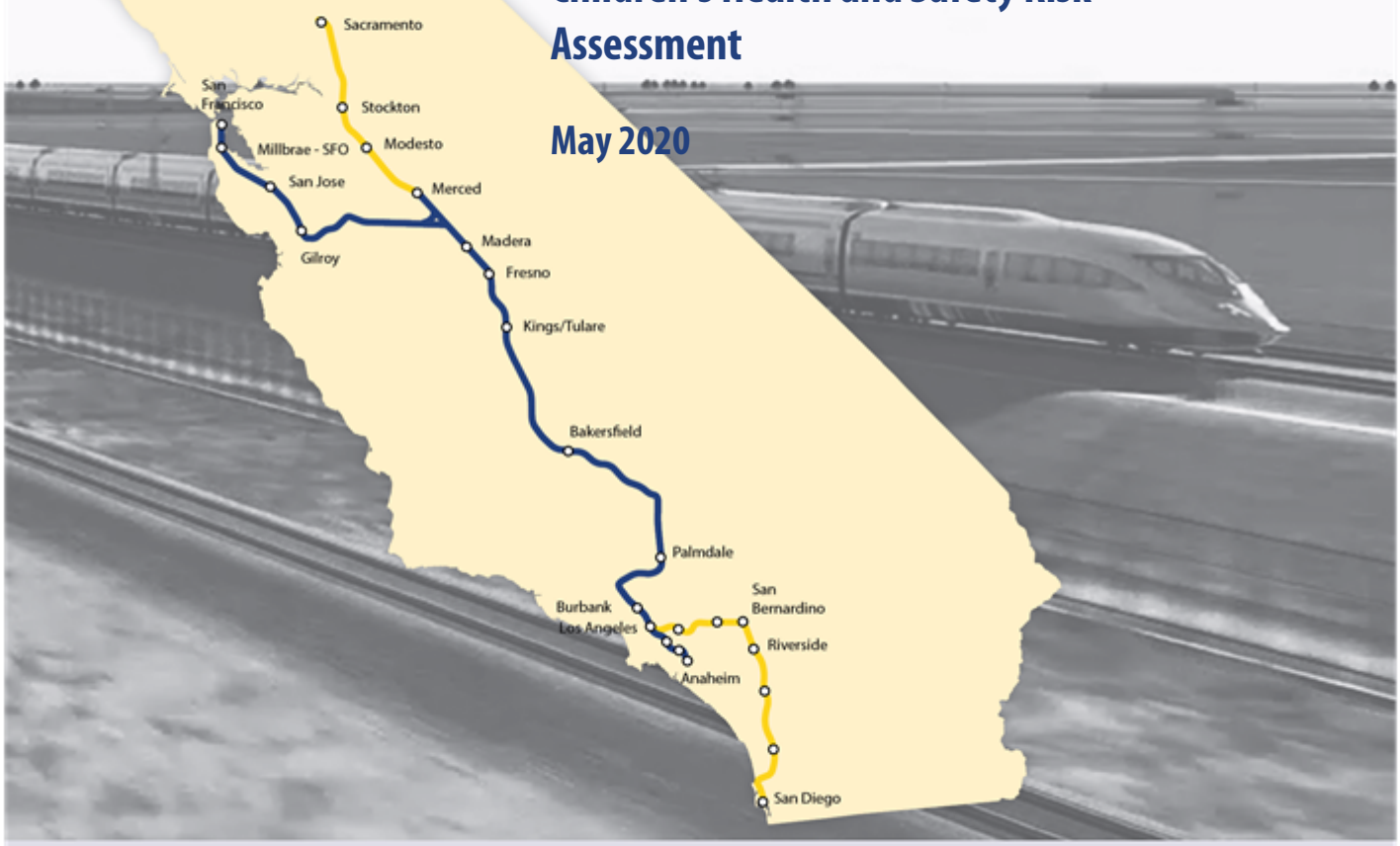
California High-Speed Rail Authority

Burbank to Los Angeles Project Section

Draft Project Environmental Impact Report/Environmental Impact Statement

Appendix 3.12-C
Children's Health and Safety Risk Assessment

May 2020



CALIFORNIA High-Speed Rail Authority

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

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TABLE OF CONTENTS

Figure

Tables

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APPENDIX 3.12-C: CHILDREN'S HEALTH AND SAFETY RISK ASSESSMENT

INTRODUCTION

This appendix describes potential children's environmental health and safety risks associated with the Burbank to Los Angeles Project Section of the California High-Speed Rail (HSR) Project in support of Section 3.12, Socioeconomics and Communities.

