# Chapter 8
## Health and Safety

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## 8.1 Introduction

Under the Draft General Plan, Chapter 8 is the Health and Safety Element. Consequently this chapter discusses the potential impacts of the Proposed Project on a variety of public health and safety issues including:

- Geologic and Seismic Hazards (Section 8.2),
- Air Quality (Section 8.3),
- Human-Made Hazards (Section 8.4),
- Flooding (Section 8.5),
- Urban and Wildland Fires (Section 8.6),
- Public Safety (Section 8.7), and
- Noise (Section 8.8).

## 8.2 Geologic and Seismic Hazards

The potential for geologic and seismic hazards (including ground shaking, landslides, and liquefaction) is the focus of this section. Potential impacts associated with increased soil erosion resulting from implementation of the Proposed Project are addressed in Chapter 7, Open Space and Conservation, (see Section 7.2, Soils). Mineral resource issues are addressed in Section 7.4, Mineral and Energy Resources, of Chapter 7.

No comments regarding geologic and/or seismic hazards were received during the public scoping period.

### Setting

A brief description of local and regional geologic conditions is provided below, with a more detailed description provided in Chapter 8, Health and Safety, in the General Plan Background Report (Appendix B, see pages 8-1 through 8-12).

The study area is located near the eastern edge of the lower Sacramento Valley. The Sacramento Valley is a broad lowland approximately 50 miles wide within the vicinity of the City. Several mountain ranges border the valley including the Coast Range to the west and the Sierra Nevada Range to the east. The study area is located 90 miles east of the Bay Area and lies within Seismic Risk Zone 3. Earthquakes in Seismic Risk Zone 3 pose a lesser risk than those experienced in Zone 4 (such as the San Francisco Bay Area). Consequently, the study area may be affected by regionally occurring earthquakes; however, impacts resulting from such an event would be less in nature than those experienced in the Bay Area. The study area is neither located within, nor crosses, a delineated Alquist-Priolo Earthquake Fault Zone.

The probability of soil liquefaction actually taking place in the study area is considered to be a low hazard, due to the substantial distance from the active Hayward, Cleveland Hills, and Concord Fault zones and the type of ground shaking expected from those faults. However, the possibility of soil liquefaction exists in areas consisting of artificial fill or unconsolidated alluvium and should be considered when planning and designing structures.

## Draft General Plan Policies

The Draft General Plan contains a variety of policies and implementation measures that have been designed to address seismic and geologic issues. For each impact described below a summary of the specific policies and implementation measures that address each impact is also provided. A complete description of all the goals, policies, and implementation measures addressing geologic issues is provided on pages 8-1, 8-2, and 8-10 of the Goals and Policies Report (Appendix C).

## Impact Methodology

The potential for geologic and seismic impacts as a result of implementation of the Proposed Project was reviewed and evaluated using readily available background information, such as pertinent geologic maps and seismic hazard maps. Key sources of information included the California Division of Mines and Geology and the United States Geologic Survey.

To reduce or mitigate potential hazards from earthquakes or other local geologic hazards, the City ensures that development will continue to be completed in compliance with local and State regulations. These regulations include the California Building Code, the Uniform Building Code, the Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazard Mapping Act. Policies and implementation measures developed for the Proposed Project include continued conformance with these applicable local and State building regulations.

## Standards of Significance

The Proposed Project will establish development guidelines against which future projects will be determined for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G of the CEQA Guidelines and based on the professional judgment of the City of Lincoln and its consultants. The Proposed Project would result in a significant impact if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) 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; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides;
- 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 an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse; or
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

## Impacts and Mitigation Measures

**Impact HS-1: The Proposed Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake, 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; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides.**

### Impact Analysis

The study area's topography is relatively flat and is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Additionally, the probability of soil liquefaction actually taking place in the study area is considered to be a low hazard. However, the possibility of soil liquefaction exists within the study area and should be considered when planning and designing levees and structures in areas of potential liquefaction.

The Proposed Project includes several policies and implementation measures designed to address a variety of environmental impacts. For example, the draft Health and Safety Element provides a number of policies that have been developed to ensure a safe environment for its residents, visitors, and businesses. These policies and implementation measures include continued compliance with all applicable development requirements including the Uniform Building Code (see Policies HS-2.1 and HS-2.4) and the restriction of development within a variety of hazardous

areas (see Policies HS-2.2 and HS-2.3). Policy HS-1.1 requires the preparation of engineering studies for all new development proposals within areas of potential soil instability. Additionally, Health and Safety Implementation Measure #1 requires the City to amend the Zoning Ordinance to prohibit development of areas with slopes greater than 30%. Implementation Measure #2 requires the City to adopt guidelines for both the evaluation and mitigation of all applicable geologic hazards common to the study area as part of the approval for both public and private projects. With adherence to these codes and regulations and implementation of the policies and implementation measures contained in the draft Health and Safety Element, geologic hazard impacts associated with on-or off-site landslide, subsidence, liquefaction, or collapse would be minimized. With implementation of the below mentioned policies, this impact is considered ***less than significant.***

| **Health and Safety Element** |
|---|
| Policies designed to minimize geologic hazard impacts to people and structures in the study area include the following: |
| HS-1.1 Engineering Analysis of Potential Hazards<br>HS-2.1 Seismic Safety of Structures<br>HS-2.2 Limit Hillside Development<br>HS-2.3 Development in Areas Subject to Geologic Hazards<br>HS-2.4 California Building Standard Code<br>Implementation Measure #1<br>Implementation measure #2 |

### Required Mitigation Measures

This impact is considered ***less than significant.*** No additional mitigation measures are required.

**Impact HS-2: The Proposed Project would not 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.**

### Impact Analysis

As more fully described above under Impact HS-1, the study area is not located within a delineated Alquist-Priolo Earthquake Fault Zone and the probability of soil liquefaction actually taking place in the study area is considered to be a low hazard. Although a majority of the City's topography is considered relatively flat, areas to the east are near the foothill areas of the Sierra Nevada Mountain Range.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, Policy HS-2.2 and Implementation Measure #1 provide guidelines for limiting development in areas with sever slope conditions. Policy HS-1.1 also requires the preparation of engineering studies for all new development proposals within areas of potential soil instability. Additionally, Implementation Measure #2 requires the City to adopt guidelines for both the evaluation and mitigation of all applicable geologic hazards common to the study area as part of the approval for

both public and private projects. With adherence to all applicable State and local building codes and regulations and implementation of the policies and implementation measures contained in the draft Health and Safety Element, impacts associated with on-or off-site landslide, subsidence, liquefaction, or collapse would be minimized. Consequently, with implementation of the below mentioned policies, this impact is considered ***less than significant.***

| **Health and Safety Element** |
|---|
| Policies designed to minimize geologic hazard impacts to people and structures in the study area include the following: |
| HS-1.1 Engineering Analysis of Potential Hazards<br>HS-2.2 Limit Hillside Development<br>Implementation Measure #1<br>Implementation measure #2 |

### Required Mitigation Measures

This impact is considered ***less than significant.*** No additional mitigation measures are required.

**Impact HS-3: The Proposed Project could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), but would not create substantial risks to life or property.**

### Impact Analysis

Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when they dry) or swelling (when they become wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, including the extent of wet or dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls. Within the study area, expansive soils are more common in less developed areas. In most developed areas, the existing layer of clay has been blended into more granular soils as a part of general site excavation, which helps to reduce the overall soil's expansiveness.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, policies include continued compliance with all applicable development requirements including the Uniform Building Code (see Policies HS-2.1 and HS-2.4) and the restriction of development within a variety of hazardous areas (see Policies HS-2.2 and HS-2.3). Policy HS-1.1 requires the preparation of engineering studies for all new development proposals within areas of potential soil instability. Additionally, Health and Safety Implementation Measure #1 requires the City to amend the Zoning Ordinance to prohibit development of areas with slopes greater than 30%. Implementation Measure #2 requires the City to adopt guidelines for both the evaluation and mitigation of all applicable geologic hazards common to the study area as part of the approval for both public and private projects. With adherence to these codes and regulations and implementation of the policies and implementation measures contained in the draft Health and Safety Element, geologic hazard impacts associated with on-or off-site landslide, subsidence, liquefaction, or collapse would be minimized. With implementation of the below mentioned policies, this impact is considered ***less than significant.***

| Health and Safety Element |
|---|
| Policies designed to minimize geologic hazard impacts to people and structures in the study area include the following: |
| HS-1.1 Engineering Analysis of Potential Hazards<br>HS-2.1 Seismic Safety of Structures<br>HS-2.2 Limit Hillside Development<br>HS-2.3 Development in Areas Subject to Geologic Hazards<br>HS-2.4 California Building Standard Code<br>Implementation Measure #1<br>Implementation measure #2 |

**Required Mitigation Measures**

This impact is considered ***less than significant.*** No additional mitigation measures are required.

# 8.3 Air Quality

As a result of comments (see Table 1-1 of Chapter 1, Introduction) received during the NOP public scoping phase of the Proposed Project, a variety of air quality issues have been considered as part of the impact analysis. For example, the Placer County Air Pollution Control District (PCAPCD) suggested that the EIR should include a discussion of the City's existing air quality, a description of applicable State and federal air quality standards, an estimate of daily emissions associated with the Proposed Project, and any mitigation strategies developed to reduce air quality impacts.

## Setting

A brief description of air quality conditions within the study area is provided below, with a more detailed description provided in Chapter 8, Health and Safety, in the Background Report (Appendix B, see pages 8-12 through 8-21).

The study area falls within the Sacramento Valley Air Basin (SVAB), which extends from Shasta County (northernmost boundary) to Sacramento and Solano counties (southernmost boundary). The region experiences temperature inversions, which limit atmospheric mixing and trap pollutants, resulting in high pollutant concentrations near ground level. Surface inversions (0-500 feet) are most frequent during winter; subsidence inversions (1,000-2,000 feet) are most frequent during summer. Stationary emission sources in the study area include the use of cleaning and surface coatings and industrial processes, road dust, local burning, construction/demolition activities, and fuel combustion. Mobile emissions are primarily generated from the operation of vehicles. According to air quality monitoring data, the study area has been in violation for exceeding ozone and PM10 emission standards for several years.

## Draft General Plan Policies

The Draft General Plan contains a variety of policies and implementation measures that have been designed to address air quality issues. For each impact described below a summary of the specific policies and implementation measures that address each impact is also provided. A complete

description of all the goals, policies, and implementation measures addressing air quality issues is provided on pages 4-33, 4-40, 6-1, 6-4 through 6-5, and page 6-13 of the Goals and Policies Report (Appendix C).

## Impact Methodology

Buildout of the Proposed Project will allow planned development to occur within both developed (infill) and undeveloped portions of the study area. While buildout or development will ultimately be market driven, for modeling purposes this analysis is based on the assumption that most uses will be developed by the year 2050 and emissions were estimated for this planning horizon. This analysis is based on methodologies and thresholds included in the URBEMIS 2002 Air Pollution Emission Model (CARB, 2004) using specified assumptions. Several default land use factors in the URBEMIS 2002 computer model (Version 8.7 model) were modified to reflect actual land use acreages and densities reflected in the land use model developed for the Proposed Project. Appendix I provides additional detail on the land use modeling assumptions used in the air quality analysis.

