic properties or archaeological resources on the Airport. Any findings will be properly documented according to applicable San Bernardino County Museum procedures. If Native American artifacts are uncovered, consultation with representatives of the Native American community shall occur.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

c) **Less than Significant with Mitigation.** There are no known paleontological sites within the Airport property and the City of Chino is not within the County of San Bernardino's Cultural Resources Preservation (CP) Overlay District (County of San Bernardino 2011). In the event that unexpected paleontological resources are uncovered, conformance with the following mitigation will ensure that no impacts to paleontological resources occur.

Mitigation Measure CULTURAL RESOURCES-4: In the event that unknown paleontological resources are discovered during construction, the San Bernardino County Museum shall be notified immediately. Construction activities (e.g., grading, grubbing, vegetation clearing) within 9 meters (25 feet) of the discovery shall be halted while the resources are evaluated.

d) **No Impact.** There are no known human remains or formal cemeteries within the Airport property. If any human remains are encountered during construction, the County of San Bernardino Coroner's Office must be contacted within 24 hours and all work halted until proper clearance has been received, according to the State of California *Health and Safety Code*, Section 7050.5. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification, and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Conformance with applicable laws and policies will ensure that no impacts to human remains occur as a result of the proposed project.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VI. GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001) creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

SUBSTANTIATION: *(Check ☐ if project is located in the Geologic Hazards Overlay District):*

a) **No Impact.** As previously evaluated in the *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005) and as stated in the City of Chino's Safety Element (2010), the Airport is not located within a geologic hazard area. Chino is not on the California Geologic Survey (CGS) list of cities affected by surface fault ruptures of the Alquist-Priolo earthquake fault zone. In addition, the Airport property is not shown on the County of San Bernardino Geologic Hazards Overlay District (County of San Bernardino 2011), which includes seismic activity such as fault rupture, ground-shaking and liquefaction, landslide/mudslide (or mudflow), or non-seismic subsidence.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

b) **Less than Significant with Mitigation.** The Airport property consists of five soil types: Chino silt loam (Cb); Chualar clay loam, 2 to 9 percent slopes (CkC); Chualar clay loam, 9 to 15 percent slopes (CkD); Grangeville fine sandy loam (Gr); and Merrill silt loam (Me) (NRCS 2011). Two more soil types occur within the proposed RPZs, i.e., Hilmar loamy sand (Hr) and Delhi fine sand (Db). The majority of the project site is the Chino silt loam, which is nearly level with slow or very slow runoff. No impacts from erosion are expected within this soil type. Merrill silt loam is located on either side of the western half of Runway 8L-26R extending offsite across Euclid Avenue. The erosion hazard for this type of soil is also slight. Grangeville soils are similarly level with a slow runoff rate and only a slight hazard for erosion. No soil erosion or loss of top soil within the RPZs will result from the project since no development will occur within these areas.

In the northwest quadrant of the intersection of Kimball and Grove Avenues in the southern part of the Airport property are the Chualar clay loams, ranging from 2 to 15 percent slope. These soils have slow to medium rates of runoff with erosion hazards ranging from slight to high, depending on the magnitude of the slope. This approximate 36-acre area of the proposed *Airport Master Plan* is listed as Future Aeronautical and Non-Aeronautical Use (if needed). The proposed *Airport Master Plan* states that this parcel presents "significant terrain and drainage challenges that would need to be addressed prior to allowing future infrastructure development to occur." Mitigation for impacts related to soil erosion may be necessary if this parcel is developed.

Mitigation Measure GEOLOGY AND SOILS-1. Prior to development of the 36-acre parcel located on Chualar clay loam soils, a detailed geologic report shall be prepared that identifies potential erosion impacts; the geotechnical recommendations shall be incorporated into future development projects.

c-e) **No Impact.** As previously evaluated in the *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005), the underlying Airport soils are considered stable for project construction and are not underlain by any known faults. Liquefaction and tsunami potential is low. According to the Natural Resource Conservation Service, the soils are not considered expansive and are capable of supporting septic tanks and waste water disposal systems.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VII.	**GREENHOUSE GAS EMISSIONS -** Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Less than Significant.** In September 2006, Governor Schwarzenegger signed the *Global Warming Solutions Act* (Assembly Bill 32), which was created to address the Global Warming situation in California. The Act requires that the greenhouse gas (GHG) emissions in California be reduced to 1990 levels by 2020. This is part of a larger plan in which California hopes to reduce its emissions to 80 percent below 1990 levels by 2050. This reduction shall be accomplished through an enforceable statewide cap on GHG emissions that shall be phased in starting in 2012 and regulated by the California Air Resources Board (CARB). With this Act in place, CARB is in charge of setting specific standards for different source emissions, as well as monitoring whether they are being met.

In September of 2011, the County of San Bernardino adopted a Greenhouse Gas Emissions Reduction Plan (GHG Plan) aimed to reduce the County's internal and external GHG emissions to 15 percent below current levels by 2020. The GHG Plan also set a performance standard that if a project does not exceed 3,000 metric tons of carbon dioxide equivalents ($MTCO_{2e}$) per year, it will be considered to be consistent with the plan and will be determined to have a less than significant individual and cumulative impact for GHG emissions. $MTCO_{2e}$ is a unit of measure that combines the differing impacts of all GHGs into a single unit.

Operation Emissions: Based on CARB's *Local Government Operations Protocol For the Quantification and Reporting of Greenhouse Gas Emissions Inventories*, fuel emissions were normalized to CO_2 emissions (expressed as CO_2e using Global Warming Potential [GWP] factors published by the International Panel for Climate Control [IPCC]).

Table 7 provides the projected CO_2 emissions associated with the operations at Chino Airport under the existing condition (2010) and future condition (2015). This includes emissions from aircraft, automobiles, ground support equipment, and fueling operations.

As indicated in **Table 7**, the operational increases outlined in the airport master plan are not expected to exceed the 3,000 tons per year threshold in the long range condition. Therefore, the airport master plan is consistent with the GHG Plan and has a less than significant individual and cumulative impact for GHG emissions.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

TABLE 7
Carbon Dioxide Emissions (Tons per year)
Chino Airport

Pollutant	2010	2015	Difference	Threshold
CO_2/$MTCO_2e$	5,757.3	6,495.4	738.1	3,000

For the purposes of this analysis, only CO_2 was modeled. EDMS does not model CH_4 or N_2O.
Source: Coffman Associates analysis

Construction Emissions: As discussed in Section III of this document, the proposed project's primary contribution to air emissions is attributable to construction activities. Project construction would result in GHG emissions from the following construction related sources: (1) construction equipment emissions and (2) emissions from construction workers' personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

The primary emissions that would result from the proposed project occur as carbon dioxide (CO_2) from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (N_2O) and methane (CH_4), as well as other GHG emissions related to vehicle cooling systems. Although construction emissions are a one-time event, GHG emissions such as CO_2 can persist in the atmosphere for decades.

Table 8 summarizes the yearly greenhouse gas emissions associated with construction of the proposed improvements. Construction emissions were calculated using CalEEMod using the previously discussed methodology. Since the project would not create 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, the generation of GHGs is considered less than significant.