Regulatory Setting

Executive Order 13045, Protection of Children from Environmental Health and Safety Risks, was issued in 1997 to minimize environmental health and safety risks to children, and to prioritize the identification and assessment of environmental health and safety risks that may have a disproportionate impact on children. Executive Order 13045 also ensures that federal agencies, in their policies, programs, activities, and standards, address environmental and safety risks to children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that children are likely to come into contact with or ingest (e.g., air, food, drinking water, recreational waters, soil, or products they might use or be exposed to). In proportion to their size, children breathe more air, drink more water, and eat more food than adults. This puts them at greater risk of exposure to pollutants. Children's bodies are also less able to metabolize, detoxify, and expunge these pollutants.

Methodology and Definitions

The analysis was performed in accordance with Executive Order 13045 and consisted of conducting a demographic analysis and review of the HSR Build Alternative to qualitatively assess whether the HSR Build Alternative would result in children's environmental health and safety risks. The analysis is based on the environmental documentation prepared in support of the Burbank to Los Angeles Project Section EIR/EIS. The following sections were reviewed because these resources would have the greatest potential to affect children's health and safety:

- Section 3.2, Transportation
- Section 3.3, Air Quality and Global Climate Change
- Section 3.4, Noise and Vibration
- Section 3.5, Electromagnetic Fields and Electromagnetic Interference
- Section 3.8, Hydrology and Water Resources
- Section 3.10, Hazardous Materials and Wastes
- Section 3.11, Safety and Security
- Section 3.12, Socioeconomics and Communities
- Section 3.15, Parks, Recreation, and Open Space
- Section 3.19, Cumulative Impacts

The study area used for this analysis is defined as 0.5 mile from the HSR Build Alternative. This 0.5-mile distance from the HSR Build Alternative was selected because this is the area where the majority of its effects would occur (i.e., noise impacts only extend about 0.25 mile and local air quality impacts consider sensitive receptors [e.g., schools, residences, and health-care facilities] under 0.25 mile). Some disciplines (e.g., air quality) analyze a broader area when potential impacts could reach beyond 0.25 mile, but these effects would occur on a regional level. For the purposes of this analysis, children are defined as the population under the age of 18 in the study area.

Significance

Substantial effects on children's health and safety are defined as those impacts and effects on the environment that result in negative impacts on children as a result of one or more of the following (the associated resources are provided in parenthesis):

- Potential respiratory impacts, including asthma, from air pollutant emissions and generation of fugitive dust (Air Quality and Global Climate Change)