## Standards of Significance

The Proposed Project will establish development guidelines against which future projects will be determined for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G of the CEQA Guidelines and based on the professional judgment of the City of Lincoln and its consultants. The Proposed Project would result in a significant impact if it would:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

## Impacts and Mitigation Measures

**Impact HS-4: The Proposed Project would result in a cumulatively considerable net increase of criteria pollutants. Future growth in accordance with the Proposed Project would exceed the daily PCAPCD thresholds for NOx, ROG, CO, and PM10.**

### Impact Analysis

Construction activity that would occur over the next 45 to 50 years in accordance with the Proposed Project would cause temporary, short-term emissions of various air pollutants. Nitrogen oxides and carbon monoxide would be emitted by activities that disturb the soil, such as grading and excavation, infrastructure construction, building demolition, and a variety of construction activities. Information regarding specific development projects, soil conditions, and the location of sensitive receptors in relation to the various projects would be needed in order to quantify the level of impact associated with construction activity. However, given the amount of development associated with implementation of the Proposed Project, it is reasonable to assume that some large-scale construction activity would exceed PCAPCD adopted thresholds over the next 45 to 50 years. Actual significance would be determined on a project by project basis as future development applications are submitted and reviewed by the City.

Operational impacts would result from local and regional vehicle emissions generated by future population growth associated with buildout of the Proposed Project. The daily number of vehicle trips associated with buildout of the Proposed Project was based on data generated by the URBEMIS 2002 model with implementation of specific land use information and verified against the results of the traffic analysis prepared for the Proposed Project. The total emissions generated by the Proposed Project were calculated using the URBEMIS 2002 model and are provided below in **Table 8-1**. As shown in the table, future growth in accordance with the Proposed Project would exceed the daily PCAPCD thresholds for NOx, ROG, PM10, and CO.

**TABLE 8-1**
**AREA AND OPERATIONAL EMISSIONS (POUNDS PER DAY)**

| Unmitigated Area plus Operation Emissions (pounds/day)a | | | |
|---|---|---|---|
| **Pollutant** | **PCAPCD Thresholds** | **Buildout Year (2050)b** | **Significant (Yes or No)b** |
| ROG | 82 | **6,092** | **Yes** |
| NOx | 82 | **1,580** | **Yes** |
| PM10 | 82 | **5,715** | **Yes** |
| SO2 | 82 | 41 | No |
| CO | 550 | **12,453** | **Yes** |

Notes:
Emission factors were generated by the Air Board's URBEMIS 2002 computer model (version 8.7) for the Lower Sacramento Air Basin.

Bold values are in excess of the applicable standard. The PCAPCD established thresholds for ROG, NOx, PM10, and CO are 82 pounds per day and 550 pounds per day for SO2.

An increase in stationary source emissions is also anticipated with buildout of the Proposed Project. In addition to vehicle emissions, emissions will be generated from a variety of stationary sources including the use of natural gas, the use of landscape maintenance equipment, and the use of woodburning fireplaces. These emissions were also calculated using the URBEMIS 2002 computer model and are included in the results provided in Table 8-1. A variety of industrial and commercial processes (e.g., dry cleaning, etc.) allowed under the Proposed Project would also be expected to release emissions; some of which could be of a hazardous nature. These emissions are controlled at the local and regional level through permitting and would be subject to further study and a health risk assessment prior to the issuance of any necessary air quality permits.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, Policy HS-3.4 encourages businesses to implement a variety of transportation alternatives to vehicle use. Policy HS-3.7 also requires preparation of a Transportation Management Program consistent with City circulation policies by new project applicants. Other policies (see HS-3.1, HS-3.2, and HS-3.3) require the City to continue its support of the Placer County Air Quality Attainment Plan and continued regional cooperation with other agencies to address air quality planning issues. Policy HS-3.5 requires new developments to be located, designed, and constructed in a manner that minimizes the production of air pollutants and avoids land use conflicts. Also, Policy HS-5.3 encourages the City work with existing industrial uses to make improvements in air quality emissions. Other policies (see HS-3.6 and HS-3.8) require air quality analysis for significant new developments and encourage the consideration of alternatives or amendments that reduce air quality emissions during the applicant review process. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant.***

| **Health and Safety Element** |
|---|
| Policies designed to support regional transportation management program goals and policies include the following: |
| HS-3.4 Transportation Demand Management<br>HS-3.7 Transportation Management Program |
| Policies designed to encourage continued support of regional air quality planning efforts include the following: |
| HS-3.1 Cooperation with Local and Regional Agencies<br>HS-3.2 Regional Agency Review of Development Proposals<br>HS-3.3 Placer County Air Quality Attainment Plan |
| Policies designed to address air quality impacts as part of the City's development review process include the following: |
| HS-3.5 Development Requirements<br>HS-3.6 City Review of Development Proposals<br>HS-3.8 Air Quality Analysis<br>HS-5.3 Air Emissions of Existing Industries |

### Required Mitigation Measures

In addition to the above mentioned policies, the following revisions to policy HS-3.1 "Cooperation with Local and Regional Agencies" and the new policies HS-3.9 "Dust Suppression Measures", HS-3.10 "Travel Demand Measures", HS-3.11 "Woodburning", HS-3.12 "Employment-Intensive Development", HS-3.13 "Location of Support Services", HS-3.14 "Parking Controls", HS-3.15 "Infill Near Employment", HS-3.16 "Planning Programs", HS-3.17 "Street Design", HS-3.18 "Design for Transportation Alternatives", HS-3.19 "Working with Employers", HS-3.20 "Transportation Management Associations", and Health and Safety Implementation Measures #8 - 10 are required to lessen this impact.

- **HS-3.1 Cooperation with Local and Regional Agencies.** The City shall cooperate with other *local, regional, and State* agencies in developing an effective approach to ~~regional air quality planning management~~ implementing air quality plans that achieve State and Federal Ambient Air Quality Standards. Air quality plans shall incorporate programs developed by the Sacramento Area Council of Governments and the PCAPCD. [Revised Policy – *Draft EIR Analysis*].

- **HS-3.9 Dust Suppression Measures.** The City shall require contractors to implement dust suppression measures during excavation, grading, and site preparation activities. Techniques may include, but are not limited to, the following:

  Site watering or application of dust suppressants,

  Phasing or extension of grading operations,

  Covering of stockpiles,

  Suspension of grading activities during high wind periods (typically winds greater than 25 miles per hour), and

  Revegetation of graded areas. *[New Policy – Draft EIR Analysis]*.

- **HS-3.10 Travel Demand Measures.** Coordinating with the PCAPCD, the City shall require large development projects to mitigate air quality impacts. As feasible, mitigations may include, but are not limited to the following:

  Providing bicycle access and bicycle parking facilities,

  Providing preferential parking for high-occupancy vehicles, car pools, or alternative fuels vehicles (including neighborhood electric vehicles or NEVs), and

  Establishing telecommuting programs or satellite work centers. *[New Policy – Draft EIR Analysis]*.

- **HS-3.11 Woodburning.** The City shall require the use of natural gas or the installation of low-emission, EPA-certified fireplace inserts in all open hearth fireplaces in new homes. The city shall promote the use of natural gas over wood products in space heating devices and fireplaces in all new homes and existing homes considering remodeling plans. *[New Policy – Draft EIR Analysis]*.

- **HS-3.12 Employment-Intensive Development.** The City shall encourage employment-intensive development with a high floor area ratio where adequate community transit services are planned, and discourage such development where adequate community transit service is not planned. *[New Policy – Draft EIR Analysis]*.

- **HS-3.13 Location of Support Services.** The City shall support the location of ancillary employee services (including, but not limited to, child care, restaurants, banking facilities, convenience markets) at major employment centers for the purpose of reducing midday vehicle trips. *[New Policy – Draft EIR Analysis]*

- **HS-3.14 Parking Controls.** The City shall provide disincentives for single-occupant vehicle trips through parking supply and pricing controls in areas where supply is limited and alternative transportation modes are available. *[New Policy – Draft EIR Analysis]*.

- **HS-3.15 Infill Near Employment.** The City shall identify and adopt incentives for planning and implementing infill development projects within urbanized areas near job centers and transportation nodes. *[New Policy – Draft EIR Analysis]*.

- **HS-3.16 Planning Programs.** The City shall support land use, transportation management, infrastructure, and environmental planning programs that reduce vehicle emissions and improve air quality. *[New Policy – Draft EIR Analysis]*.
- **HS-3.17 Street Design.** The City shall promote street design that provides an environment which encourages neighborhood electric vehicles, transit use, biking and walking. *[New Policy – Draft EIR Analysis]*.
- **HS-3.18 Design for Transportation Alternatives.** The City shall encourage all new development to be designed to promote pedestrian and bicycle access and circulation (including the use of NEVs), to the greatest extent feasible. *[New Policy – Draft EIR Analysis]*.
- **HS-3.19 Working with Employers.** The City shall encourage employers to provide transit subsidies, bicycle facilities, and alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education, and preferential parking for carpools/vanpools. *[New Policy – Draft EIR Analysis]*.
- **HS-3.20 Transportation Management Associations.** The City shall encourage commercial, retail, and residential developments to participate in or create Transportation Management Associations. *[New Policy – Draft EIR Analysis]*.
- **Implementation Measure #8.** The City shall replace City fleet vehicles with low-emission technology vehicles, wherever possible. *[New Implementation Measure – Draft EIR Analysis]*.
- **Implementation Measure #9.** The City shall encourage lowest emission technology buses in public transit fleets. *[New Implementation Measure – Draft EIR Analysis]*.
- **Implementation Measure #10.** The City shall encourage the continued use of neighborhood electric vehicles. *[New Implementation Measure – Draft EIR Analysis]*.

As stated above, the City will adopt and implement a variety of policies and implementation measures (including the revised Policy HS-3.1 "Cooperation with Local and Regional Agencies" and the new policies HS-3.9 "Dust Suppression Measures", HS-3.10 "Travel Demand Measures", HS-3.11 "Woodburning", HS-3.12 "Employment-Intensive Development", HS-3.13 "Location of Support Services", HS-3.14 "Parking Controls", HS-3.15 "Infill Near Employment", HS-3.16 "Planning Programs", HS-3.17 "Street Design", HS-3.18 "Design for Transportation Alternatives", HS-3.19 "Working with Employers", HS-3.20 "Transportation Management Associations", and Health and Safety Implementation Measures #8 – 10) designed to address air quality issues. Depending on the feasibility and level of implementation, the inclusion of additional trip reduction measures would help to further reduce vehicle-related emissions. Future project-specific compliance with PCAPCD permitting would also help to reduce air quality emissions associated with individual projects. However, total air quality emissions associated with buildout of the Proposed Project would still exceed daily PCAPCD thresholds for NOx, ROG, PM10, and CO. Consequently, this impact remains ***significant.*** No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-4

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

**Impact HS-5: The Proposed Project would conflict with or obstruct implementation of an applicable air quality plan.**

### Impact Analysis

The Proposed Project was designed specifically to achieve and promote consistency with the planning documents of other key neighboring land use agencies or other agencies that have jurisdiction over the project (see Chapter 4 "Land Use"). Policies provided within the draft Health and Safety Element call for continued support of regional air quality plans and programs sponsored by the PCAPCD and Transportation Demand Management Programs sponsored by both the PCAPCD and the SACOG. For example, Policy HS-3.4 encourages businesses to implement a variety of transportation alternatives to vehicle use. Policy HS-3.7 also requires preparation of a Transportation Management Program consistent with City circulation policies by new project applicants. Other policies (see HS-3.1, HS-3.2, and HS-3.3) require the City to continue its support of the Placer County Air Quality Attainment Plan and continued regional cooperation with other agencies to address air quality planning issues. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant.***

| Health and Safety Element |
|---|
| Policies designed to support regional transportation management program goals and policies include the following: |
| HS-3.4 Transportation Demand Management<br>HS-3.7 Transportation Management Program |
| Policies designed to encourage continued support of regional air quality planning efforts include the following: |
| HS-3.1 Cooperation with Local and Regional Agencies<br>HS-3.2 Regional Agency Review of Development Proposals<br>HS-3.3 Placer County Air Quality Attainment Plan |

### Required Mitigation Measures

Similar to Impact HS-4, the City will adopt and implement a variety of policies and implementation measures (including revisions to Policy HS-3.1 "Cooperation with Local and Regional Agencies" and the new policies HS-3.10 "Travel Demand Measures", HS-3.11 "Woodburning", HS-3.12 "Employment-Intensive Development", HS-3.13 "Location of Support Services", HS-3.14 "Parking Controls", HS-3.15 "Infill Near Employment", HS-3.16 "Planning Programs", HS-3.17 "Street Design", HS-3.18 "Design for Transportation Alternatives", HS-3.19 "Working with Employers", HS-3.20 "Transportation Management Associations", and Health and Safety Implementation Measures #8 – 10) that have been developed to ensure conformance with regional air quality plans and Transportation Demand Management Programs sponsored by both the PCAPCD and the SACOG.