TABLE 8
Summary of Annual Construction GHG Emissions (metric tons CO_2e per year)
Chino Airport

Source	
2012	85.04
2014	103.89
2016	244.83
Threshold	3,000

Source: Coffman Associates analysis

b) **No Impact.** See above discussion. Since the project would not create 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, it is consistent with the County of San Bernardino adopted GHG Plan. The City of Chino's Open Space and Conservation Element (2010) also contains several goals and objectives with associated policies regarding energy conservation and greenhouse gas

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

reduction. These include the incorporation of green building practices (Objective OSC-4.1) and promoting strategic land use patterns (Objective OSC-5.1, Policy P1). Proposed Airport development will not conflict with these City policies.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VIII.	**HAZARDS AND HAZARDOUS MATERIALS -** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

SUBSTANTIATION:

a,b) **Less than Significant.** The proposed *Airport Master Plan* involves the build-out of the Chino Airport, which uses potentially hazardous materials in its operations. The materials may include fuel, paint products, lubricants, solvents, and industrial types of cleaning products. As forecasted aircraft operations increase, an increase in the amount of hazardous materials being routinely transported, used, or disposed of in association with the Airport would increase as well. In addition, build-out of landside development could involve the use, transport, or disposal of hazardous materials. The increase in hazardous materials as the Airport continues to develop will occur with either the approved *Airport Master Plan* (2003) or the proposed *Airport Master Plan*. The proposed project

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

does provide for two additional fuel farms to be located on the north side of the Airport, bringing the total number of fuel farms on the property to six.

Any business in Chino that handles, uses, generates, or stores hazardous materials is required to submit a "Business Emergency/Contingency Plan" to the Hazardous Materials Division of the County of San Bernardino Fire Department. Review and approval of any hazardous material use or storage is also required by the Chino Valley Independent Fire District (City of Chino Safety Element 2010).

The Chino Airport and any related landside development will comply with all applicable laws and regulations regarding the routine transport, use, or disposal of hazardous materials. In addition, all operators at the Airport must comply with applicable regulations pertaining to the use, storage and disposal of hazardous materials as outlined in FAA Order 1050.10B, *Prevention, Control and Abatement of Environmental Pollution at FAA Facilities*; Order 1050.15A, *Underground Storage Tanks at FAA Facilities*; and AC 150/5320-15, *Management of Airport Industrial Wastes*.

c) **Less than Significant with Mitigation.** The closest school to the Airport is Cal Aero Preserve Academy, a K-12 school located approximately 0.2 miles from the southeast corner of the Airport. No other schools exist or are planned within one-quarter mile from the Airport. The area of the Airport within one-quarter mile of the school is currently developed with an aircraft hangar complex that may be redeveloped with non-aeronautical land use as the part of the proposed Airport Master Plan Update. This may reduce the existing risks related to hazardous materials or wastes.

Mitigation Measure HAZARDS AND HAZARDOUS MATERIALS-1. New development on the Airport that is located within one-quarter mile of Cal Aero Preserve Academy shall consult with the school district as required by *California Code of Regulations*, Section 15186, pursuant to the *California Environmental Quality Act Guidelines*.

d) **Less than Significant with Mitigation.** The Environmental Protection Agency's (EPA) *EJView*[2] online tool was consulted regarding the presence of regulated hazardous sites or impaired waters within the vicinity of the Airport. A total of 10 EPA regulated sites (RCRA) are present at the Airport as well as two Superfund sites. The Superfund Program, administered under the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA), is an EPA program to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. The National Priorities List (NPL) is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. Superfund sites listed on the Airport include Chino Airport Radium Dials and Chino Airport Napalm Waste, neither of which is included on the NPL. These two sites are located on the northwestern part of the Airport

[2] http://epamap14.epa.gov/ejmap/entry.html, accessed February 2011.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

along Stearman Drive and are not planned for redevelopment as part of the proposed *Airport Master Plan*.

The State of California's Department of Toxic Substances Control (DTSC) ENVIROSTAR database was also accessed to see if there were any hazardous waste sites located at or in the vicinity of the airport. According to the DTSC's Hazardous Waste and Substance Site List,[3] there are no hazardous materials release sites near the Chino Airport that are currently in the State's Brownfields and Environmental Restoration Program (Cleanup Program).

According to the EPA, there are no impaired waters within the vicinity of the Airport. As described previously, all operators at the Airport must comply with applicable regulations pertaining to the use, storage and disposal of hazardous materials. However, due to the historic and existing land use on the Airport, the potential for unknown hazardous sites exists. Therefore, mitigation to reduce unknown hazards to less than significant levels is proposed.

Mitigation Measure HAZARDS AND HAZARDOUS MATERIALS-2. Prior to the development of Master Plan projects involving land disturbance or land ownership changes, Phase I Environmental Due Diligence Audits (EDDAs) shall be required to determine whether the land is, was, or has the potential for involvement with hazardous materials resulting in environmental contamination. Appropriate site-specific procedures, in accordance with applicable regulations and policies, shall then be required as a condition of project approval or associated land ownership transfers.

e) **No Impact.** The proposed *Airport Master Plan* would require a change in the airport safety zones contained in the *Chino Airport Comprehensive Land Use Plan* (ACLUP), which are in place to protect people residing or working in the vicinity of the Airport (County of San Bernardino 1991), due to the proposed change in the RPZ. This planning document is implemented through the Chino *Zoning Ordinance's* (2009) Chino Airport Overlay District and Section 20.06.040, Airport Over-flight Area (see also *The Preserve Specific Plan*, City of Chino 2008). However, the land in question is currently utilized as farmland. The proposed project will not result in a safety hazard for people residing or working in the project area.

f) **No Impact.** The proposed project is not located within the vicinity of a private airstrip.

g) **No Impact.** The proposed project is located on an existing airport site and will not result in off-site development. The project will not impair the implementation of, or physically interfere with, adopted emergency response plans or emergency evacuation plans for San Bernardino or Riverside Counties.

[3] http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed May 2012.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

h) **<u>No Impact</u>.** The proposed project is located within an area of the City that is identified as "Little or no threat" on the "Wildland Urban Interface Threat to Community" map of the City of Chino's Safety Element (2010). Build-out of the proposed *Airport Master Plan* will not expose people or structures to a significant risk to wildland fires.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
IX.	**HYDROLOGY AND WATER QUALITY -** Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

SUBSTANTIATION:

a, f) **Less than Significant.** The *Clean Water Act* (CWA) provides the authority to establish water quality standards, control discharges, develop waste treatment management plans and practices, prevent or minimize the loss of wetlands, and regulate other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc.

The County of San Bernardino holds a current NPDES General Permit Number CAS618036 and is assigned Waste Discharge Identification number 8-36S0049096, which ensures that pollution control measures are in place at the Airport. The Airport also has a current Storm Water Pollution Prevention Program (SWPPP), which addresses potential pollution sources and describes practices to minimize and control pollutants. As future development occurs at the Airport, the NPDES permit and Airport SWPPP will be modified to reflect proposed changes to impervious surfaces and storm water retention facilities.

Future construction at the Airport will need to comply with the conditions of the updated NPDES general permit and SWPPP. In addition, best management practices (BMPs) from FAA Advisory Circular 150/5370-10A, *Standards for Specifying Construction of Airports, Item P-156, Temporary Air and Water Pollution, Soil Erosion and Siltation Control* are required. These standards are intended to prevent the violation of water quality standards and the substantial degradation of local water bodies and streams.

b) **No Impact.** As previously stated in the *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005), the Airport is not located within a groundwater recharge area. Water is provided to the Airport by the City of Chino. To meet demand, the City imports water, draws water from the Chino Groundwater Basin, and uses recycled water that is processed locally by the Inland Empire Utilities Agency (IEUA). Approximately 22 percent of the City water supply comes from recycled water (*Chino General Plan,* Public Facilities and Services Element, 2010). The proposed project will not substantially increase the use of groundwater resources such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

c,d) **Less than Significant with Mitigation.** According to the *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005), field surveys identified two drainage areas on the Airport that may be considered waters of the United States subject to regulation under the CWA. Jurisdiction is dependent in part on proving a significant nexus to downstream waters of the U.S. or on the presence of wetlands, which may also involve jurisdiction of the CDFG. These potentially jurisdictional waters are identified on **Figure 7**.