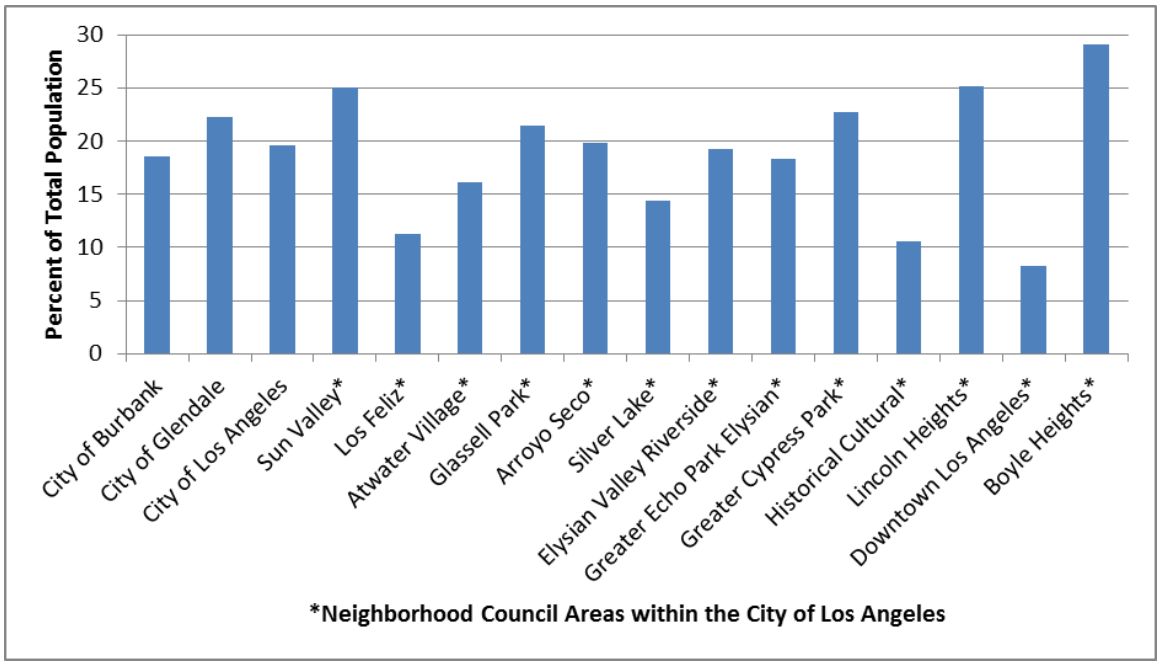
- Potential noise impacts on health and learning, especially in areas where children congregate (e.g., schools, parks, and residential areas) (Noise and Vibration)
- Potential impacts from the use of chemicals (e.g., dust suppression methods and hazardous materials) (Hazardous Materials and Wastes)
- Potential safety risks to children, especially where the HSR Build Alternative is located near areas where children congregate (Transportation; Electromagnetic Fields and Electromagnetic Interference; Hydrology and Water Resources; Safety and Security; Socioeconomics and Communities; Parks, Recreation, and Open Space; and Cumulative Impacts)

EXISTING CONDITIONS

This section provides information on demographics, community setting, schools, parks, and other community facilities located in the study area.

Demographics

Figure 3.12-C-1 provides information on the population under the age of 18 in the cities and neighborhood council areas within 0.5 mile of the HSR Build Alternative. The percentage of the population under age 18 in Los Angeles County is 19.6 percent (American Community Survey 2010–2014, Tables B01001 and B01002). The cities of Burbank and Glendale were examined as a whole because they are smaller and their demographic characteristics are less varied. Information for the City of Los Angeles is presented both as a whole and for specific neighborhood council areas. The boundaries of the neighborhood council areas are shown on Figure 3.12-4 in Section 3.12, Socioeconomics and Communities. In the study area, the Boyle Heights Neighborhood Council Area has the highest percentage of the population under age 18 (29.1 percent) and the Downtown Los Angeles Neighborhood Council Area has the lowest percentage of population under age 18 (8.3 percent). For additional information on demographics, refer to Section 3.12.



Source: U.S. Census Bureau, 2010–2014 American Community Survey, Table B01001 and B01002

Figure 3.12-C-1 Percentage of Population Under 18 Years of Age

Community Setting

The region consists of Los Angeles County. The study area runs through many urban communities in the cities of Burbank, Glendale, and Los Angeles. These communities consist of residents, businesses, and community resources. For complete information on the community setting, refer to Section 3.12, Socioeconomics and Communities.

Schools

School Locations

Table 3.12-C-1 lists school facilities in the study area, including early childhood education centers and public and private elementary, middle, and high schools. This analysis does not include post-secondary education facilities. A total of 45 schools fall within the study area.

Table 3.12-C-1 Schools Within 0.5 Mile of the High-Speed Rail Build Alternative

Name/Address	Jurisdiction
Bellarmine-Jefferson High School 465 E Olive Avenue Burbank	Burbank
Burbank USD Community Day School 223 E Santa Anita Avenue	Burbank
George Washington Elementary School 2322 N Lincoln Street	Burbank
Little Angels Academy Burbank, Inc. 721 S San Fernando Boulevard	Burbank
Monterey High School (Continuation) 1915 Monterey Avenue	Burbank
Options for Youth-Burbank Charter School 1610 W Burbank Boulevard	Burbank
Providencia Elementary School 1919 N Ontario Street	Burbank
Scholars Preparatory School 1001 S Glenoaks Boulevard	Burbank
Artek Child Education Center, Inc. 546 W Broadway	Glendale
Benjamin Franklin Elementary School 1610 Lake Street	Glendale
Cerritos Elementary School 120 E Cerritos Avenue	Glendale
Jewel City Community Day School 440 W Lomita Avenue	Glendale
Mark Keppel Elementary School/Eleanor J Toll Middle School 730 Glenwood Road	Glendale
Pacific Avenue – Early Bird Preschool 440 W Lomita Avenue	Glendale
Thomas Edison Elementary School 435 S Pacific Avenue	Glendale