However, total air quality emissions associated with buildout of the Proposed Project would still result in a net increase of a criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ROG or ozone precursors). As a result, this impact remains ***significant***. No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-5

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

**Impact HS-6: Buildout of the Proposed Project would generate emissions above the daily PCAPCD significance thresholds for a variety of pollutants, primarily due to emissions related to increased traffic.**

### Impact Analysis

As more fully described above under Impact HS-4, development resulting from buildout of the Proposed Project would result in an increase in emissions primarily due to additional motor vehicle trips. Stationary sources and area sources associated with future development would also generate criteria air pollutant emissions. Residential wood stoves and fireplaces are a significant source of CO and PM10 emissions during wintertime conditions. Operational emissions of ROG, NOx and PM10 from project related motor vehicle trips and area sources (natural gas combustion for space heating, landscaping equipment use, consumer products use, and wood stove and fireplace use) were estimated using URBEMIS 2002 computer model, with the results summarized above in Table 8-1. The results indicate that buildout of the Proposed Project would generate emissions above the significance thresholds for NOx, ROG, PM10, and CO.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, Policy HS-3.4 encourages businesses to implement a variety of transportation alternatives to vehicle use. Policy HS-3.7 also requires preparation of a Transportation Management Program consistent with City circulation policies by new project applicants. Other policies (see HS-3.1, HS-3.2, and HS-3.3) require the City to continue its support of the Placer County Air Quality Attainment Plan and continued regional cooperation with other agencies to address air quality planning issues. Policy HS-3.5 requires new developments to be located, designed, and constructed in a manner that minimizes the production of air pollutants and avoids land use conflicts. Also, Policy HS-5.3 encourages the City work with existing industrial uses to make improvements in air quality emissions. Other policies (see HS-3.6 and HS-3.8) require air quality analysis for significant new developments and encourage the consideration of alternatives or amendments that reduce air quality emissions during the applicant review process. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant.***

| Health and Safety Element |
|---|
| Policies designed to support regional transportation management program goals and policies include the following: |
| HS-3.4 Transportation Demand Management<br>HS-3.7 Transportation Management Program |
| Policies designed to encourage continued support of regional air quality planning efforts include the following: |
| HS-3.1 Cooperation with Local and Regional Agencies<br>HS-3.2 Regional Agency Review of Development Proposals<br>HS-3.3 Placer County Air Quality Attainment Plan |
| Policies designed to address air quality impacts as part of the City's development review process include the following: |
| HS-3.5 Development Requirements<br>HS-3.6 City Review of Development Proposals<br>HS-3.8 Air Quality Analysis<br>HS-5.3 Air Emissions of Existing Industries |

### Required Mitigation Measures

Similar to Impact HS-4, the City will adopt and implement a variety of policies and implementation measures (including the revised Policy HS-3.1 "Cooperation with Local and Regional Agencies" and the new policies HS-3.9 "Dust Suppression Measures", HS-3.10 "Travel Demand Measures", HS-3.11 "Woodburning", HS-3.12 "Employment-Intensive Development", HS-3.13 "Location of Support Services", HS-3.14 "Parking Controls", HS-3.15 "Infill Near Employment", HS-3.16 "Planning Programs", HS-3.17 "Street Design", HS-3.18 "Design for Transportation Alternatives", HS-3.19 "Working with Employers", HS-3.20 "Transportation Management Associations", and Health and Safety Implementation Measures #8 – 10) designed to address air quality issues. Depending on the feasibility and level of implementation, the inclusion of additional trip reduction measures would help to further reduce vehicle-related emissions. Future project-specific compliance with PCAPCD permitting would also help to reduce air quality emissions associated with individual projects. However, total air quality emissions associated with buildout of the Proposed Project could still result in a net increase of a criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ROG or ozone precursors). As a result, this impact remains ***significant***. No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-6

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

**Impact HS-7: The Proposed Project would expose sensitive receptors to substantial pollutant concentrations.**

### Impact Analysis

Development (in particular infill development) resulting from buildout of the Proposed Project could place sensitive land uses near local intersections or roadways associated with air pollutant emissions that exceed State or federal ambient air quality standards. Similarly, existing sensitive land uses near local roadways that experience increased levels of traffic resulting from buildout of the Proposed Project could be exposed to air pollutant emissions that exceed State and/or federal ambient air quality standards.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. To help address a variety of nuisance issues (including air quality concerns) associated with the inappropriate siting of sensitive land uses near other incompatible uses, the Proposed Project locates future industrial uses near existing industrial facilities and complexes such as the Lincoln Regional Airport (see Policies LU-2.1, LU-2.10, LU-3.6, LU-4.1, HS-4.1, and HS-4.3 below). Future multi modal corridors are also proposed for areas that minimize direct exposure to more sensitive land uses (i.e., residential uses, etc.). Policy HS-3.5 requires new developments to be located, designed, and constructed in a manner that minimizes the production of air pollutants and avoids land use conflicts. Also, Policy HS-5.3 encourages the City to work with existing industrial uses to make improvements in air quality emissions. Other policies (see HS-3.6 and HS-3.8) require air quality analysis for significant new developments and encourage the consideration of alternatives or amendments that reduce air quality emissions during the applicant review process. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant.***

| **Health and Safety Element** |
|---|
| Policies designed to address air quality impacts as part of the City's development review process include the following: |
| HS-3.5 Development Requirements<br>HS-3.6 City Review of Development Proposals<br>HS-3.8 Air Quality Analysis<br>HS-5.3 Air Emissions of Existing Industries |
| Policies designed to minimize a variety of airport-related risks (i.e., odor, air quality, noise, etc.) to City residents and property include the following: |
| HS-4.1 Airport Land Use Compatibility Plan<br>HS-4.3 Development in Airport Vicinity |
| **Land Use and Community Design Element** |
| Policies designed to promote compatible development within areas that minimize impacts to surrounding land uses include the following: |
| LU-2.1 Prevent Incompatible Uses<br>LU-2.10 Airport Buffer<br>LU-3.6 Buffer Commercial Land Uses<br>LU-4.1 Buffer Incompatible Uses<br>LU-4.2 Protect Environment |

### Required Mitigation Measures

In addition to the above mentioned policies, the following revisions to existing Policy LU-2.1 "Prevent Incompatible Uses" and the new LU-1.7 "Land Use Conflicts" are also required to lessen this impact.

- **LU-2.1 Prevent Incompatible Uses.** The City shall prevent the intrusion of new incompatible *activities and* land uses *(i.e., traffic, noise) and environmental hazards (i.e., flood, soil instability)* into existing residential areas. *[Existing Land Use Element Policy 4.1 – Draft EIR Analysis]*

- **LU-1.14 Land Use Conflicts.** The City shall continue to apply the regulations and procedures of the City's Zoning Ordinance and shall use the environmental process to prevent or mitigate land use conflicts. *[New Policy – Draft EIR Analysis]*

Additionally, subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and to the extent feasible, mitigate any potential air quality impacts to a less-than-significant level. Examples of mitigation that may be proposed include intersection/roadway capacity improvements or additional land use siting and required setbacks. However, it should be noted, the ability to mitigate these potential impacts is contingent on a variety of factors including the severity of the air quality impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures (e.g., relocations, road widening, etc.). Consequently, given the uncertainty as to whether future air quality impacts associated with the potential exposure of sensitive receptors to substantial pollutant concentrations could be adequately mitigated, this impact remains ***significant***. No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-7

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

**Impact HS-8: The Proposed Project would create objectionable odors affecting a substantial number of people.**

### Impact Analysis

Construction activity will require the operation of equipment which may generate exhaust from either gasoline or diesel fuel. Construction of new buildings will also require the application of paints and the paving of roads which would generate odors from materials such as paints and asphalt. However, these odors are of a temporary or short-term nature and quickly disperse into the surrounding atmosphere.

Future residential and commercial development would also involve minor, odor-generating activities, such as backyard barbeque smoke, garden equipment exhaust, and the application of exterior paint for home improvement activities. These types of odors are typical of most residential communities and are not considered significant generators of odor impacts.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. To help address a variety of nuisance issues (including odor concerns) associated with the inappropriate siting of sensitive land uses near other incompatible uses, the Proposed Project clusters future industrial uses near existing industrial facilities and complexes such as the Lincoln Regional Airport (see Policies LU-2.1, LU-2.10, LU-3.6, LU-4.1, HS-4.1, and HS-4.3 below). Similarly, Policy PFS-5.8 promotes the provision of adequate buffers for the Western Regional Landfill, in order to prevent the encroachment of incompatible land uses, which could affect its long-term operations. Future multi modal corridors are also proposed for areas that minimize direct exposure to more sensitive land uses (i.e., residential uses, etc.). Policy HS-3.5 requires new developments to be located, designed, and constructed in a manner that minimizes the production of air pollutants and avoids land use conflicts. Also, Policy HS-5.3 encourages the City to work with existing

industrial uses to make improvements in air quality emissions. Other policies (see HS-3.6 and HS-3.8) require air quality analysis for significant new developments and encourage the consideration of alternatives or amendments that reduce air quality emissions that may also result in odor impacts during the applicant review process. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant.***