The eastern drainage occurs in non-culverted form in two locations on the Airport property. The northern section of this drainage could be disturbed by the proposed taxiway extension from

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Runway 3-21 and Taxiway P to provide aircraft access to two aeronautical revenue support parcels located in the northeastern corner of the Airport; however, it is not anticipated that substantial alterations to this drainage would occur.

The eastern drainage also appears in non-culverted form through an approximate 36-acre parcel of land adjacent to Kimball Avenue that is designated on the proposed *Airport Master Plan* as Future Aeronautical and Non-Aeronautical Use (if needed). The proposed *Airport Master Plan* specifies that this parcel can only be developed if its terrain and drainage challenges can be solved satisfactorily. Substantial changes to this drainage are not proposed at this time.

A second drainage occurs in the southwestern corner of the Airport property in an area of the Airport currently utilized for agriculture. This area is designated by the proposed *Airport Master Plan* for non-aeronautical revenue support. Substantial changes to this drainage resulting in erosion, siltation, or flooding could occur as a result of future development, if not mitigated.

Disturbance of the aforementioned waters may require authorization from the regulatory agencies. Authorizations might include a Section 404 permit from the USCOE, a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region, and a Section 1600 Streambed Alteration Agreement from the CDFG. Prior to undertaking any drainage improvements, coordination with the agencies will be required to determine permitting requirements. As previously discussed, future improvements at the Airport will also require the County of San Bernardino to update its NPDES General Permit and the Airport's SWPPP. Formal wetland surveys have not yet been conducted (refer to Section IV c) and **Appendix B**).

Mitigation Measure HYDROLOGY-1. Field surveys shall be required as part of the jurisdictional delineation for non-culverted drainages on the Airport property before site-specific development plans can be approved. Proposed development projects shall comply with the conditions and mitigation plans associated with any resulting permits.

e) **Less than Significant with Mitigation.** Build-out of the Airport as called for by the proposed *Airport Master Plan* will result in an increase of impervious surfaces throughout the site. Drainage improvement plans will be created as development occurs to ensure that additional runoff water will not exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. As discussed above, the County of San Bernardino will need to update its NPDES General Permit to account for these additional impervious surfaces. All future construction of the planned improvements at the Airport will require subsequent updates of the Airport's SWPPP and NPDES permit.

Mitigation Measure HYDROLOGY-2. As future development of the Airport occurs, plans for improvements to support the increase of wastewater and runoff associated with the

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

development shall be implemented. In the event that the drainage system exceeds capacity, proper water detention basins or other control methods shall be installed. As the Airport obtains the necessary local permits, additional mitigation may be required. These measures will be determined on a project-by-project basis and incorporated as necessary.

g - i) **No Impact.** The Chino Airport is not located within either the 100- or 500-year floodplain as mapped on the City of Chino's Safety Element (2010). It also lies outside of the Prado Dam Flood Inundation Area (*City of Chino 2025 General Plan,* Safety Element, 2010). A review of Federal Emergency Management Agency (FEMA) FIRM number 06071C9335H map[4], which includes the Airport property, indicates that the majority of the Airport is located within Zone D, an area in which flood hazards are undetermined, but possible. The easternmost portion of the Airport is located within Zone X, which is defined as an area outside of the 100-year and 500-year floodplains. The nearest areas within a known 100-year floodplain are located approximately 0.75-mile to the south and west of Airport property.

Proposed master plan improvements will not occur within a known 100-year floodplain. Thus, no structures are expected to impede or redirect flood flows as a result of the proposed *Airport Master Plan.* The proposed project will not expose people or structures to a significant risk of loss, injury, or death involving flooding.

j) **No Impact.** As previously stated in the *Initial Study for Improvements Outlined within the Chino Airport Master Plan* (2005), the Airport's inland location precludes tsunami hazards. There are also no lakes in proximity to the Airport that could result in seiche hazards. The Airport is not within the Prado Dam Flood Inundation Area. Mudflows are not a hazard due to the geography of the area.

[4] http://msc.fema.gov/webapp/wcs/stores/servlet/StoreCatalogDisplay?storeId=10001&catalogId=10001&langId=-1&userType=G, accessed February 2011

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
X.	**LAND USE AND PLANNING** - Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No Impact.** The proposed *Airport Master Plan* will guide the build-out of an existing land use within the City of Chino. The Airport has been an established land use in Chino since 1940 and its build-out will not divide any established communities. All applicable land use maps, including the neighboring City of Ontario, identify the Airport as an existing land use.

b) **No Impact.** The proposed *Airport Master* Plan, when approved by the FAA and the County of San Bernardino, will supersede the existing 2003 *Airport Master Plan.* However, the basic land use at the Airport will not change as a result of the new plan. Therefore, the proposed *Airport Master Plan* is consistent with all applicable overlay and land use maps. The *City of Chino 2025 General Plan,* Safety Element (2010) addresses the General Plan's compatibility with the Airport and the *Chino Airport Comprehensive Land Use Plan (ACLUP)* (1991), which established airport safety zones, i.e., zones that require certain restrictions on land uses depending on their relationship to the runways. The ACLUP would need to be updated to reflect the acquisition of the RPZ and proposed runway extension; however, the land in question is currently utilized for agriculture. No change in the General Plan land use designation or zoning would be necessary. The Chino Airport is not identified on any of the County of San Bernardino Overlay maps. *The Preserve Specific Plan* (City of Chino 2008) also contains language on its interface with the Airport.

The City of Ontario's recently adopted General Plan, *The Ontario Plan*, contains the following policy regarding the Chino Airport: "We will support the creation and implementation of the Airport Land Use Compatibility Plan for the Chino Airport." (LU5-8, City of Ontario 2010) and includes an Airport Impact Overlay on its land use map.

The Chino Airport is not identified on any of the County of San Bernardino Overlay maps.

The proposed *Airport Master Plan* will not cause any conflict with these adopted land use plans for the area.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

c) **No Impact.** The proposed *Airport Master Plan* does not conflict with any County or City habitat conservation or natural community conservation plans.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XI. MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

SUBSTANTIATION: *(Check ☐ if project is located within the Mineral Resource Zone Overlay):*

a,b) **No Impact.** The Airport property is classified as MRZ-3 on the *City of Chino 2025 General Plan,* Open Space and Conservation Element (2010), "Mineral Resource Zones" map. This indicates that there may be sand and gravel deposits, but there is insufficient data to ascertain whether these mineral deposits are significant. Thus, no impacts to known mineral resources or locally important mineral recovery sites as shown on a land use plan will occur. In addition, the existing and planned land use for the project site, i.e., an airport, is not changing as a result of the proposed *Airport Master Plan.*

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XII.	**NOISE** - Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if the project is located in the Noise Hazard Overlay District ☐ or is subject to severe noise levels according to General Plan* Noise Element ☐*)*

The following discussion is based on a Chino Airport noise analysis resulting in noise contour maps for existing (2009) and future noise conditions (2015 and 2030). The analysis and maps are attached to this Initial Study as **Appendix D**.

a,c,e) **Less than Significant.** The State Office of Noise Control and the *Chino Municipal Code, Noise Ordinance* have established an exterior noise standard of 65 L_{dn} for residential, open space, and other land uses sensitive to noise. As part of the City's *General Plan* update (2010), noise monitoring was conducted in the vicinity of the Airport at 7653 Kimball Avenue. Over a 24-hour measurement period, the existing L_{dn} was 61.6 (*City of Chino 2025 General Plan,* Noise Element 2010).