Name/Address	Jurisdiction
Thomas Jefferson Elementary School 1540 5th Street	Glendale
Albion Street Elementary School 322 S Avenue 18	Los Angeles
Alliance Environmental Science and Technology High School 2930 Fletcher Drive	Los Angeles
Alliance Susan & Eric Smidt Technology High School 211 Avenue 20	Los Angeles
Ann Street Elementary School 126 E Bloom Street	Los Angeles
Aragon Avenue Elementary School 1118 Aragon Avenue	Los Angeles
Atwater Avenue Elementary School 3271 Silver Lake Boulevard	Los Angeles
Bridge Street Elementary School 605 N Boyle Avenue	Los Angeles
C. Erwin Piper Technical Center 555 Ramirez Street	Los Angeles
Castelar Elementary School 840 Yale Street	Los Angeles
Cathedral High School 1253 Bishops Road	Los Angeles
Dorris Place Elementary School 2225 Dorris Place	Los Angeles
Fletcher Drive Elementary School 3350 Fletcher Drive	Los Angeles
Florence Nightingale Middle School 3311 N Figueroa Street	Los Angeles
Glassell Park Elementary School 2211 W Avenue 30	Los Angeles
Glenfeliz Boulevard Elementary School 3955 Glenfeliz Boulevard	Los Angeles
Glenwood Elementary School 8001 Ledge Avenue	Los Angeles
Holy Trinity Elementary School 3716 Boyce Avenue	Los Angeles
Loreto Street Elementary School 3408 Arroyo Seco Avenue	Los Angeles
Los Feliz Charter Schools for the Arts 2709 Media Center Drive	Los Angeles
Perlita Head Start 4118 Chevy Chase Drive	Los Angeles
PUC Milagro Charter Elementary School 1855 N Main Street	Los Angeles

Name/Address	Jurisdiction
Ramon C. Cortines School of Visual and Performing Arts 450 N Grand Avenue	Los Angeles
School of Math & Science at Felicitas and Gonzalo Mendez Learning Center 1200 Plaza Del Sol	Los Angeles
Solano Avenue Elementary School 615 Solano Avenue	Los Angeles
Sonia M. Sotomayor Learning Academies 2050 San Fernando Road	Los Angeles
St. Bernard Elementary School 3254 Verdugo Road	Los Angeles
Utah Street Elementary School 255 Gabriel Garcia Marquez Street	Los Angeles
Washington Irving Middle School Math Music, and Engineering Magnet 3010 Estara Avenue	Los Angeles
White Memorial Adventist School 1605 New Jersey Street	Los Angeles

Source: California High-Speed Rail Authority (2017)
PUC = Partnerships to Uplift Communities
USD = Unified School District

School District Boundaries

Many of the students in the school districts crossed by the proposed HSR Build Alternative likely use transportation provided by the school district, rely on family members, or drive themselves to school. Figure 5-8 in the Community Impact Assessment (California High-Speed Rail Authority [Authority] 2018) shows the boundaries of the school districts in the study area.

Parks and Recreation

Table 3.12-C-2 lists the parks and recreation facilities in the study area and includes information on whether the resources are considered passive or active. Passive resources are identified as open space areas with trails and/or picnic areas. Active resources are identified as those that require development (e.g., playgrounds and ball fields). Parks that are considered active are associated with more intensive use by children. Table 3.12-D-2 demonstrates that of the 49 parks, recreation facilities, and open space resources in the study area, 11 are passive and 38 are active. The locations of the parks, recreation, and open space resources are presented on Figure 5-9 in the Burbank to Los Angeles Project Section Community Impact Assessment (Authority 2018).