<table>
<tr><th colspan="2">Health and Safety Element</th></tr>
<tr><td colspan="2">Policies designed to address air quality impacts as part of the City's development review process include the following:</td></tr>
<tr><td colspan="2">HS-3.5 Development Requirements<br>HS-3.6 City Review of Development Proposals<br>HS-3.8 Air Quality Analysis<br>HS-5.3 Air Emissions of Existing Industries</td></tr>
<tr><td colspan="2">Policies designed to minimize a variety of airport-related risks (i.e., odor, air quality, noise, etc.) to City residents and property include the following:</td></tr>
<tr><td colspan="2">HS-4.1 Airport Land Use Compatibility Plan<br>HS-4.3 Development in Airport Vicinity</td></tr>
<tr><th>Land Use and Community Design Element</th><th>Public Facilities and Services</th></tr>
<tr><td colspan="2">Policies designed to promote compatible development within areas that minimize impacts to surrounding land uses include the following:</td></tr>
<tr><td>LU-2.1 Prevent Incompatible Uses<br>LU-2.10 Airport Buffer<br>LU-3.6 Buffer Commercial Land Uses<br>LU-4.1 Buffer Incompatible Uses<br>LU-4.2 Protect Environment</td><td>PFS-5.8 Provisions of Buffers for Regional Landfill</td></tr>
</table>

### Required Mitigation Measures

In addition to the above mentioned policies, the following revisions to Policy LU-2.1 "Prevent Incompatible Uses" and the new Policies LU-1.7 "Land Use Conflicts" and PFS-3.11 "Provisions of Buffers for Wastewater Treatment Facility" are required to ensure that this impact is reduced to a less-than-significant level:

- **LU-2.1 Prevent Incompatible Uses.** The City shall prevent the intrusion of new incompatible *activities and* land uses *(i.e., traffic, noise) and environmental hazards (i.e., flood, soil instability)* into existing residential areas. *[Existing Land Use Element Policy 4.1 – Revised Draft EIR Analysis]*

- **LU-1.14 Land Use Conflicts.** The City shall continue to apply the regulations and procedures of the City's Zoning Ordinance and shall use the environmental process to prevent or mitigate land use conflicts. *[New Policy – Draft EIR Analysis]*

- **PFS-3.11 Provisions of Buffers for Wastewater Treatment Facility.** The City shall continue to promote the provision of adequate buffers for the City's regional wastewater facility, in order to prevent the encroachment of incompatible land uses, which could affect its long-term operations. *[New Policy – Draft EIR Analysis]*

**Significance after Implementation of Mitigation for Impact HS-8**

As stated above, the Draft General Plan includes a number of policies that address a variety of nuisance issues including air quality emissions and odors. Therefore, implementation of the Proposed Project including the adoption of the policies listed above (including the revised Policy LU-2.1 "Prevent Incompatible Uses" and the new Policies LU-1.14 "Land Use Conflicts" and PFS-3.11 "Provisions of Buffers for Wastewater Treatment Facility") would result in a ***less-than-significant*** impact.

# 8.4 Human-Made Hazards

This section provides information on a variety of safety hazards with the potential to occur within the study area, including human-made hazards associated with emergency preparedness and hazardous waste disposal.

As a result of comments (see Table 1-1 of Chapter 1, Introduction) received during the NOP public scoping phase of the Proposed Project, a variety of human-made hazard conditions have been considered as part of the impact analysis. For example, the Placer County Environmental Health Services Department suggested that the EIR should include an analysis of possible environmental and health risk impacts associated with agricultural-related contaminants.

## Setting

A brief description of human-made hazard conditions within the study area is provided below, with a more detailed description provided in Chapter 8, Health and Safety, in the Background Report (Appendix B, see pages 8-21 through 8-34).

A variety of hazardous materials are generated by residents and businesses within the study area. Generally, these businesses that have been known to use, store, and/or generate hazardous materials or wastes are those associated with local industrial uses (Gladding McBean, Lincoln Regional Airport, etc.) and with smaller commercial sites (i.e., gas stations, etc.). Other sites associated with a variety of human-made hazard conditions include underground storage tanks, above ground storage tanks, landfill and disposal sites, railroads, the Lincoln Wastewater Treatment Plant and the Lincoln Regional Airport (Airport).

## Draft General Plan Policies

The Draft General Plan contains a variety of policies and implementation measures that have been designed to address human-made hazards conditions. For each impact described below a summary of the specific policies and implementation measures that address each impact is also provided. A complete description of all the goals, policies, and implementation measures addressing human-made hazards is provided on pages 4-33, 4-40, 6-1, 6-4 through 6-5, and pages 6-13of the Goals and Policies Report (Appendix C).

## Impact Methodology

The assessment of human-hazard impacts is a qualitative review of the existing conditions applicable to the study area and a determination of whether the Proposed Project includes adequate provisions to address the potential impacts associated with local human-hazard conditions.

## Standards of Significance

The Proposed Project will establish development guidelines against which future projects will be determined for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G of the CEQA Guidelines and based on the professional judgment of the City of Lincoln and its consultants. The Proposed Project would result in a significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or involve handling hazardous or acutely hazardous substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site that 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 environment;
- Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area;
- Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- 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.

# Impacts and Mitigation Measures

**Impact HS-9: The Proposed Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials to the environment.**

### Impact Analysis

Lists of contaminated sites within the study area are available through the Placer County Environmental Health Services Department, the Regional Water Quality Control Board, and the Department of Toxic Substance Control. According to information provided by these agencies, several of these sites are associated with existing industrial uses, the Lincoln Regional Airport, and the Lincoln Wastewater Treatment Plant. In addition, businesses such as dry cleaners and gas stations could also be contaminated or cause contamination. Railroad rights-of-way typically have surface contamination due to the lubricating oil used on the wheels and the use of herbicides to help minimize weeds within these areas. Although a number of businesses within the study area routinely store, handle and transport hazardous substances, the use of these hazardous materials is controlled and permitted by the City's fire department which conducts Uniform Fire Code inspections of these facilities, regulates these facilities, and otherwise ensures that risks associated with the use of hazardous materials in the community are minimized.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, the Draft Health and Safety Element provides a number of policies and implementation measures that have been developed to address the designation of routes for the transport of hazardous materials (see Policies HS-5.1 and HS-5.10), the attraction of clean non-polluting industries (Policy HS-5.2), and appropriate siting of hazardous waste producing facilities near similar land uses (see Policy HS-5.6). Policy HS-5.9 encourages the appropriate disposal of household wastes and continued public awareness of appropriate methods to dispose of hazardous wastes (see Policy HS-5.8). Policy HS-5.11 includes continued cooperation with the County to manage the use of hazardous materials. Other policies require the protection of local soils and water resources from contamination (see Policy HS-5.7) and Implementation Measure #3 requires the City to develop siting and enforcement criteria for businesses that use and produce hazardous materials. However, even with implementation of the below mentioned policies and implementation measures, the potential impacts associated with an existing hazardous materials source or impact is still considered ***potentially significant.***

| Health and Safety Element | |
|---|---|
| Policies designed to minimize the risk of City residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following: | |
| HS-5.1 Transporting Hazardous Materials<br>HS-5.2 Attraction/Retention of Clean Industries<br>HS-5.3 Air Emissions of Existing Industries<br>HS-5.4 Disclosure of Hazardous Materials<br>HS-5.5 Treatment of Industrial Waste<br>HS-5.6 Hazardous Waste Facility Siting<br>HS-5.7 Contamination Prevention | HS-5.8 Increase Public Awareness<br>HS-5.9 Household Hazardous Waste<br>HS-5.10 Designated Routes for Hazardous Materials<br>HS-5.11 County Hazardous Waste Management Plan<br>HS-5.12 Hazardous Materials Inventory<br>Implementation Measure #3<br>Implementation Measure #4 |

### Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new Policy HS-5.13 "Hazardous Materials Studies" is required to address existing sources of hazardous materials and ensure that this impact is reduced to a less-than-significant level:

- **HS-5.13 Hazardous Materials Studies.** The City shall ensure that the proponents of development projects (including new, redevelopment, remodel, or demolition projects) address existing hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations outlined in the studies will be implemented as part of the construction phase for each project. *[New Policy – Draft EIR Analysis]*.

### Significance after Implementation of Mitigation for Impact HS-9

As stated above, the City will continue to regulate facilities that routinely use, store, handle and transport hazardous substances. Additionally, the Draft General Plan includes a number of policies that address a variety of hazardous materials concerns (including existing sources of hazardous materials). Therefore, implementation of the Proposed Project including the adoption of the policies listed above (including the new Policy HS-5.13 "Hazardous Materials Studies") would result in a ***less-than-significant*** impact.

**Impact HS-10: The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

### Impact Analysis

Schools are one of several sensitive receptors that must be taken into consideration when the City is approving new land uses or transportation routes that may accommodate the production, storage, use, or transportation of hazardous materials and/or waste. Buildout of the Proposed Project would result in increased population levels throughout the study area and would increase the number of school-age children as well. A potential increase in levels of residential development throughout the existing City limits and other portions of the study area would generate an increase in the number of students (dependent on future household sizes and make-ups), and would necessitate the need to construct additional school facilities. New school sites should be evaluated for their proximity and potential exposure to hazardous materials as they are proposed for development. Potential school sites should be selected to minimize their exposure to a variety of hazardous conditions.

In addition to general CEQA requirements, school acquisition/development projects to be funded under the State School Facilities Program must also satisfy several specific requirements established under the California Education Code and California Code of Regulations. These regulations require that potential school hazards relating to soils, seismicity, hazards and hazardous materials, and flooding be addressed during the school site selection process. Compliance with these requirements will address any significant impacts associated with the siting of new public schools within the study area.

Similar to Impact HS-9, the draft Health and Safety Element provides a number of policies and implementation measures that have been developed to address a variety of public safety issues including the designation of routes for the transport of hazardous materials (see Policies HS-5.1 and HS-5.10), the attraction of clean non-polluting industries (Policy HS-5.2), and appropriate siting of hazardous waste producing facilities near similar land uses (see Policy HS-5.6). Policy HS-5.9 encourages the appropriate disposal of household wastes and continued public awareness of appropriate methods to dispose of hazardous wastes (see Policy HS-5.8). Policy HS-5.11 includes continued cooperation with the County to manage the use of hazardous materials. Other policies require the protection of local soils and water resources from contamination (see Policy HS-5.7) and Implementation Measure #3 requires the City to develop siting and enforcement criteria for businesses that use and produce hazardous materials. However, even with implementation of the below mentioned policies and implementation measures, this impact is still considered ***potentially significant.***

| **Health and Safety Element** | |
|---|---|
| Policies designed to minimize the risk of City residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following: | |
| HS-5.1 Transporting Hazardous Materials<br>HS-5.2 Attraction/Retention of Clean Industries<br>HS-5.3 Air Emissions of Existing Industries<br>HS-5.4 Disclosure of Hazardous Materials<br>HS-5.5 Treatment of Industrial Waste<br>HS-5.6 Hazardous Waste Facility Siting<br>HS-5.7 Contamination Prevention | HS-5.8 Increase Public Awareness<br>HS-5.9 Household Hazardous Waste<br>HS-5.10 Designated Routes for Hazardous Materials<br>HS-5.11 County Hazardous Waste Management Plan<br>HS-5.12 Hazardous Materials Inventory<br>Implementation Measure #3<br>Implementation Measure #4 |

### Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new Policies HS-5.13 "Hazardous Materials Studies" and HS-5.14 "School Siting and Hazardous Materials" are required to address existing sources of hazardous materials and ensure that this impact is reduced to a less-than-significant level:

- **HS-5.13 Hazardous Materials Studies.** The City shall ensure that the proponents of development projects (including new, redevelopment, remodel, or demolition projects) address existing hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations outlined in the studies will be implemented as part of the construction phase for each project. *[New Policy – Draft EIR Analysis]*.