Noise contours calculated for the proposed *Airport Master Plan* update show that existing (2009) and future (2015) CNEL contours remain entirely on the Airport property (**Appendix D**). The future (2030) 65 CNEL contour would extend slightly beyond the Airport boundary to the east of Runway 26R. *The Preserve Specific Plan* (2008) designates future land use of this area as Public Facility; however, this area is currently in agricultural use within an Airport RPZ proposed for land acquisition as part of this project. Acquisition of the parcel by the Airport for an RPZ would prevent its development with other land uses. Even without the Airport's successful acquisition of the RPZ,

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

permitted land uses under the Public Facility designation include land uses such as minor utility facilities, police or fire stations, and row crops. These facilities are considered compatible with the 65 CNEL noise contour. No significant noise impacts related to the proposed *Airport Master Plan* will occur.

b) **Less than Significant.** It is possible that persons working on the Airport may be exposed to ground-borne vibration or noise. This type of vibration or noise is typically associated with railway traffic, but can also occur during grading, construction, or remodeling activities. These types of activities are limited by Sections 9.40.040(B) and 15.44.030 of the City's *Municipal Code* regarding noise and hours of activity. No significant impacts to the public health, welfare, and safety are anticipated.

d) **Less than Significant.** Noise related to construction or redevelopment activities undertaken as part of the *Airport Master Plan* will occur. Such temporary impacts would be localized to the section of the Airport being improved. Most of the Airport is not adjacent to noise-sensitive land uses. In addition, construction occurring in the vicinity of The Preserve residential area will be subject to the City's *Noise Ordinance*. The closest residences to this part of the Airport have a 1,700-foot buffer from the airfield, which includes Kimball Avenue.

f) **No Impact.** The project is not located within the vicinity of a private airstrip.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XIII.	**POPULATION AND HOUSING** - Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Less than Significant.** The proposed project designates approximately 230 acres of Airport property for mixed use "revenue support" development. This revenue will help support the Airport functions as well as provide jobs and services to the community. In contrast, the City of Chino has designated over 10,456 acres to developed land uses and another 1,779 as Urban Reserve in its *General Plan,* Land Use Element (2010). The mixed use development from the Airport represents less than two percent of the City's overall planned development.

Roads and infrastructure will only be extended on-site as a result of the proposed *Airport Master Plan.* These extensions will serve the Airport only and are not considered to be growth-inducing.

b,c) **No Impact.** The proposed *Airport Master Plan* will not displace housing or people as a result of planned improvements. The only land acquisition (that necessary for Airport control of the RPZs) was also included in the previously approved *Airport Master Plan* (2003). No new impacts to land use will occur as a result of the project.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

XIV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

SUBSTANTIATION:

General Discussion: As previously discussed, no significant airfield capacity improvements are included for the 20-year planning period of the proposed *Airport Master Plan*. Future build-out of the Airport does include approximately 230 acres of mixed-use development. Approximately 110 acres of this area are designated as non-aeronautical (commercial/light industrial/business park) land uses, while the other 120 acres would be for aeronautical land use. This build-out of approximately 230 acres of mixed land uses was already included in the current 2003 *Airport Master Plan* as aviation-related commercial/industrial land use and is less than two percent of the City's planned development. No significant impacts to public services are expected.

a) **Fire Protection? <u>Less than Significant</u>.** See above General Discussion. Build-out of the proposed *Airport Master Plan* update will create additional demand on local fire protection services; this growth has been planned for by the City of Chino. The Chino Valley Fire Station #3 is located on Airport property and is responsible for responding to Airport emergencies.

The City of Chino Fire Chief recommends a higher level of dedicated Airport Rescue and Firefighting (ARFF) protection as listed below (Summers 2011):

- Provide two full-time firefighters, dedicated only to ARFF operations, on duty 24 hours a day, 7 days a week.
- Provide an ARFF apparatus with the firefighting capacity to handle significant incidents involving large corporate jets.

However, the fire protection available from Fire Station #3 meets the FAA's standards due to the Airport's non-indexed status.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Police Protection? Less than Significant. See above General Discussion. The future build-out of the Airport will not result in a significant increase in demand for local police protection services. This development has already been considered in the approved 2003 *Airport Master Plan*. No significant impacts to police protection will occur.

Schools? No Impact. The proposed build-out at the Airport under the proposed *Airport Master Plan* will not generate additional demand for schools because there is no residential component or significant increase in employment with this project.

Parks? No Impact. The proposed build-out at the Airport under the proposed *Airport Master Plan* will not generate additional demand for parks within the City or the region because there is no residential component or significant increase in employment with this project.

Other Public Facilities? No Impact. The CDCR's Facility Planning, Construction and Management (FPCM) and the California Department of General Services (DGS) were contacted regarding future plans for the adjacent Heman G. Stark Correctional Facility, which is located immediately west of the Chino Airport. Although this facility has been closed in recent years, it could eventually be reopened. The CDCR's *Master Plan Annual Report for Calendar Year 2010* identifies the facility's potential use as a reception center (CDCR 2011). Other types of institutional use are also under consideration.

The Chino Airport has been an established land use since the 1940s. As such, it has been an adjacent land use to the CDCR property during times that the H. G. Stark Correctional Facility was in operation. No impacts to future uses of the CDCR facility as a reception center or other institutional use are anticipated.

Planned use of CDCR land to the south of the H. G. Stark Correctional Facility includes future development as warehouse/industrial. No impacts related to this future land use are anticipated as long as future development does not occur within the airport RPZ. Since acquisition of the RPZ by the Airport is part of the *Airport Master Plan*, no impacts would occur.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XV.	**RECREATION**				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUBSTANTIATION:

a,b) **No Impact.** The proposed build-out at the Airport under the proposed *Airport Master Plan* will not generate additional demand for parks and other recreational facilities within the City or the region. No recreational facilities are included in the proposed *Airport Master Plan*.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVI.	**TRANSPORTATION/TRAFFIC -** Would the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e)	Result in inadequate emergency access?	☐	☐	☐	☒
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety or such facilities?	☐	☐	☐	☒

SUBSTANTIATION:

General Discussion: The City of Chino's Transportation Element (2010) contains 2015 and 2025 projections for total operations of the Chino Airport, i.e., takeoffs and landings, which are greater than updated forecasts contained in the proposed *Airport Master Plan*. Therefore, traffic assumptions used by the City for analyzing vehicular trips associated with the Airport on the local street network should be worst-case scenarios.

The Airport is bordered by the following City streets: Merrill Avenue on the north; Euclid Avenue (State Route 83) on the west; and Kimball Avenue on the south. These roads are designated truck routes on the City's Transportation Element (2010). Traffic signals are present at the intersections of Euclid Avenue with both Merrill and Kimball Avenues. Ultimate build-out of these roadways per the City's Transportation Element (2010) is as follows: Merrill Avenue as a 4-lane, secondary arterial; Euclid Avenue (State Route 83) as an 8-lane expressway; and Kimball Avenue from Euclid Avenue east to Hellman Avenue as a 4-lane primary arterial.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

A Class-I bicycle facility is also planned along Kimball Avenue on the south side of the Airport. A Class I bicycle facility is a bicycle path physically separated from vehicular traffic on its own right-of-way. A Class II or III bicycle facility is planned on Euclid Avenue. A Class II bicycle facility is a designated bicycle lane on a road identified by pavement markings and/or signs; a Class III bicycle facility is a bicycle route that shares the roadway with motor vehicle traffic with bicycle route signs posted at intervals. An equestrian trail is also planned along Euclid Avenue and a portion of Kimball Avenue in the vicinity of the Airport.

Public transit service in and around Chino is provided by five agencies: Omnitrans, Foothill Transit, Orange County Transportation Authority, Metrolink, and Amtrak. The Chino Transit Center allows bus riders from various locations to assemble at a central point to take advantage of express trips or other route-to-route transfers. There are no Metrolink or Amtrak stations in the City of Chino itself.

a) **No Impact.** The proposed *Airport Master Plan* is consistent with the City's planned growth and related transportation policies (City of Chino 2010). The City's *Draft General Plan Environmental Impact Report (EIR)* (2010) stated with regard to the Airport, "the policies of the Proposed General Plan and the Focused Growth Plan are internally consistent and are consistent with other adopted plans and programs supporting the provision of aviation facilities or services in the City of Chino."

b) **Less than Significant.** Additional vehicular traffic will be generated as a result of several aspects of the proposed *Airport Master Plan*, as shown in **Table 9**. The City of Chino has recently completed its *2025 General Plan* and Transportation Element (City of Chino 2010). The Chino Airport is included in the City's planning documents.