Table 3.12-C-2 Parks, Recreation, and Open Space Resources Within 0.5 Mile of the High-Speed Rail Build Alternative

Name/Address	Jurisdiction	Passive or Active?
Proposed San Fernando Road Bike Path Burbank-Los Angeles city limit to the Downtown Burbank Metrolink Station	Burbank	Active
Robert E. Lundigan Park 2701 Thornton Avenue	Burbank	Active

Name/Address	Jurisdiction	Passive or Active?
Robert E. Gross Park 2800 W Empire Avenue	Burbank	Active
Victory Park 2300 W Monterey Place	Burbank	Active
McCambridge Park 1515 N Glenoaks Boulevard	Burbank	Active
Planned Chandler Road Bikeway W Chandler Boulevard, between N Clybourn Avenue and N Mariposa Street	Burbank	Active
Five Points Plaza 1075 W Burbank Boulevard	Burbank	Passive
Proposed Burbank Western Channel Bike Path Along the Burbank-Western Flood Control Channel from Alameda Avenue to the Downtown Burbank Metrolink Station	Burbank	Active
Golden State Connector Bike Path (Caltrans Replacement Pedestrian Bridge) Adjacent to the Golden State Freeway in the vicinity of Providencia Avenue	Burbank	Active
Robert R. Ovrom Park and Community Center 601 S San Fernando Boulevard	Burbank	Active
Ralph Foy Park 1731 N Ontario Street	Burbank	Active
Proposed San Fernando Railroad Bike Path San Fernando Road from northern to southern city limits	Glendale	Active
Griffith Manor Park 1551 Flower Street	Glendale	Active
Pelanconi Park 934 Grandview Avenue	Glendale	Active
Proposed Verdugo Wash Bike Path Verdugo Wash Channel that runs from north Glendale to the Los Angeles River	Glendale	Active
Pacific Park and Community Center 501 Pacific Avenue	Glendale	Active
Pacific Park Pool 509 S Pacific Avenue	Glendale	Active
Cerritos Park 3690 San Fernando Road	Glendale	Active
Fremont Park 600 W Hahn Avenue	Glendale	Active
Glendale Narrows Riverwalk 900 Flower Street	Glendale	Passive

Name/Address	Jurisdiction	Passive or Active?
Harvard Mini Park 425 W Harvard Street	Glendale	Active
Milford Mini Park 601 W Milford Street	Glendale	Active
Existing Los Angeles River Bike Path Along the west bank of the Los Angeles River, connecting approximately 7 miles from the north side of Griffith Park at Riverside Drive (at Zoo Drive) along the Los Angeles River to Barclay Street in Elysian Valley	Los Angeles	Active
Griffith Park 4730 Crystal Springs Drive	Los Angeles	Active
Chevy Chase Park and Recreation Center 4165 Chevy Chase Drive	Los Angeles	Active
Juntos Family Park 3135 Drew Street	Los Angeles	Active
Marsh Park 2999 Rosanna Street	Los Angeles	Active
Elysian Valley Gateway Park 2914 Knox Avenue	Los Angeles	Active
Rio de Los Angeles State Park (Taylor Yard) 1900 N San Fernando Road	Los Angeles	Active
Proposed Taylor Yard (Parcel G2) No address available	Los Angeles	Active
Cypress Park and Recreation Center 2630 Pepper Avenue	Los Angeles	Active
Steelhead Park 2230 Oros Street	Los Angeles	Passive
Oso Park Riverside Drive at Oros Street	Los Angeles	Passive
Egret Park N Arnold Street	Los Angeles	Passive
River Garden Park 570 W Avenue 26	Los Angeles	Passive
Confluence Park 500–554 N San Fernando Road	Los Angeles	Passive
Elysian Park (including Point Grandview Park and Buena Vista Meadow Picnic Area) 929 Academy Road	Los Angeles	Active
Los Angeles Youth Athletic Club 421 N Avenue 19	Los Angeles	Active
Ed P. Reyes Riverway 295 N Avenue 19	Los Angeles	Passive