- **HS-5.14 School Siting and Hazards.** For future City projects involving school acquisition/development projects, the City shall ensure that specific siting requirements established under the California Education Code and California Code of Regulations are addressed. These regulations require that potential school hazards relating to soils, seismicity, hazards and hazardous materials, and flooding be addressed during the school site selection process. *[New Policy – Draft EIR Analysis]*.

### Significance after Implementation of Mitigation for Impact HS-10

As stated above, the City will continue to regulate facilities that routinely use, store, handle and transport hazardous substances. Additionally, the Draft General Plan includes a number of policies that address a variety of hazardous materials concerns. Therefore, implementation of the Proposed Project including the adoption of the policies listed above (including the new Policies HS-5.13 "Hazardous Materials Studies" and HS-5.14 "School Siting and Hazardous Materials") would result in a ***less-than-significant*** impact.

**Impact HS-11: Development under the Proposed Project could 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, could create a significant hazard to the public or the environment.**

### Impact Analysis

As more fully described above under Impact HS-9, Lists of contaminated sites within the study area are available through the Placer County Environmental Health Services Department, the Regional Water Quality Control Board, and the Department of Toxic Substance Control. According to information provided by these agencies, several of these sites are associated with existing industrial uses, the Lincoln Regional Airport, and the Lincoln Wastewater Treatment Plant. In addition, businesses such dry cleaners and gas stations could also be contaminated.

Similar to Impact HS-9, the draft Health and Safety Element provides a number of policies and implementation measures that have been developed to address a variety of public safety issues including the designation of routes for the transport of hazardous materials (see Policies HS-5.1 and HS-5.10), the attraction of clean non-polluting industries (Policy HS-5.2), and appropriate siting of hazardous waste producing facilities near similar land uses (see Policy HS-5.6). Policy HS-5.9 encourages the appropriate disposal of household wastes and continued public awareness of appropriate methods to dispose of hazardous wastes (see Policy HS-5.8). Policy HS-5.11 includes continued cooperation with the County to manage the use of hazardous materials. Other policies require the protection of local soils and water resources from contamination (see Policy HS-5.7) and Implementation Measure #3 requires the City to develop siting and enforcement criteria for businesses that use and produce hazardous materials. However, even with implementation of the below mentioned policies and implementation measures, this impact is still considered ***potentially significant.***

| Health and Safety Element | |
|---|---|
| Policies designed to minimize the risk of City residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following: | |
| HS-5.1 Transporting Hazardous Materials<br>HS-5.2 Attraction/Retention of Clean Industries<br>HS-5.3 Air Emissions of Existing Industries<br>HS-5.4 Disclosure of Hazardous Materials<br>HS-5.5 Treatment of Industrial Waste<br>HS-5.6 Hazardous Waste Facility Siting<br>HS-5.7 Contamination Prevention | HS-5.8 Increase Public Awareness<br>HS-5.9 Household Hazardous Waste<br>HS-5.10 Designated Routes for Hazardous Materials<br>HS-5.11 County Hazardous Waste Management Plan<br>HS-5.12 Hazardous Materials Inventory<br>Implementation Measure #3<br>Implementation Measure #4 |

### Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new Policy HS-5.13 "Hazardous Materials Studies" is required to ensure that this impact is reduced to a less-than-significant level:

- **HS-5.13 Hazardous Materials Studies.** The City shall ensure that the proponents of development projects (including new, redevelopment, remodel, or demolition projects) address existing hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations outlined in the studies will be implemented as part of the construction phase for each project. *[New Policy – Draft EIR Analysis]*.

### Significance after Implementation of Mitigation for Impact HS-11

As stated above, the City will continue to regulate facilities that routinely use, store, handle and transport hazardous substances. Additionally, the Draft General Plan includes a number of policies that address a variety of hazardous materials concerns. Therefore, implementation of the Proposed Project including the adoption of the policies listed above (including the new Policy HS-5.13 "Hazardous Materials Studies") would result in a ***less-than-significant*** impact.

**Impact HS-12: The Proposed Project could result in development located within an airport land use plan area or/and could result in a safety hazard for people residing or working in the study area.**

### Impact Analysis

The Lincoln Regional Airport is the largest airport in Placer County and is designated a reliever airport for Sacramento County. The publicly owned airport is situated on 808 acres located approximately two miles west of the City. Facilities include: 260 tiedowns, 46 portable hangars, 88 T-hangars, 9 corporate hangars, and conventional hangar space for 46 aircraft. A heliport and three helicopter tiedowns were constructed in 1995.

The Airport Land Use Commission (ALUC) was established to ensure that there are no direct conflicts with land uses, noise, or other issues that would impact the functionality and safety of airport operations. One of the key functions of the ALUC is to require that cities' and counties' general plans and zoning ordinances are consistent with Airport Environs Land Use Plans (AELUP's), which contain noise contours, restrictions for types of construction and building

heights in navigable air space, as well as requirements impacting the establishment or construction of sensitive uses within close proximity to airports.

The Placer County ALUC adopted the Placer County Airport Land Use Compatibility Plan on October 25, 2000. This airport land use compatibility plan is primarily concerned with land uses near the three public-use airports in Placer County: Auburn Municipal Airport; Blue Canyon Airport; and the Lincoln Regional Airport. The influence area for each of the airports extends roughly two to three miles from the airport runways.

The Proposed Project includes several policies and implementation measures that have been developed to address land use compatibility and safety issues associated with the Lincoln Regional Airport. For example, policies have been developed to ensure that all future development is consistent with the land use compatibility guidelines outlined in the Placer County Airport Land Use Compatibility Plan (see Policies HS-4.1 and LU-2.10) and that new residential land uses be prohibited from locating within one mile of the airport's main runway (see Policies HS-4.3 and LU-5.1). Additionally, Policy HS-4.2 requires new development around the airport to be in compliance with Federal Aviation Administration Regulations. With implementation of the below mentioned policies, this impact is considered ***less than significant.***

| Land Use Element | Transportation and Circulation & Health and Safety Elements |
|---|---|
| Policies designed to minimize the risk of airport related hazards to City residents and property include the following: | |
| LU-2.10 Airport Buffer<br>LU-5.1 Rural Land Uses | T-6.2 Runway Expansion<br>HS-4.1 Airport Land Use Compatibility Plan<br>HS-4.2 Compliance With FAA Regulations<br>HS-4.3 Development in Airport Vicinity |

### Required Mitigation Measures

No mitigation measures are required.

**Impact HS-13: The Proposed Project could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

### Impact Analysis

As more fully described in Chapter 5 "Transportation and Circulation" of this EIR, implementation of the Proposed Project would more than double the current number of vehicle trips and miles of vehicular travel within the study area. Consequently, several local roadway facilities would experience deterioration in their level of service to an unacceptable level. The Proposed Project addresses these traffic impacts through a combination of policies and several physical roadway improvements identified in the Circulation Diagram (see Chapter 5 "Transportation and Circulation" of this EIR for additional information). However, the traffic impact is still considered "significant and unavoidable" for roadways outside the City's jurisdiction because the proposed policies allow for the deterioration of their level of service and

because implementation of several proposed roadway improvements is contingent on a variety of factors outside the City's control. Roadways operating at unacceptable levels of service could contribute to the physical interference of an adopted emergency response plan or evacuation plan.

Policies included as part of the Proposed Project that would minimize this impact are summarized below by general plan element. The draft Health and Safety Element provides a number of these policies that address conformance with local emergency response programs and continued cooperation with emergency response service providers. For example, policies have been developed to ensure that all applicable disaster plans are updated regularly (see Policy HS-7.2) and a coordinated emergency response system is maintained with other agencies (see Policies HS-7.1 and HS-7.5). However, even with implementation of the below mentioned policies, this impact is considered ***potentially significant.***

| **Health and Safety Element** |
|---|
| Policies designed to ensure a coordinated approach to emergency response and evacuation planning include the following: |
| HS-9.1 Emergency Response Plan<br>HS-9.2 Coordinate Emergency Response Services with Local Agencies<br>HS-9.3 Educate Public on Emergency Response<br>HS-9.3 Coordinate with Placer County |

### Required Mitigation Measures

In addition to the above mentioned policies, the following revisions to Policy HS-9.1 "Emergency Response Plan" and the new HS-9.5 "Siting of Critical Emergency Response Facilities" are also required to lessen this impact.

- **HS-9.1 Emergency Response Plan.** The City shall *continue to update* and ensure that the Emergency Response Plan meets current federal, State, and local emergency requirements. *[Revised New Policy – Draft EIR Analysis]*.
- **HS-9.5 Siting of Critical Emergency Response Facilities.** The City shall ensure that the siting of critical emergency response facilities such as hospitals, fire stations, police offices, substations, emergency operations centers and other emergency service facilities and utilities have minimal exposure to flooding, seismic and geological effects, fire, and explosions. *[New Policy – Draft EIR Analysis]*.

Although the City will adopt and implement a variety of policies (including the revised Policy HS-9.1 "Emergency Response Plan" and the new Policy HS-9.5 "Siting of Critical Emergency Response Facilities") developed to ensure conformance with local emergency response programs and continued cooperation with emergency response service providers, roadways operating at unacceptable levels of service (through increased vehicle traffic associated with the Proposed Project) could physically impede the response times of emergency response vehicles or delay implementation of an evacuation plan. Consequently, this impact remains ***significant***. No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-13

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

**Impact HS-14: The Proposed Project could 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.**

### Impact Analysis

Wildland fires would continue to pose a significant threat to the people and structures of the study area. Although the central portions of the study area are highly urbanized, the northern, eastern, and western portions of the study area are more susceptible to wildland fires due to potential fuel loads (grasslands and other vegetation). One of the primary factors contributing to the effective control of a vegetation fire is the rapid response by local fire units. This is especially true during fire season, when fire units may be committed to other fires and are unavailable to respond as quickly.

Policies and implementation measures included as part of the Proposed Project that address the need for additional fire protection services are summarized below by general plan element. For example, Policies PFS-8.2, PFS-8.4, PFS-8.5, and Implementation Measure #4 require the City to plan for and expand fire protection services and facilities consistent with community needs. Policy PFS-8.3 calls for the continued promotion of public fire safety and emergency life support education programs. Policies PFS-2.11, PFS-8.6, and PFS-8.7 provide a range of building requirements (i.e., fire flows, sprinklers, emergency access points, etc.) necessary to address fire prevention concerns for new development. Other policies from the draft Health and Safety Element promote the implementation of a coordinated emergency response plan both locally and regionally through the continued coordination with Placer County and other appropriate agencies (see Policies HS-9.1, HS-9.2, HS-9.4, Implementation Measure #6 and Implementation Measure #7). Additionally, Policies HS-7.2 and HS-7.3 provide for the education of wildland fire concerns.