The 2003 *Airport Master Plan* forecast a total of 868 Busy Day operations by the year 2020. The proposed *Airport Master Plan* now projects a total of 590 Busy Day operations by the year 2020 and 684 Busy Day operations by the year 2030, an actual increase of 235 additional Busy Day operations over what occurred in 2009. Expected build-out of revenue-support parcels between the 2003 *Airport Master Plan* and proposed *Airport Master Plan* are approximately the same.

The intersection of Euclid Avenue and Kimball Avenue was one of 30 selected intersections included in the traffic analysis of the City's *Draft General Plan EIR* (2010). According to the EIR, this intersection currently functions at Level of Service (LOS) B in both the AM and PM peak hours. With implementation of the City's *2025 General Plan*, it is anticipated to function at LOS C in both the AM and PM peak hours. The EIR concluded that no significant impacts to transportation were identified as a result of the City's *2025 General Plan* and no mitigation measures were required.

Since the proposed *Airport Master Plan* anticipates fewer Busy Day operations and thus less vehicular traffic than what was projected in the 2003 *Airport Master Plan*, the proposed *Airport Master Plan* is consistent with the City of Chino's *2025 General Plan* and the analysis contained

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

within the City's *General Plan EIR*. No significant impacts to transportation will occur with the proposed project.

TABLE 9
Future Airport-Related Trips
Chino Airport

Airport	Future Build-out (2030)	Trip Generation Rates[1]	Vehicular Daily Trips[1]	Vehicular Peak Trips[1]
Future Aviation Growth	235 additional Busy Day operations	1.97 trips/flight (General Aviation Airport 022)	463	N/A
Aeronautical Revenue-Support Development	119.6 acres (2,344 KSF[2])	6.97 trips/KSF (General Lt. Industrial 110)	16,338	2,274
Non-aeronautical Revenue-Support Development	109.7 acres (1,672 KSF[3])	6.96 trips/KSF (Industrial Park 130)	11,637	1,438
TOTAL:			28,438	3,712

[1] Source: Institute of Transportation Engineers (2008)
[2] KSF = 1,000 square feet. Assumes floor to area ratio (FAR) of 0.45 for Airport Related Light Industrial - Source: *The Preserve Specific Plan* (City of Chino 2008)
[3] Assumes FAR of 0.35 for Airport Related Business Park/Office - Source: *The Preserve Specific Plan* (City of Chino 2008)

c) **No Impact.** Air traffic patterns at the Chino Airport will not be affected as a result of the proposed *Airport Master Plan.*

d) **Less than Significant.** Additional access to the City's street and roadway network will occur as a result of the proposed *Airport Master Plan*. The design of these access points and their relationship to other planned or existing development will be according to current road safety standards, subject to review by the appropriate City of Chino Engineering and/or Planning departments.

e) **No Impact.** No impacts to emergency access will occur as a result of the planned land uses on the Airport. Additional access to the City's street and roadway network is provided, subject to review by the appropriate City of Chino Engineering and/or Planning departments. Access to various portions of the Airport internally is subject to FAA review and standards.

f) **No Impact.** See a) above. No impacts to public transit, bicycles, or pedestrian facilities or their applicable policies will occur as a result of the proposed *Airport Master Plan.*

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVI.	**UTILITIES AND SERVICE SYSTEMS -** Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed?	☐	☐	☒	☐
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f)	Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

SUBSTANTIATION:

General Discussion: As previously discussed, no significant airfield capacity improvements are included for the 20-year planning period of the proposed *Airport Master Plan*. Future build-out of the Airport does include approximately 230 acres of mixed-use "revenue support" development. This build-out was provided for in the current 2003 *Airport Master Plan* as aviation-related commercial/industrial land use. Airport development overall is part of the planned growth of the City of Chino.

a,b) **No Impact.** Water delivery and wastewater collection at the Chino Airport is provided by the City of Chino. The local sewer is then connected to the regional sewer system, which is owned and operated by the Inland Empire Utilities Agency (IEUA). The City pays the IEUA for the treatment and disposal of wastewater.

The proposed *Airport Master Plan* does not increase the capacity of the Airport or overall development acreage over what was previously approved in the 2003 *Airport Master Plan*. The

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

proposed *Airport Master Plan* will not result in environmental effects related to increased demand on water or wastewater utilities.

c) **Less than Significant with Mitigation.** See discussion of on-site drainage issues in the Hydrology section of this Initial Study. Build-out of the Airport as called for by the proposed *Airport Master Plan* will result in an increase of impervious surfaces throughout the site. Drainage improvement plans will be created as development occurs to ensure that additional runoff water will not exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Mitigation Measure HYDROLOGY-2. As future development of the Airport occurs, plans for improvements to support the increase of wastewater and runoff associated with the development shall be implemented. In the event that the drainage system exceeds capacity, proper water detention basins or other control methods shall be installed. As the Airport obtains the necessary local permits, additional mitigation may be required. These measures will be determined on a project-by-project basis and incorporated as necessary.

d,e) **Less than Significant.** Future development on the Airport will require the on-site extension of water and sewer infrastructure; these extensions are included in the Airport's Capital Improvement Program (CIP) for the intermediate and long-term. As discussed above under subsection a,b), water and wastewater collection at the Chino Airport is provided by the City of Chino. The proposed *Airport Master Plan* does not increase overall development acreage over what was included in the 2003 *Airport Master Plan*. The proposed build-out is planned, previously approved, growth. No significant impacts from the extension of water and wastewater utilities will occur as a result of the proposed *Airport Master Plan*.

f) **Less than Significant.** The collection of solid waste is provided by the City of Chino through contracted services with Waste Management, Inc. Solid waste is taken to a recovery facility and transfer station in Fontana, CA, before being taken to the El Sobrante Landfill in Riverside County.

As discussed previously under the Public Services section, General Discussion, of this Initial Study, the City's Land Use Element (2010) designates 10,546 acres of land for developed land uses and another 1,779 acres as Urban Reserve. Airport development is a very small percentage of the overall planned growth for the City of Chino. No significant impacts to the capacity of the El Sobrante Landfill will occur as a result of development from the *Airport Master Plan*.

g) **No Impact.** The Chino Airport will continue compliance with federal, state, and local statutes and regulations.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVII. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects, which shall cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

SUBSTANTIATION:

a) **<u>Less than Significant with Mitigation</u>.**

The proposed project has the potential to cause adverse impacts to two special status species: the burrowing owl and the California horned lark. Both of these species are known to utilize maintained and ruderal habitats present at the Airport. In addition, there is the potential for wetland species to be present in on-site drainages at the Airport.

Several historic buildings that are potentially eligible for listing on the NRHP are located within proposed development areas of the Airport. In addition, there is the potential for unknown archaeological or paleontological resources to be uncovered during grading activities.

In the northwest quadrant of the intersection of Kimball and Grove Avenues in the southern part of the Airport property are soils with slow to medium rates of runoff with erosion hazards ranging from slight to high, depending on the magnitude of the slope. This area of the proposed *Airport Master Plan* is listed as Future Aeronautical and Non-Aeronautical Use (if needed). If substantial changes to on-site drainages are proposed as part of future development proposals at the Airport, impacts resulting in erosion, siltation, or flooding could occur. In addition, build-out of the Airport as called for by the proposed *Airport Master Plan* will result in an increase of impervious surfaces throughout the site. The County of San Bernardino will need to update its NPDES General Permit to account for these additional impervious surfaces. All future construction of the planned improvements at the Airport will require subsequent updates of the Airport's SWPPP and NPDES permit.