Name/Address	Jurisdiction	Passive or Active?
Downey Pool 1775 Spring Street	Los Angeles	Active
Downey Recreation Center 1772 N Spring Street	Los Angeles	Active
Albion Riverside Park (currently under construction) 1739 N Albion Street	Los Angeles	Active
Los Angeles State Historic Park 1245 N Spring Street	Los Angeles	Active
Play area at William Mead Homes 256 E Elmyra Street	Los Angeles	Active
Los Angeles Plaza Park 125 Paseo De La Plaza	Los Angeles	Passive
Proposed Park 101 U.S. Route 101	Los Angeles	Passive
Alpine Recreation Center 817 Yale Street	Los Angeles	Active
City Hall Park 200 N Main Street	Los Angeles	Passive
Elysian Valley Recreation Center 1811 Ripple Street	Los Angeles	Active

Source: California High-Speed Rail Authority (2017)
Caltrans = California Department of Transportation

Community Facilities

Table 3.12-C-3 lists other community facilities where children congregate, including religious institutions, museums, libraries, and community centers. Religious facilities represent the majority of the study area community facilities. The locations of the community facilities where children congregate in each community are presented on Figure 3.12-1 in Section 3.12, Socioeconomics and Communities.

Table 3.12-C-3 Community Facilities Where Children Congregate Within 0.5 Mile of the High-Speed Rail Build Alternative

Name/Address	Jurisdiction
Bethany Korean Community Church 2401 N Brighton Street	Burbank
Burbank Temple Emanu El 1302 N Glenoaks Boulevard	Burbank
Burbank Central Library 110 N Glenoaks Boulevard	Burbank
Salvation Army Corps Community Center – Burbank 300 E Angeleno Avenue	Burbank
St. Leon Armenian Cathedral: Western Diocese of the Armenian Church 3325 Glenoaks Boulevard	Burbank

Name/Address	Jurisdiction
Unity Church of Burbank 637 S Victory Boulevard	Burbank
Victory Tabernacle 1614 W Victory Boulevard	Burbank
Armenian Evangelical Brethren Church – Evangelical Church 1800 Lake Street	Glendale
First Evangelical Church 522 W Broadway	Glendale
Pacific Park Branch Library 501 N Pacific Avenue	Glendale
Salvation Army Corps Community Center – Glendale 801 S Central Avenue	Glendale
St. Krevork Armenian Church 1434 W Kenneth Road	Glendale
Arleta Foursquare Church 10201 Armanita Street	Los Angeles
Atwater Park Baptist Church 3370 Perlita Avenue	Los Angeles
Blessing Mission Church 10231 Arminta Street	Los Angeles
Burbank Foursquare Church No address available	Los Angeles
Burbank Seventh-Day Adventist Church No address available	Los Angeles
Calvary Baptist Church No address available	Los Angeles
Central Baptist Church 301 E Angeleno Avenue	Los Angeles
Central Methodist Church 101 W Palmer Avenue	Los Angeles
Chinese American Museum 425 N Los Angeles Street	Los Angeles
Chinese United Methodist Church 821 N Hill Street	Los Angeles
Choong Hyun Mission Church 5005 Edenhurst Avenue	Los Angeles
Christ's Church – Griffith Park 3852 Edenhurst Avenue	Los Angeles
Church of Christ No address available	Los Angeles
Church of San Antonio de Padua 1414 E Cesar Chavez Avenue	Los Angeles

Name/Address	Jurisdiction
Cristo Rey Church 4343 Perlita Avenue	Los Angeles
CZBC – Chinese Zion Baptist Church 2610 W Avenue 33	Los Angeles
Divine Savior Presbyterian Church No address available	Los Angeles
Divine Saviour Catholic Church 624 Cypress Avenue	Los Angeles
El Pueblo de Los Angeles Historic Monument 845 N Alameda Street	Los Angeles
Faith Center Church No address available	Los Angeles

Source: California High-Speed Rail Authority (2017)

ENVIRONMENTAL CONSEQUENCES

This section describes the potential effects to children's health and safety as a result of construction and operation of the HSR Build Alternative.

Overview

Analysis based on the Burbank to Los Angeles Project Section EIR/EIS demonstrates the HSR Build Alternative would not affect products or substances (i.e., water, soil, and food) that a child is likely to ingest, use, be exposed to, or come into contact with. After mitigation, no residual impacts on children's health and safety are expected from construction or operation of the HSR Build Alternative.