The draft Land Use and Community Design Element also includes several policies (see Policies LU-15.1, LU-15.9, and LU-15.10) that require the development of specific and master plans for all future development areas that outline detailed plans for a variety of infrastructure improvements, phasing, and financing. Other policies and implementation measures (see Policy ED-1.2 and Implementation Measures #2 and #3) from the draft Economic Development Element require the City to evaluate the fiscal impacts of development proposed under the Draft General Plan and implement a variety of fiscal mitigation measures in an effort to provide and improve the full range of public services. However, even with implementation of the below mentioned policies and implementation measures, this impact is still considered ***potentially significant.***

| Public Facilities and Services Element | Health and Safety Element |
|---|---|
| Policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning include the following: | |
| PFS-2.11 Fire Flows<br>PFS-8.2 Fire Protection<br>PFS-8.3 Public Awareness of Fire and Emergency Procedures<br>PFS-8.4 Fire Response Times<br>PFS-8.5 Provision of Fire Station Facilities and Equipment<br>PFS-8.6 Emergency Access<br>PFS-8.7 Sprinkler Requirements<br>Implementation Measure #4 | HS-9.1 Emergency Response Plan<br>HS-9.2 Coordinated Emergency Response Services with Local Agencies<br>HS-9.4 Coordinate with Placer County<br>Implementation Measure #6<br>Implementation Measure #7 |
| **Economic Development Element** | **Land Use and Community Design Element** |
| Policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning include the following: | |
| ED-1.2 Evaluate Fiscal Impacts<br>Economic Development Implementation Measure #2<br>Economic Development Implementation Measure #3 | LU-15.1 Village Specific Plans/General Plan Amendments<br>LU-15.9 Infrastructure Master Plans<br>LU-15.10 Area Infrastructure Master Plans |
| **Health and Safety Element** | |
| Policies designed to minimize this impact through the continued awareness of wildland fire management risks and prevention include the following: | |
| HS-7.2 Educate Residents of Fire Hazards<br>HS-7.3 Wildland Fire Management Plans | |

### Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revised Policy ED-1.2 "Evaluate Fiscal Impacts", Economic Development Implementation Measure #3, and new Policies OSC-7.21 "Maintenance of Waterway and Trail Corridors", HS-7.4 "Buffer Zones for Fire Protection", and HS-7.5 "Weed Abatement" are required to ensure that this impact is reduced to a less-than-significant level:

- **ED-1.2 Evaluate Fiscal Impacts.** The City shall evaluate the fiscal impacts of new development and encourage a pattern of development that allows the City to provide and maintain a high level of urban services (*including but not limited to* water, sewer, transportation, *fire stations, police stations, libraries,* and parks), ~~and~~ community facilities, *and utility infrastructure* as well as attract targeted businesses and a stable labor force. *[Revised Policy – Draft EIR Analysis]*
- **Implementation Measure #3.** Based on fiscal analysis, the City shall establish and implement the appropriate fiscal mitigation measures *(including but not limited to development fees)* on new development in order to improve *existing or new* public services *and utility infrastructure*. *[Revised Implementation Measure – Draft EIR Analysis]*
- **OSC-7.21 Maintenance of Waterway and Trail Corridors.** The City shall ensure that existing park maintenance activities incorporate applicable trail maintenance activities necessary to address public safety issues along City-owned trail areas. Trail maintenance activities shall be conducted in a manner consistent with all applicable environmental regulations and shall ensure emergency vehicle access along portions of the trail corridor

where appropriate. Trail maintenance measures shall include, but not be limited to, vegetation or brush clearing and signage prohibiting inappropriate uses. *[New Policy – Draft EIR Analysis]*

- **HS-7.4 Buffer Zones for Fire Protection.** The City shall require new development to incorporate additional greenbelts, fuel breaks, fuel reduction and buffer zones around communities to minimize potential fire losses. *[New Policy – Draft EIR Analysis]*.
- **HS-7.5 Weed Abatement.** The City shall maintain a weed abatement program to ensure clearing of dry brush areas. Weed abatement activities shall be conducted in a manner consistent with all applicable environmental regulations. *[New Policy – Draft EIR Analysis]*.

#### Significance after Implementation of Mitigation for Impact HS-14

As stated above, the Draft General Plan includes a number of policies and implementation measures designed to provide continued fire (including wildland fires) protection services. Therefore, implementation of the Proposed Project including the adoption of the policies and implementation measures listed above (including the revised Policy ED-1.2 "Evaluate Fiscal Impacts", Economic Development Implementation Measure #3, and new Policies OSC-7.21 "Maintenance of Waterway and Trail Corridors", HS-7.4 "Buffer Zones for Fire Protection", and HS-7.5 "Weed Abatement") would result in a ***less-than-significant*** impact.

## 8.5 Flooding

As a result of comments (see Table 1-1 of Chapter 1, Introduction) received during the NOP public scoping phase of the Proposed Project, a variety of flooding issues have been considered as part of the impact analysis. The Placer County Flood Control and Water Conservation District suggested that the EIR address a variety of issues including higher peak flow rates at downstream locations, increases in runoff volumes, overloading of the actual or designed capacity of existing storm water and flood-carrying facilities, and the alteration of floodplain boundaries. Similarly, Reclamation District No. 1001 also suggested that the EIR should analyze flooding impacts and storm water flow into local watersheds resulting from implementation of the Proposed Project.

As previously described, a common chapter numbering system was used in preparation of the City's General Plan Update to allow readers to easily find related information in all of the documents that comprise the General Plan. Under the Draft General Plan, Section 8.5 is the "Flooding" section of the Health and Safety Element. However, in this document, flood impacts are addressed as part of the storm water discussion due to their relationship to local drainage patterns and storm water infrastructure capacity issues. Consequently, please see Chapter 6 "Public Facilities and Services, Section 6.4 "Storm Water Drainage" for a discussion of flood hazard impacts.

# 8.6 Urban and Wildland Fires

Under the Draft General Plan, Section 8.6 is the "Urban and Wildland Fires" section of the Health and Safety Element. However, in this document, wildland fire impacts are addressed under Section 8.5 "Human Hazards" of the EIR. Additional impacts associated with the provision of fire protection services to the study area are provided in Chapter 6 "Public Facilities and Services, Section 6.8 "Fire and Police Protection".

# 8.7 Public Safety

The City's local Emergency Operations Plan has been developed to address a variety of public health and safety issues including fire, seismic, and flooding events. Impacts associated with the provision of law enforcement and fire protection services are addressed in Section 6.8 "Fire and Police Protection" of Chapter 6 "Public Facilities and Services". Impacts specific to seismic-related issues are addressed above in Section 8.2 "Geologic and Seismic Hazards". Flooding impacts are addressed in Section 6.4 "Storm Water Drainage" of Chapter 6 "Public Facilities and Services". Additionally, human-made hazard issues are addressed above in Section 8.4 "Human Hazards".

# 8.8 Noise

This section provides information on a variety of noise sources with the potential to occur within the study area. As a result of comments (see Table 1-1 of Chapter 1, Introduction) received during the NOP public scoping phase of the Proposed Project, a variety of noise issues have been considered as part of the impact analysis. For example, the California Department of Transportation, Division of Aeronautics suggested that the EIR should include an analysis of noise issues in the Draft General Plan.

## Setting

A brief description of background noise conditions within the study area is provided below, with a more detailed description provided in Chapter 8, Health and Safety, in the Background Report (Appendix B, see pages 8-41 through 8-62).

Primary noise sources within the City's study area consist of vehicular traffic along SR 65, other local roadways, the Lincoln Regional Airport, and the Union Pacific Railroad line. Roadway and traffic noise contribute a majority of the noise in the study area. Stationary noise sources are also a concern within the study area, with industrial land uses (i.e., Gladding McBean, etc.) contributing localized noise sources.

The following background information regarding noise and how it is measured is provided below.

## Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. Noise levels are representative of measured noise at a given instant in time, however, they rarely persist consistently over a long period of time. Rather, community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and continually changing atmospheric conditions. What makes community noise constantly variable throughout a day, besides the slowly changing background noise, is the addition of short duration single event noise sources such as aircraft flyovers, vehicle passbys, sirens, etc., which are readily identifiable to the individual. These successive additions of sound to the community noise environment vary the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

- Leq: the equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The Leq is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- Lmax: the instantaneous maximum noise level for a specified period of time.
- L10: the noise level that is equaled or exceeded 10 percent of the specified time period. The L10 is often considered the maximum noise level averaged over the specified time period.
- L90: the noise level that is equaled or exceeded 90 percent of the specified time period. The L90 is often considered the background noise level averaged over the specified time period.
- DNL (or Ldn): 24-hour day and night A-weighed noise exposure level which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noise.
- CNEL: similar to the DNL, the Community Noise Equivalent Level (CNEL) adds a 5 dBA "penalty" for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10 dBA penalty between the hours of 10:00 p.m. and 7:00 a.m.

## Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance and dissatisfaction;
- Interference with activities such as speech, sleep, learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to a baseline noise condition (typically the existing environment) to which one has adapted: the so called "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged by those hearing it. With regard to increases in A weighted noise level, the following relationships occur (Caltrans, 1998):

- under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA;
- outside of such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise;
- It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA;
- a change in level of 5 dBA is a readily perceptible increase in noise level; and
- a 10 dBA change is recognized as twice as loud as the original source.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. Because the decibel scale is based on logarithms two noise sources do not combine in a simple linear fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

## Noise Attenuation

Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 to 7.5 dBA per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions, ground conditions, and noise barriers). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles (a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dBA per doubling distance from the source (also dependent on environmental conditions)

(Caltrans, 1998). Noise from large construction sites would have characteristics of both "point" and "line" sources, so attenuation would probably range between approximately 4.5 and 7.5 dBA per doubling of distance.

## Draft General Plan Policies

The Draft General Plan contains a variety of policies and implementation measures that have been designed to address noise issues. For each impact described below a summary of the specific policies and implementation measures that address each impact is also provided. A complete description of all the goals, policies, and implementation measures addressing noise issues is provided on pages 4-14 through 4-17, 5-7, 8-3, and pages 8-6 through 8-9 of the Goals and Policies Report.

## Impact Methodology

Noise impacts are assessed based on a comparative analysis of the noise levels resulting from the Proposed Project and the noise levels under baseline or existing conditions. The traffic-related noise analysis is based on the traffic volumes reported in the traffic analysis (see Chapter 5 "Transportation and Circulation" of the EIR). An increase of three decibels is considered to be a significant increase in traffic-related noise, and it requires a doubling of traffic volumes (a 100 percent increase) for noise levels to increase by three decibels.

## Standards of Significance

The Proposed Project will establish development guidelines against which future projects will be determined for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G of the CEQA Guidelines and based on the professional judgment of the City of Lincoln and its consultants. The Proposed Project would result in a significant impact if it would:

- Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or publicly used airport and expose people residing or working in the project area to excessive noise levels; or
- Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

This EIR considers changes in ambient noise levels as a result of the Proposed Project. A sliding scale is commonly used for this purpose, allowing greater increases at lower absolute sound levels than at higher levels. As described in section 4.5.1 above, a 3 dBA noise increase is barely perceptible to the average healthy ear and a 5 dBA increase is readily perceptible. Thus the significance criteria for changes in noise from the project are as follows:

- If the noise level resulting from implementation of the Proposed Project or its alternatives would exceed the "normally acceptable" range for a given land use where the existing noise level exceeds the normally acceptable range, a 3 dBA or greater increase due to the project is considered significant.
- If the noise level resulting from implementation of the Proposed Project or its alternatives would exceed the "normally acceptable" range for a given land use where the existing noise level is within the normally acceptable range, a 5 dBA or greater increase due to the project is considered significant.
- If the noise level resulting from implementation of the Proposed Project or its alternatives would be within the "normally acceptable" range for a given land use, a 10 dBA or greater increase due to the project is considered significant.