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*

Mitigation measures are incorporated for biological and cultural resources, and for geology and hydrology. With these mitigation measures, project impacts will be less than significant.

b) **Less than Significant with Mitigation.**
The proposed *Airport Master Plan* has the potential to contribute to significant air quality impacts in the region. Mitigation measures have been incorporated to mitigate cumulative impacts for air quality below a level of significance.

c) **Less than Significant with Mitigation.**
Proposed improvements in the vicinity of The Preserve residential area to the south of the Airport have been planned in part to help shield the residential development from the proposed expansion of hangar facilities; however, potentially significant lighting and aesthetic impacts could still occur. Commercial or light industrial land use along the Kimball Avenue frontage can be developed in an aesthetically-pleasing manner that mitigates potential visual impacts to a less than significant level.

Portions of the Airport are located within one-quarter mile of Cal Aero Preserve Academy. Airport development within this area may involve the use of hazardous materials, thus posing a potential risk to children. In addition, due to the historic and existing land use on the Airport, the potential for unknown hazardous sites exists. Therefore, consultation with the school district will be required for projects with potential impacts to schools.

Attachment 1 shows a Mitigation Monitoring Plan specific to build-out of the proposed Chino *Airport Master Plan.*

LIST OF PREPARERS

Project Sponsor:
County of San Bernardino Department of Airports
777 E. Rialto Avenue
San Bernardino, CA 92415-0831
James Jenkins, Director of Airports

Environmental Consultants:
Coffman Associates
4835 E. Cactus Road, Ste. 235
Phoenix, AZ 85023
Project Manager: James Harris
CEQA Analysts: Judi Krauss, Kory Lewis

SWCA Environmental Consultants
150 S. Arroyo Parkway, Second Floor
Pasadena, CA 91105
Cultural Resources: Samantha Murray, John Dietler
Biological Resources: Michael Cady, Michael Tuna, Matthew South

REFERENCES

Archaeological Information Center, San Bernardino County Museum, 2011. "Historical Review for the County of San Bernardino Dept. of Airports," re: Chino Airport Master Plan Update, March 10.

California Department of Corrections and Rehabilitation (CDCR), 2011. *Master Plan Annual Report for Calendar Year 2010*, submitted January 2011, http://www.cdcr.ca.gov/FPCM/index.html, accessed July 28, 2011.

City of Chino, 2010. *City of Chino 2025 General Plan,* Community Character Element, Land Use Element, Noise Element, Open Space and Conservation Element, Public Facilities and Services Element, Safety Element, and Transportation Element, July.

City of Chino, 2010. *Draft/Final General Plan Environmental Impact Report (EIR),* January 25 (Draft EIR), April 15 (Final EIR), May 21 (Final EIR update) .

City of Chino, 2009. *Zoning Ordinance* and map, Dec. 8.

City of Chino, 2008. *The Preserve Specific Plan*, March 2003, updated February 2008.

City of Ontario, 2010, *The Ontario Plan*, adopted January 27. Available at: http://www.ontarioplan.org/.

City of Ontario, 2011. Land Use Plan/Zoning Map. www.ci.ontario.ca.us/index.cfm/22623/22239, accessed July 7.

County of San Bernardino, 2011. "General Plan Update – Mapping" - Land Use Zoning District Maps, Hazard Overlay Maps, Geologic Hazard Overlay Maps, Resource Overlay Maps, www.sbcounty.gov/landuseservices/general%20plan%20update/Mapping/Default.asp, accessed July 7.

County of San Bernardino, Chino Airport, 2010. Draft *Airport Master Plan*, July.

County of San Bernardino, 2007. *2007 General Plan*, adopted March 13, effective April 12.

County of San Bernardino, 2005. *Initial Study for Improvements Outlined within the Chino Airport Master Plan*, October.

County of San Bernardino, Chino Airport, 2003. *Airport Master Plan*, December.

County of San Bernardino, Airport Land Use Commission, 1991. *Chino Airport Comprehensive Land Use Plan (ACLUP),* November.

Frederick, Diana, CDCR, Facility Operations Branch, 2012. Personal communication with Jim Harris and Judi Krauss, Coffman Associates, April 16.

Federal Aviation Administration (FAA). Advisory Circular (AC) 150/5060-5, *Airport Capacity and Delay*.

Institute of Transportation Engineers, 2008. *Trip Generation*, 7th and 8th Editions, December.

Natural Resources Conservation Service (NRCS), 2011. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.apsx, accessed July 7.

South Coast Air Quality Management District (SCAQMD), 2006. Draft *2007 Air Quality Management Plan* and appendices, October.

Summers, Kirk, Fire Chief, Chino Valley Fire District, 2011. Letter to Mr. Jim Harris, Coffman Associates, Inc., re: Chino Airport Master Plan Update, June 30.

ATTACHMENT 1

MITIGATION MONITORING PLAN
For the Proposed Chino *Airport Master Plan* Update

Self-Monitoring Project Features and Mitigation Measures:

Compliance with these requirements will be incorporated into the construction documents for Airport projects. Construction will not be considered as completed until these measures have been incorporated into the project and compliance is achieved. The captions below refer to corresponding sections of the Initial Study checklist for this project, using the Appendix G format from the CEQA Guidelines.

MITIGATION MEASURE
AESTHETICS-1: Any future Airport development that fronts on public thoroughfares surrounding the Airport shall comply with the policies of Objective CC-1.1, Community Character Element, *City of Chino 2025 General Plan* (2010), specifically Policy P5, which states, "Lighting on private and public property should be designed to provide safety, while minimizing light spillage to adjacent properties and the night sky."
AIR QUALITY-1: Measures that will be implemented at the Airport to further decrease the impact of Airport operations on air quality include: reducing the use of remote auxiliary power units whenever possible; considering the use of alternative fuel vehicles for on-airport use; and encouraging employees at the Airport to utilize car pools whenever possible.
AIR QUALITY-2: A number of measures will also be incorporated during the construction phase of the various projects including: measures to minimize fugitive dust; and discontinuing grading activities when winds exceed 30 miles per hour.
AIR QUALITY-3: To reduce fugitive dust emissions (PM_{10}) during project implementation, the following mitigation techniques will be employed: application of water to disturbed areas every three hours and all trucks hauling dirt, sand, soil, or other loose materials will be tarped with a fabric cover and will maintain a freeboard height of 12 inches. These measures are outlined in Table XI-A – Mitigation Measure Examples: Fugitive Dust From Construction and Demolition of the SCAQMD *Air Quality Handbook*.
AIR QUALITY-4: To mitigate for potential adverse impacts resulting from construction activities, development projects must abide by the SCAQMD's Rule 403 concerning Best Management Practices for construction sites in order to reduce emissions during the construction phase. Measures shall include: • Development of a construction traffic management program that includes, but is not limited to, rerouting construction related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from site; • Sweep streets at the end of the day if visible soil material is carried onto adjacent paved public roads; • Wash off trucks and other equipment leaving the site; • Replace ground cover in disturbed areas immediately after construction;

ATTACHMENT 1

MITIGATION MONITORING PLAN
For the Proposed Chino *Airport Master Plan* Update
(continued)