No Project Alternative

The No Project Alternative includes planned projects that will likely be implemented by 2040. Chapter 2, Alternatives, in the Burbank to Los Angeles Project Section EIR/EIS provides a complete description of the No Project Alternative, and Section 3.19, Cumulative Impacts, discusses foreseeable future projects, including shopping centers and large residential and industrial developments. All projects requiring discretionary action under the No Project Alternative would be subject to environmental review through which impacts to children's health and safety associated with these projects would be addressed.

High-Speed Rail Build Alternative

Construction Impacts of the High-Speed Rail Build Alternative

The impacts on children's health and safety from construction of the HSR Build Alternative were determined by reviewing the construction impacts associated with the environmental elements addressed in the Burbank to Los Angeles Project Section EIR/EIS. Construction impacts were considered after implementation of the Authority's standard impact avoidance and minimization features (IAMF). Table 3.12-C-4 provides information about the potential impacts and their relevance to children's health and safety after the implementation of mitigation measures. Construction activities would be temporary, although these activities would occur over a longer duration in the station areas (refer to Chapter 2, Alternatives, for information on the construction period time frame).

Table 3.12-C-4: High-Speed Rail Build Alternative Construction Impacts on Children's Health and Safety

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Transportation	Construction of the HSR Build Alternative would temporarily contribute to interference with pedestrians, bicyclists, and transit and automobile users where existing sidewalks, paths, parking areas, roadway travel lanes, and transit stops need to be temporarily closed or relocated to allow for construction of new facilities. Adverse impacts as a result of local roadway modifications and construction activities may temporarily disrupt circulation patterns in some communities. Although access to some neighborhoods, businesses, or community facilities would be disrupted and detoured for short periods during construction, access would be available. Any roadways that would require realignment would be constructed before the closure of the existing roadway to minimize impacts. Construction would also require an increase in truck trips that could increase congestion. In addition, construction activities would affect pedestrians, bicyclists, and transit because of detours, traffic delays, and increased congestion. During construction, there may be temporary impacts related to school bus detours due to road closures. Standard construction procedures related to traffic management would be used to maintain traffic flow during peak travel periods, including identification of when and where temporary closures and detours would occur.	Before construction, a Construction Management Plan would be implemented and would include information to address communications, safety controls, and traffic controls to minimize impacts and maintain access. Additionally, a Construction Transportation Plan would be prepared before construction to provide information ensuring the safety of students and advising school districts of construction activities.
Air Quality and Global Climate Change	Construction activities (e.g., earthmoving) could result in a substantial amount of fugitive dust emissions and potential exposure to cancer risks. These emissions could have potential localized impacts on children in the vicinity of construction sites. These impacts would be reduced through implementation of various IAMFs, including compliance with air quality plans to reduce fugitive dust and other emissions. In addition to the IAMFs, mitigation measures are also proposed to reduce construction emissions. Station construction would take place over a period of approximately five years, and children at schools, residences, and health-care facilities could potentially be exposed to health impacts from elevated concentrations of criteria pollutants and cancer risks. At the regional level, construction activities would result in increased fugitive dust emissions.	After mitigation, cancer risks for any sensitive receptor near the station construction area are estimated to be below 10 in 1 million and within applicable air quality thresholds.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Noise and Vibration	Noise and vibration from construction activities would temporarily exceed noise and vibration standards and would affect sensitive receivers along the Burbank to Los Angeles Project Section. Five noise-sensitive uses are within 700 feet of the proposed HSR track: Hollywood Piano Company, Glendale Fire Training Center, Cornel School of Contemporary Music at Shepherd University, Los Feliz Charter School for the Arts, and Sotomayor Learning Academies. The Glendale Fire Training Center would experience no effect, and the remaining four facilities would experience a moderate noise effect. IAMFs implemented as part of the HSR Build Alternative would avoid or minimize construction noise and vibration impacts. In addition to the IAMFs, mitigation measures are also proposed to reduce noise impacts during construction.	With implementation of IAMFs and mitigation measures, the noise and vibration effects on children's health and safety would be reduced.
EMF/EMI	There would be no impacts during construction because construction equipment generates low levels of EMF and EMI.	There would be no impacts related to children's health and safety.