# Impacts and Mitigation Measures

**Impact HS-15: The Proposed Project would result in the 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; or would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**

### Impact Analysis

***Construction Noise.*** Construction related noise is considered a short-term noise impact associated with demolition, site preparation, grading, and other construction-related activities. Two types of short-term noise impacts could occur during these construction-related activities. First, the transport of workers and the movement of materials to and from the construction site could incrementally increase noise levels along local access roads. The second source of noise would result from the physical activities (e.g., grading, etc.) associated with any construction-related activities. Construction is performed in various distinct steps, each with its own mix of equipment, workers, and activities. Consequently, each step has its own noise characteristics. However, despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. **Table 8-2** provides a list of typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between a particular piece of equipment and a noise receptor. Buildout of the Proposed Project has the potential to result in all of these types of construction-related noises at varying times and intensities throughout the planning period.

**TABLE 8-2**
**NOISE LEVELS GENERATED BY TYPICAL CONSTRUCTION EQUIPMENT**

| Type of Equipment | Range of Sound Levels Measured (dBA of 50 feet) | Suggested Sound Levels for Analysis (dBA of 50 feet) |
|---|---|---|
| Pile Drivers, 12,000 to 18,000 ft – lb/blow | 81 to 96 | 93 |
| Rock Drills | 83 to 99 | 96 |
| Jack Hammers | 75 to 85 | 82 |
| Pneumatic Tools | 78 to 88 | 85 |
| Pumps | 68 to 80 | 77 |
| Dozers | 85 to 90 | 88 |
| Tractor | 77 to 82 | 80 |
| Front-End Loaders | 86 to 90 | 88 |
| Hydraulic Backhoe | 81 to 90 | 86 |
| Hydraulic Excavators | 81 to 90 | 86 |
| Graders | 79 to 89 | 86 |
| Air Compressors | 76 to 86 | 86 |
| Trucks | 81 to 87 | 86 |

Source: Noise Control for Buildings and Manufacturing Plants (Bolt, Beranek and Newman, 1987).

Using the information provided in Table 8-2, an estimate of composite construction noise for commercial and industrial development can be characterized as 89 dBA Leq when measured at a distance of 50 feet from the construction area. Residential development is slightly lower with a composite noise level of 88 dBA Leq. These values take into account the number, pieces, and spacing of the types of equipment used for each type of activity. Additionally, during the later phases of building construction, noise levels typically are reduced from these values and the physical structures themselves may further break-up line-of-sight noise propagation.

Using the 89 dBA Leq value and assuming that construction would occur for approximately 8 hours per day, the CNEL is estimated at 84 dBA at 50 feet (83 dBA CNEL for residential construction). Consequently, construction-related noise associated with the Proposed Project could exceed the "normally acceptable" range for a given land use and result in a significant impact. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential construction-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include shielding of construction equipment and limitations on construction hours. However, it should be noted, the ability to mitigate this potential noise impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

***On-Road Mobile Sources.*** Potential impacts on existing and future land uses are the result of additional on-road mobile sources (vehicles) traveling along local roadways. Table 8-3 identifies the various routes for which traffic data was generated using the City's traffic model prepared for the Proposed Project (see Chapter 5 "Transportation and Circulation"). The table provides information for both existing and proposed roadway segments and identifies the potential for a

significant increase in noise associated with buildout of the Proposed Project. As shown in the table, portions of several roadways (including Fiddyment Road, Dowd Road, East Lincoln Parkway, and Gladding Road) experience noise increases greater than 5 dBA, with a few roadway segments experiencing noise increases greater than 10 dBA. While an increase of 3 to 5 dBA is considered potentially significant, it is only significant if it affects sensitive land uses. Similarly, the actual level of impact would depend on the presence and location of any existing or proposed land uses in relation to the noise source. Ultimately, it is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential traffic-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding or sound walls. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

***Railroad Noise Sources.*** Railroad noise primarily occurs from existing operations along the Union Pacific Railroad (UPRR) line, which runs north-south through the study area. As more fully described in the General Plan Background Report, noise contours for existing daily operations are identified in **Table 8-4**.

As shown in the table, at 88 feet from the railroad center line, the noise level would be approximately 80 dBA. At 275 feet from the railroad center line, the noise level would be approximately 75 dBA and at 900 feet from the railroad center line, the noise level would be approximately 70 dBA. However, it should be noted that these noise levels do not take into account potential shielding from existing buildings, which could increase the rate of attenuation over a given distance.

**TABLE 8-3**
**APPROXIMATE DISTANCES TO THE UNION PACIFIC RAILROAD NOISE CONTOURS**

| Ldn Noise Level (dB) | Distance to Noise Contour with warning horns (feet) |
|---|---|
| 80.0 | 88 |
| 75.0 | 275 |
| 70.0 | 900 |

Source: ESA, 2005.

Because of the uncertainties associated with future operational details, no comprehensive noise predictions are included in this analysis. However, buildout of the Proposed Project could result in the need for additional rail use and locate residential land uses in the vicinity of the UPRR corridor, which could result in the exposure of sensitive receptors (in particular those associated with future planned land uses in Village #3 and SUD A) to noise levels that exceed City standards. The actual level of impact would depend on the presence and location of any existing or proposed land uses in relation to the noise source. While an increase of 3 to 5 dBA is considered potentially significant, it is only significant if it affects sensitive land uses. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential operations-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding (e.g., vegetation, etc.), sound walls, or noise-

reducing building treatments. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

***Industrial Noise Sources.*** Existing industrial areas within the study area are currently located around the existing SR 65 roadway corridor in both the northern and southern parts of the City. Industrial uses are also located and planned for areas surrounding the Lincoln Regional Airport. Under the Proposed Project, similar land uses are proposed within these existing areas. The location of these new industrial areas may increase noise levels in their proximity. This could occur due to the continual presence of heavy trucks used for the distribution of goods and supplies; or from the use of equipment actually used in the manufacturing process or on the site to transport goods (primarily forklifts). Potential areas of land use-noise conflicts could occur at the borders of these industrial areas with other sensitive land uses (i.e., residential, schools, etc.) or along roadways leading to these industrial areas. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential operations-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding (e.g., vegetation, etc.), sound walls, or noise-reducing building treatments. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. To help address a variety of noise issues, the Draft Health and Safety Element provides a number of policies that have been developed to address noise and land use compatibility issues associated with the Proposed Project. For example, Policies HS-8.8 and HS-8.15 minimize construction-related noise impacts to sensitive receptors. Other policies have been developed to provide guidance on the analysis and mitigation of future project-related noise issues. These policies include identifying appropriate noise levels for sensitive receptors (Policies HS-8.1 and HS-8.2), noise compatibility guidelines (Policy HS-8.9), and identify the need for future project-specific noise studies (see Policy HS-8.14). Policies HS-8.10 and HS-8.11 require the consideration and use of a variety of sound attenuation features (including walls, landscaping, berms) to minimize noise impacts between various types of land uses and sensitive receptors. Additional policies (including HS-8.3, HS-8.4, HS-8.12, and HS-8.13) address a variety of mobile noise sources by restricting truck traffic to designated truck routes, and coordination with railroad companies and Caltrans to address noise from railroad and state route sources.

The draft Land Use and Community Design Element also provides a variety of polices that have been designed to promote compatible development that minimizes a variety of nuisance related impacts (i.e., visual, noise, etc.). For example, Policies LU-2.1, LU-2.10, LU-3.6, and LU-4.1 help address a variety of nuisance issues (including noise concerns) associated with the inappropriate siting of sensitive land uses near other incompatible uses and cluster future

industrial uses near existing industrial facilities and complexes such as the Lincoln Regional Airport. Additionally, Policy LU-4.2 encourages the attraction of industrial development that avoids or minimizes substantial pollution, noise, glare, odor, or other significant offensive activity that would negatively affect adjacent uses and other areas of the city. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant***.

| **Health and Safety Element** |
|---|
| Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the study area include the following: |
| HS-8.1 Sensitive Receptors<br>HS-8.2 Protect Residential Areas<br>HS-8.5 Noise Monitoring<br>HS-8.9 Noise Compatibility Guidelines<br>HS-8.10 Sound Attenuation Features<br>HS-8.11 Noise Buffering<br>HS-8.14 Noise Analysis |
| Policies designed to minimize construction-related noise impacts in the study area include the following: |
| HS-8.8 Construction Noise<br>HS-8.15 Limiting Construction Activities |
| Policies designed to minimize mobile or transportation-related noise impacts in the study area include the following: |
| HS-8.3 Railroad Noise<br>HS-8.4 Controlling Truck Traffic<br>HS-8.12 Coordinate with Railroad Companies<br>HS-8.13 Coordinate with Caltrans |
| **Land Use and Community Design Element** |
| Policies designed to promote compatible development within areas that minimize impacts (including noise) to surrounding land uses include the following: |
| LU-2.1 Prevent Incompatible Uses<br>LU-2.10 Airport Buffer<br>LU-3.6 Buffer Commercial Land Uses<br>LU-4.1 Buffer Incompatible Uses<br>LU-4.2 Protect Environment |

### Required Mitigation Measures

In addition to the above mentioned policies, the following revisions to Policies HS-8.11 "Noise Buffering" HS-8.13 "Coordinate with Caltrans", and HS-8.14 "Noise Analysis", and new Policy HS-8.16 "State Noise Insulation Standards" and Health and Safety Implementation Measure #11 are also required to lessen this impact.

- **HS-8.11 Noise Buffering.** The City shall require a variety of sound attenuation features (including noise buffering or insulation) in new development along major streets and highways, and along railroad tracks. *[Modified Existing Policy 3, Noise Element]*.
- **HS-8.13 Coordinate with Caltrans.** The City shall work with Caltrans to mitigate noise impacts on sensitive receptors near SR65 and SR193, by requiring a variety of sound attenuation features (including noise buffering or insulation) in new construction. *[New Policy – Modified Draft EIR Analysis]*.

- **HS-8.14 Noise Analysis.** The City ~~may~~ shall require noise analysis of proposed development projects as part of the environmental review process and to require mitigation measures that reduce noise impacts to acceptable levels. The noise analysis shall:
  - Be the responsibility of the applicant.
  - Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
  - Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
  - Estimate existing and projected noise levels in terms of Ldn/CNEL and compare the levels to the adopted policies of the City's General Plan.
  - Recommend appropriate mitigation to achieve compatibility with the adopted noise policies and standards of the City's General Plan. Where the noise source in question consists of intermittent single events, the acoustical analysis must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
  - Estimate noise exposure after the prescribed mitigation measures have been implemented. If the project does not comply with the adopted standards and policies of the City's General Plan, the analysis must provide acoustical information for a statement of overriding considerations for the project.
  - Describe a post-project assessment program, which could be used to evaluate the effectiveness of the proposed mitigation measures. *[Existing Policy 2, Noise Element – Draft EIR Analysis]*.
- **HS-8-16 State Noise Insulation Standards.** The City shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code. *[New Policy – Draft EIR Analysis]*.
- **Implementation Measure #11.** The City will prepare guidelines for developers for reducing potential noise impacts (including construction-related noise impacts) on surrounding land uses. *[New Implementation Measure – Draft EIR Analysis]*.