• Keep disturbed/loose soil moist at all times; • Suspend all grading activities when wind speeds exceed 25 miles per hour; • Enforce a 15 mile per hour speed limit on unpaved portions of the construction site.
AIR QUALITY-5: To reduce diesel emissions associated with construction, construction contractors shall provide temporary electricity to the site to eliminate the need for diesel-powered electric generators, or provide evidence that electrical hook-ups at construction sites are not cost-effective or feasible.
AIR QUALITY-6: To reduce construction related particulate matter air quality impacts of City projects the following measures shall be required: 1. the generation of dust shall be controlled as required by the SCAQMD; 2. grading activities shall cease during periods of high winds (greater than 25 mph); 3. trucks hauling soil, dirt or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the City Engineer; and 4. the contractor shall prepare and maintain a traffic control plan, prepared, stamped, and signed by either a licensed Traffic Engineer or a Civil Engineer. The preparation of the plan shall be in accordance with Chapter 5 of the latest edition of the Caltrans Traffic Manual and the State Standard Specifications. The plan shall be submitted for approval, by the engineer, at the preconstruction meeting. Work shall not commence without an approved traffic control plan.
BIOLOGICAL RESOURCES-1: If construction activities associated with proposed projects must occur during the burrowing owl nesting season (February 1 through August 31), burrowing owl surveys shall be conducted per CDFG-recommended burrowing owl protocol to determine whether the action area and its immediate vicinity are occupied by breeding season burrowing owls. Based on CDFG-protocol, focused breeding season surveys and pre-construction surveys may then be necessary. If burrowing owl is determined to occupy the action area or its vicinity, including a buffer area of 500 feet around the action area, a mitigation and monitoring plan shall be prepared and implemented prior to, during, and after project activities, as necessary.
BIOLOGICAL RESOURCES-2: When possible, the removal of potential nesting vegetation for migratory birds, including California horned lark, shall occur outside the nesting season. A qualified biologist shall conduct a nesting bird study if this is not feasible. Surveys should be conducted no more than three days prior to removal date. If active nests are found, buffers shall be established around the vegetation (300 feet for raptors, 50 feet for all other birds). Construction activities impacting the nests shall be postponed until the nest is no longer active.
BIOLOGICAL RESOURCES-3: Prior to the development of areas where drainage ditches are located, particularly along Kimball Avenue, formal wetland surveys shall be conducted. If wetland species are found, consultation with the USCOE would be required as part of the permitting processes. Consultation with the CDFG may also be necessary if a Section 1600 Streambed Alteration Agreement is needed. Permit conditions required by these agencies as part of their respective permitting process shall be implemented into the development projects, as appropriate, to mitigate potential impacts below a level of significance.

ATTACHMENT 1

MITIGATION MONITORING PLAN
For the Proposed Chino *Airport Master Plan* Update
(continued)

CULTURAL RESOURCES-1: Prior to design and engineering of development in parcels where potentially eligible historic structures are located, a qualified historian shall be retained to prepare a detailed assessment of the history and integrity of the individual buildings to be affected and to recommend appropriate mitigation, which could include, but is not limited to, the following options: a. Include structures determined to be historically significant into proposed development plans in a manner that would leave them in place; b. Relocate historic structures within the existing Airport grounds; or c. Complete appropriate documentation and photography of the structures prior to demolition or removal of the structures, if permitted under applicable historic preservation regulations.
CULTURAL RESOURCES-2: In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, an archaeologist who meets the Secretary of the Interior's professional qualification standards in archaeology shall be retained. Construction activities (e.g., grading, grubbing, vegetation clearing) within 9 meters (25 feet) of the discovery shall be halted while the resources are evaluated for significance under the NRHP and the CRHR. Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and would be discussed in consultation with the lead agency.
CULTURAL RESOURCES-3: For intermediate and long term development projects of the proposed *Airport Master Plan* update, where not previously surveyed, field surveys shall be undertaken prior to development to determine the presence of unidentified historic properties or archaeological resources on the Airport. Any findings will be properly documented according to applicable County of San Bernardino procedures. If Native American artifacts are uncovered, consultation with representatives of the Native American community shall occur.
CULTURAL RESOURCES-4: In the event that unknown paleontological resources are discovered during construction, the San Bernardino County Museum shall be notified immediately. Construction activities (e.g., grading, grubbing, vegetation clearing) within 9 meters (25 feet) of the discovery shall be halted while the resources are evaluated.
GEOLOGY AND SOILS-1: Prior to development of the 36-acre parcel located on Chualar clay loam soils, a detailed geologic report shall be prepared that identifies potential erosion impacts; the geotechnical recommendations shall be incorporated into future development projects.
HAZARDS AND HAZARDOUS MATERIALS-1: New development on the Airport that is located within one-quarter mile of Cal Aero Preserve Academy shall consult with the school district as required by *California Code of Regulations,* Section 15186, pursuant to the *California Environmental Quality Act Guidelines*.
HAZARDS AND HAZARDOUS MATERIALS-2: Prior to the development of Master Plan projects involving land disturbance or land ownership changes, Phase I EDDAs shall be required to determine whether the land is, was, or has the potential for involvement with hazardous materials resulting in environmental contamination. Appropriate site-specific procedures, in accordance with applicable regulations and policies, shall then be required as a condition of project approval or associated land ownership transfers.

ATTACHMENT 1

MITIGATION MONITORING PLAN
For the Proposed Chino *Airport Master Plan* Update
(continued)

HYDROLOGY-1: Field surveys shall be required as part of the jurisdictional delineation for non-culverted drainages on the Airport property before site-specific development plans can be approved. Proposed development projects shall comply with the conditions and mitigation plans associated with any resulting permits.
HYDROLOGY-2: As future development of the Airport occurs, plans for improvements to support the increase of wastewater and runoff associated with the development shall be implemented. In the event that the drainage system exceeds capacity, proper water detention basins or other control methods shall be installed. As the Airport obtains the necessary local permits, additional mitigation may be required. These measures will be determined on a project-by-project basis and incorporated as necessary.

Appendix A
AIR QUALITY INPUT ASSUMPTIONS

Appendix A
AIR QUALITY INPUT ASSUMPTIONS

The following appendix details the parameters utilized to predict air emissions resulting from the proposed Chino Airport master plan improvements. Both long-term (operational) and short-term (construction) related emissions are addressed.

EMISSION MODELING AND ASSUMPTIONS

Operational Emissions

Operational emissions were modeled using FAA's Emissions and Dispersion Modeling System (EDMS) version 5.1.3. Aircraft operational levels by aircraft type were based upon a noise analysis conducted for this report using the Federal Aviation Administration's (FAA) Integrated Noise Model (INM) discussed in **Appendix D**. EDMS aircraft and engine assignments were based primarily upon FAA's list of approved aircraft, engines, and substitutions included in INM.

Construction Emissions

Air emissions occurring due to construction activity vary based on the project's duration and level of activity. Construction emissions occur mostly as exhaust products from the operation of construction equipment and vehicles, but can also occur as fugitive dust emissions from land disturbance during material staging, demolition, and movement. Evaporative emissions also result from asphalt paving operations. The type of construction equipment commonly used can

be categorized as both off- and on-road equipment. Off-road equipment is normally used for earthwork, paving, demolition, and other on-site activities, while on-road equipment is typically used to transport and deliver supplies and materials and also includes contractor employee trips to the site.

The equipment activity levels and vehicle parameters associated with the proposed improvements (i.e., horsepower, fuel type, expected hours of use) were estimated based on the expected construction schedule for the Chino Airport improvements. Equipment/vehicle emission factors were developed using the CARB-approved emissions models OFFROAD2007 (for off-road equipment) and EMFAC2007 (for on-road equipment). The emission factors were applied to the schedule-specific equipment parameters to calculate the total level of emissions expected from equipment use. The assumptions used for off-road and on-road equipment are included in **Tables A1** and **A2** for projects anticipated to occur in 2012, 2014, and 2016 which represent the first five years of the airport's capital improvement program. There are no construction activities programmed for 2013, 2015, or 2017.

TABLE A1
Off-Road Equipment Construction Assumptions Input for OFFROAD2007
Chino Airport

	Hours		
Off-Road Equipment	**2012**	**2014**	**2016**
Bore/Drill Rigs	30	0	0
Cement & Mortar Mixers	90	0	0
Cranes	0	16	0
Crawler Tractor/Dozers	180	160	0
Excavators	360	320	960
Graders	60	60	3840
Pavers	0	100	0
Paving Equipment	0	100	0
Rollers	0	200	3840
Rubber Tire Loaders	180	200	3840
Scrapers	30	250	1920
Skid Steer Loaders	180	80	3840
Surfacing Equipment	0	0	24
Tampers/Rammers	0	160	0
Tractors/Loaders/Backhoes	270	240	3840
Trenchers	360	120	0

Source: Coffman Associates analysis.

TABLE A2
On-Road Equipment Construction Assumptions Input for EMFAC2007
Chino Airport

On-Road Vehicles (Miles)	**2012**	**2014**	**2016**
Medium-Duty Trucks (MDV)	1,440	3,263	18,047
Light-Duty Trucks (LDT1)	4,500	9,000	48,000
Medium-Heavy-Duty (MHDT)	720	960	13,920
Heavy-Heavy-Duty (HHDT)	0	3,125	36,000

Source: Coffman Associates analysis.

Following are the modeling outputs generated from the EDMS, OFFROAD, and EMFAC2007 emissions models.

Emissions Inventory Summary

(Short Tons per Year)

Baseline - Chino 2012

Category	CO2	CO	THC	NM...	VOC	TOG	NOx	SOx	PM...	PM-...	Fuel Cons...
Aircraft	6,346.354	1,041.750	30.692	31.369	30.724	32.926	7.970	2.599	0.277	0.277	2,011.523
GSE	N/A	10.585	N/A	0.404	0.421	0.461	1.559	0.029	0.047	0.045	N/A
APUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parking Facilities	N/A	0.541	N/A	0.073	0.073	0.077	0.056	0.000	0.001	0.001	N/A
Roadways	N/A	0.167	N/A	0.013	0.013	0.014	0.021	0.000	0.001	0.000	N/A
Stationary Sour...	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	6,346.354	1,053.043	30.692	31.858	31.232	33.478	9.607	2.628	0.327	0.324	2,011.523

Emissions Inventory Summary

(Short Tons per Year)

Baseline - Chino 2015

Category	CO2	CO	THC	NM...	VOC	TOG	NOx	SOx	PM...	PM-...	Fuel Cons...
Aircraft	7,159.985	1,097.782	33.209	34.087	33.405	35.716	9.218	2.932	0.327	0.327	2,269.409
GSE	N/A	9.027	N/A	0.338	0.353	0.386	1.129	0.030	0.041	0.039	N/A
APUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parking Facilities	N/A	0.515	N/A	0.064	0.064	0.068	0.043	0.000	0.001	0.001	N/A
Roadways	N/A	0.160	N/A	0.011	0.011	0.012	0.016	0.000	0.001	0.000	N/A
Stationary Sour...	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	7,159.985	1,107.484	33.209	34.500	33.834	36.182	10.407	2.963	0.369	0.367	2,269.409

OFFROAD Emissions Factors
Class: Construction and Mining
Year: 2012, 2014, 2016
South Coast Air Basin

	Tons/Day						
	ROG Exhaust	**CO Exhaust**	**NOX Exhaust**	**CO2 Exhaust**	**SO2 Exhaust**	**PM Exhaust**	**CH4 Exhaust**
Pavers	0.000286	0.000835	0.002715	0.254965	0.000003	0.000107	0.000026
Plate Compactors	0.000005	0.000025	0.000030	0.004070	0.000000	0.000001	0.000000
Rollers	0.000149	0.000451	0.001556	0.168937	0.000002	0.000055	0.000013
Scrapers	0.000584	0.002276	0.005280	0.562716	0.000006	0.000208	0.000053
Paving Equipment	0.000191	0.000804	0.001497	0.132871	0.000001	0.000084	0.000017
Surfacing Equipment	0.000116	0.000485	0.001269	0.157479	0.000002	0.000044	0.000010
Signal Boards	0.000140	0.000704	0.001200	0.130021	0.000001	0.000063	0.000013
Trenchers	0.000311	0.001392	0.003001	0.309194	0.000003	0.000118	0.000028
Bore/Drill Rigs	0.000356	0.001447	0.003489	0.815492	0.000008	0.000115	0.000032
Excavators	0.000404	0.001230	0.003608	0.523348	0.000005	0.000129	0.000036
Concrete/Industrial Saws	0.000105	0.000445	0.000695	0.067631	0.000001	0.000058	0.000010
Cement and Mortar Mixers	0.000014	0.000040	0.000073	0.008282	0.000000	0.000004	0.000001
Cranes	0.000557	0.001924	0.005334	0.610325	0.000006	0.000196	0.000050
Graders	0.000291	0.000993	0.002721	0.343230	0.000003	0.000100	0.000026
Off-Highway Trucks	0.001156	0.003377	0.010204	1.382140	0.000014	0.000364	0.000104
Crushing/Proc. Equipment	0.000655	0.002086	0.007267	0.884304	0.000009	0.000234	0.000059
Rough Terrain Forklifts	0.000241	0.000694	0.002510	0.304385	0.000003	0.000082	0.000022
Rubber Tired Loaders	0.000204	0.000588	0.002013	0.228455	0.000003	0.000071	0.000018
Rubber Tired Dozers	0.000652	0.001826	0.005634	0.470224	0.000005	0.000242	0.000059
Tractors/Loaders/Backhoes	0.000192	0.000571	0.001950	0.261339	0.000003	0.000063	0.000017
Crawler Tractors	0.000790	0.003011	0.007231	0.766829	0.000008	0.000281	0.000071
Skid Steer Loaders	0.000080	0.000312	0.000321	0.034134	0.000000	0.000024	0.000007
Off-Highway Tractors	0.001198	0.005431	0.010800	0.999055	0.000010	0.000442	0.000108
Dumpers/Tenders	0.000010	0.000034	0.000064	0.007937	0.000000	0.000003	0.000001

Title : Chino MP
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2012/04/30 14:42:24
Scen Year: 2012 -- All model years in the range 1968 to 2012 selected
Season : Annual
Area : South Coast AQMD
****

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.073	0.141	0.153	0.642

Pollutant Name: Carbon Monoxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	2.642	2.163	1.93	4.006

Pollutant Name: Oxides of Nitrogen

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.36	1.141	4.922	10.836

Pollutant Name: Carbon Dioxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	488.891	463.459	1328.468	1664.665

Pollutant Name: Sulfur Dioxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.005	0.004	0.013	0.016

Pollutant Name: PM30

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.018	0.009	0.141	0.384

Title : Chino MP
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2012/04/30 14:42:24
Scen Year: 2014 -- All model years in the range 1970 to 2014 selected
Season : Annual
Area : South Coast AQMD
****

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.061	0.119	0.135	0.523

Pollutant Name: Carbon Monoxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	2.353	1.769	1.664	3.248

Pollutant Name: Oxides of Nitrogen

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.307	0.985	4.006	8.265

Pollutant Name: Carbon Dioxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	488.718	463.472	1326.372	1671.306

Pollutant Name: Sulfur Dioxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.005	0.004	0.013	0.016

Pollutant Name: PM30

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.019	0.009	0.127	0.302

Title : Chino MP
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2012/04/30 14:42:24
Scen Year: 2016 -- All model years in the range 1972 to 2016 selected
Season : Annual
Area : South Coast AQMD
****

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.051	0.1	0.118	0.425

Pollutant Name: Carbon Monoxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	2.105	1.456	1.438	2.653

Pollutant Name: Oxides of Nitrogen

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.262	0.854	3.228	6.244

Pollutant Name: Carbon Dioxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	488.563	463.467	1324.317	1676.437

Pollutant Name: Sulfur Dioxide

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.005	0.004	0.013	0.016

Pollutant Name: PM30

Speed	MDV	LHD1	MHD	HHD
MPH	ALL	ALL	ALL	ALL
45	0.02	0.009	0.115	0.236