As stated above, the City will adopt and implement a variety of policies (including the revised Policies HS-8.11 "Noise Buffering" HS-8.13 "Coordinate with Caltrans", and HS-8.14 "Noise Analysis", and the new Policy HS-8.16 "State Noise Insulation Standards" and Health and Safety Implementation Measure #11) that have developed to address future noise impacts associated with buildout of the Proposed Project. In addition, the City will ensure that future CEQA documentation be prepared for individual projects (with project-specific data) that will (if technically possible) mitigate any potential noise impacts to a less-than-significant level. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures. Given the uncertainty as to whether future noise impacts could be adequately mitigated, this impact remains ***significant.*** No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-15

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

### Impact HS-16: The Proposed Project will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

### Impact Analysis

Similar to Impact HS-15, buildout of the Proposed Project could potentially expose more people to the impacts of excess groundborne vibration or noise levels. Increased exposure to sources of groundborne vibration could occur through increased residential or employment densities on lands within proximity to noise generating activities (i.e., industrial, airport, etc.). Specifically, vibration created through construction and industrial activities or through the operation of motor vehicles and railways could result in potentially significant impacts on local residents. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential construction/operations-related vibration and noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding, sound walls, or noise-reducing building treatments. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the vibration impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

The Proposed Project includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. To help address a variety of noise issues, the draft Health and Safety Element provides a number of policies that have been developed to address noise and land use compatibility issues associated with the Proposed Project. For example, Policies HS-8.8 and HS-8.15 minimize construction-related noise impacts to sensitive receptors. Other policies have been developed to provide guidance on the analysis and mitigation of future project-related noise issues. These policies include identifying appropriate noise levels for sensitive receptors (Policies HS-8.1 and HS-8.2), noise compatibility guidelines (Policy HS-8.9), and identify the need for future project-specific noise studies (see Policy HS-8.14). Policies HS-8.10 and HS-8.11 require the consideration and use of a variety of sound attenuation features (including walls, landscaping, berms) to minimize noise impacts between various types of land uses and sensitive receptors. Additional policies (including HS-8.3, HS-8.4, HS-8.12, and HS-8.13) address a variety of mobile noise sources by restricting truck traffic to designated truck routes, and coordination with railroad companies and Caltrans to address noise from railroad and state route sources.

The draft Land Use and Community Design Element also provides a variety of polices that have been designed to promote compatible development that minimizes a variety of nuisance related impacts (i.e., visual, noise, etc.). For example, Policies LU-2.1, LU-2.10, LU-3.6, and LU-4.1 help address a variety of nuisance issues (including noise concerns) associated with the

inappropriate siting of sensitive land uses near other incompatible uses and locating future industrial uses near existing industrial facilities and complexes such as the Lincoln Regional Airport. Additionally, Policy LU-4.2 encourages the attraction of industrial development that avoids or minimizes substantial pollution, noise, glare, odor, or other significant offensive activity that would negatively affect adjacent uses and other areas of the city. However, even with implementation of the below mentioned policies, this impact is still considered ***potentially significant***.

| **Health and Safety Element** |
|---|
| Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the study area include the following: |
| HS-8.1 Sensitive Receptors<br>HS-8.2 Protect Residential Areas<br>HS-8.5 Noise Monitoring<br>HS-8.9 Noise Compatibility Guidelines<br>HS-8.10 Sound Attenuation Features<br>HS-8.11 Noise Buffering<br>HS-8.14 Noise Analysis |
| Policies designed to minimize construction-related noise impacts in the study area include the following: |
| HS-8.8 Construction Noise<br>HS-8.15 Limiting Construction Activities |
| Policies designed to minimize mobile or transportation-related noise impacts in the study area include the following: |
| HS-8.3 Railroad Noise<br>HS-8.4 Controlling Truck Traffic<br>HS-8.12 Coordinate with Railroad Companies<br>HS-8.13 Coordinate with Caltrans |
| **Land Use and Community Design Element** |
| Policies designed to promote compatible development within areas that minimize impacts (including noise) to surrounding land uses include the following: |
| LU-2.1 Prevent Incompatible Uses<br>LU-2.10 Airport Buffer<br>LU-3.6 Buffer Commercial Land Uses<br>LU-4.1 Buffer Incompatible Uses<br>LU-4.2 Protect Environment |

### Required Mitigation Measures

In addition to the above mentioned policies, the following revisions to Policies HS-8.11 "Noise Buffering" HS-8.13 "Coordinate with Caltrans", and HS-8.14 "Noise Analysis", and new policy HS-8.16 "State Noise Insulation Standards" and Health and Safety Implementation Measure #11 are also required to lessen this impact.

- **HS-8.11 Noise Buffering.** The City shall require a variety of sound attenuation features (including noise buffering or insulation) in new development along major streets and highways, and along railroad tracks. *[Modified Existing Policy 3, Noise Element – Draft EIR Analysis]*.
- **HS-8.13 Coordinate with Caltrans.** The City shall work with Caltrans to mitigate noise impacts on sensitive receptors near SR65 and SR193, by requiring a variety of sound attenuation features (including noise buffering or insulation) in new construction. *[New Policy – Draft EIR Analysis]*.

- **HS-8.14 Noise Analysis.** The City ~~may~~ shall require noise analysis of proposed development projects as part of the environmental review process and to require mitigation measures that reduce noise impacts to acceptable levels. The noise analysis shall:
  - Be the responsibility of the applicant.
  - Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
  - Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
  - Estimate existing and projected noise levels in terms of Ldn/CNEL and compare the levels to the adopted policies of the City's General Plan.
  - Recommend appropriate mitigation to achieve compatibility with the adopted noise policies and standards of the City's General Plan. Where the noise source in question consists of intermittent single events, the acoustical analysis must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
  - Estimate noise exposure after the prescribed mitigation measures have been implemented. If the project does not comply with the adopted standards and policies of the City's General Plan, the analysis must provide acoustical information for a statement of overriding considerations for the project.
  - Describe a post-project assessment program, which could be used to evaluate the effectiveness of the proposed mitigation measures. *[Existing Policy 2, Noise Element – Draft EIR Analysis]*.
- **HS-8-16 State Noise Insulation Standards.** The City shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code. *[New Policy – Draft EIR Analysis]*.
- **Implementation Measure #11.** The City will prepare guidelines for developers for reducing potential noise impacts (including construction-related noise impacts) on surrounding land uses. *[New Implementation Measure – Draft EIR Analysis]*.

As stated above, the City will adopt and implement a variety of policies (including the revised Policies HS-8.11 "Noise Buffering" HS-8.13 "Coordinate with Caltrans", and HS-8.14 "Noise Analysis", and the new Policy HS-8.16 "State Noise Insulation Standards" and Health and Safety Implementation Measure #11) that have developed to address future noise and vibration impacts associated with buildout of the Proposed Project. In addition, the City will ensure that future CEQA documentation be prepared for individual projects (with project-specific data) that will (if technically possible) mitigate any potential noise and vibration impacts to a less-than-significant level. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the vibration impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures. Given the uncertainty as to whether future noise impacts could be adequately mitigated, this impact remains ***significant***. No additional feasible mitigation is currently available.

### Significance after Implementation of Mitigation for Impact HS-16

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered ***significant and unavoidable***.

**Impact HS-17: The Proposed Project will be located within an airport land use plan area or within the vicinity of a private airstrip and could expose people residing or working within the study area to excessive noise levels.**

### Impact Analysis

The Lincoln Regional Airport is located in the northwestern portion of the study area between the existing SR 65 and the new SR 65 Bypass. The publicly owned airport is situated on 808 acres located approximately two miles west of the City. Facilities include: 260 tiedowns, 46 portable hangars, 88 T-hangars, 9 corporate hangars, and conventional hangar space for 46 aircraft. A heliport and three helicopter tiedowns were constructed in 1995. The City is in the process of preparing an updated master plan for the airport. As part of the master plan update, the City will evaluate projected operations at the airport and update existing and future airport noise contours.

The Airport Land Use Commission (ALUC) was established to ensure that there are no direct conflicts with land uses, noise, or other issues that would impact the functionality and safety of airport operations. One of the key functions of the ALUC is to require that cities and counties general plans and zoning ordinances are consistent with Airport Environs Land Use Plans (AELUP's), which contain noise contours, restrictions for types of construction and building heights in navigable air space, as well as requirements impacting the establishment or construction of sensitive uses within close proximity to airports.

Implementation of the Proposed Project would include various land uses developed as part of SUD-A both to the north and west of the airport and SUD-B to the south of the existing airport boundary. As more fully described in Chapter 4 "Land Use" of this EIR, a small amount of residential land uses are planned for both special use districts. However, residential uses planned for SUD-A (near Dowd Road) are well outside the 55 CNEL future noise contour. Existing and planned residential uses to the south of the airport (SUD-B) are within or outside the 60 CNEL future noise contour.

The Proposed Project includes several policies and implementation measures that have been developed to address land use compatibility and safety issues associated with the Lincoln Regional Airport. For example, policies have been developed to ensure that all future development is consistent with the land use compatibility guidelines outlined in the Placer County Airport Land Use Compatibility Plan (see Policies HS-4.1 and LU-2.10) and that new residential land uses be prohibited from locating within one mile of the airport's main runway (see Policies HS-4.3, T-6.2, and LU-5.1). Additionally, Policy HS-4.2 requires new development around the airport to be in compliance with Federal Aviation Administration Regulations.

To address a variety of noise issues, the Draft Health and Safety Element provides a number of policies that have been developed to address noise and land use compatibility issues associated with the Proposed Project. For example, policies have been developed to provide guidance on the analysis and mitigation of future project-related noise issues. These policies include identifying appropriate noise levels for sensitive receptors (Policies HS-8.1 and HS-8.2), noise compatibility guidelines (Policy HS-8.9), and identify the need for future project-specific noise studies (see Policy HS-8.14). Policies HS-8.10 and HS-8.11 require the consideration and use of a variety of sound attenuation features (including walls, landscaping, berms) to minimize noise impacts between various types of land uses and sensitive receptors. Additionally, Policy HS-8.5 requires the City to establish an ongoing noise monitoring program and Policy HS-8.6 requires that new development around the airport be consistent with the noise standards contained in the approved Airport Land Use Commission Plan, and where deemed appropriate, require navigation easements from new development. Finally, Policy HS-8.7 requires the City to pursue an update of the City's existing Airport Master Plan noise contours through the year 2030, consistent with the anticipated use of the airport by larger aircraft. With implementation of the below mentioned policies, this impact is considered ***less than significant.***

| **Land Use Element** | **Transportation and Circulation & Health and Safety Elements** |
|---|---|
| Policies designed to minimize the risk of airport related hazards to City residents and property include the following: | |
| LU-2.10 Airport Buffer<br>LU-5.1 Rural Land Uses | T-6.2 Runway Expansion<br>HS-4.1 Airport Land Use Compatibility Plan<br>HS-4.2 Compliance With FAA Regulations<br>HS-4.3 Development in Airport Vicinity |
| **Health and Safety Element** | |
| Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the study area include the following: | |
| HS-8.1 Sensitive Receptors<br>HS-8.2 Protect Residential Areas<br>HS-8.5 Noise Monitoring<br>HS-8.6 Development Around Airport<br>HS-8.7 Update Airport Master Plan | HS-8.9 Noise Compatibility Guidelines<br>HS-8.10 Sound Attenuation Features<br>HS-8.11 Noise Buffering<br>HS-8.14 Noise Analysis |

### Required Mitigation Measures

This impact is considered ***less than significant.*** No additional mitigation measures are required.