Hydrology and Water Resources	All construction impacts related to hydrology and water quality as a result of implementing the HSR Build Alternative would be avoided or minimized through compliance with National Pollutant Discharge Elimination System permits and project-specific design standards.	There would be no impacts related to children's health and safety.
Hazardous Materials and Wastes	The construction of the HSR Build Alternative would involve transporting, using, and disposing of construction-related hazardous materials and wastes. Potentially, such construction could result in accidental spills or releases of hazardous materials and wastes, and could result in temporary hazards to schools. The effect of hazardous materials released to the environment in the unlikely event of a leak or spill as the result of an accident or collision during construction would largely be negligible because of the generally small quantities of materials transported or used at any given time and because of the precautions required by existing regulations. Mitigation measures would be implemented to ensure the use of extremely hazardous substances or mixture thereof in a quantity equal to or greater than the state threshold quantity would not occur within 0.25 mile of a school.	With implementation of mitigation measures, the effect of construction of the HSR Build Alternative related to routine transport and handling of hazardous or acutely hazardous materials within 0.25 mile of an existing or proposed school would be reduced. In general, implementation of regulatory requirements would reduce the potential for a severe spill to a negligible intensity. Therefore, there would be no impacts on children's health and safety.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Safety and Security	The general public would not have access to construction areas for the HSR Build Alternative. The roads crossing the HSR alignment would be grade-separated, which would improve the safety of children crossing the HSR alignment. Temporary road closures would occur during construction and traffic would have to be detoured onto other roads. At these locations, lane closures and detours could potentially create a distraction to automobile drivers, pedestrians, and cyclists. Distraction and unfamiliarity with detours could lead to accidents. In addition, the road closures, detours, and localized automobile congestion could increase the response time for law enforcement, fire and emergency services personnel, and school buses. Emergency evacuation times could also increase. The HSR Build Alternative would include development of a detailed Construction Transportation Plan that would require coordination with local jurisdictions on emergency vehicle access. The plan would also include a traffic control plan that establishes procedures for temporary road closures, including access to residences and businesses during construction, lane closure, signage and flagpersons, temporary detour provisions, alternative bus and delivery routes, emergency vehicle access, bicycle and pedestrian access, and alternative access locations.	Because the HSR Build Alternative would implement a Construction Transportation Plan and associated traffic control plan and restrict access to construction areas, there would be no safety/security effects relevant to children's health and safety.
Socioeconomics and Communities	Construction activities could be particularly disruptive to nearby community facilities and institutions (e.g., schools) because construction would occur primarily during their normal hours of operation, when noise, traffic, and other conflicts would be most problematic. Additionally, construction activities, materials deliveries, etc., would conflict with pedestrian and vehicle access to schools when school is in session. Detailed construction access plans would be developed before the start of construction and the affected cities would review these plans before construction begins. Temporary construction employment would not result in a need for additional community facilities (e.g., schools and parks) because temporary construction employment needs are anticipated to be fulfilled locally. Also, construction of the HSR Build Alternative would have temporary and permanent impacts to park and recreational facilities due to restricted access and acquisitions. These impacts are further described below.	By maintaining access to nearby community facilities and institutions (e.g., schools) frequented by children, the HSR Build Alternative would have no socioeconomic or community effects related to children's health and safety.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Parks, Recreation, and Open Space	The proposed San Fernando Road Bike Path – Burbank, Robert E. Gross Park, Vickroy Park, Monterey High School/Magnolia Park School (play area), Burbank Western Channel Bike Path , Five Points Plaza , McCambridge Recreation Center, proposed Chandler Road Bikeway, Burbank High School (open space), Golden State Connector Bike Path (Caltrans Replacement Pedestrian Bridge), proposed San Fernando Railroad Bike Path, Griffith Manor Park, Pelanconi Park, proposed Verdugo Wash Bike Path, Pacific Park Community Center, Chevy Chase Park and Recreation Center, Cerritos Elementary (play areas), Cerritos Park, Los Feliz Charter School for the Arts (play area), Sotomayor Learning Academies (play areas), Rio de Los Angeles State Park, proposed Taylor Yard (G2 Parcel), Cypress Park and Recreation Center, River Garden Park, Confluence Park, Elysian Park (including Point Grandview Park and Buena Vista Meadow Picnic Area), Albion Riverside Park (currently under construction), Los Angeles State Historic Park, play area at William Mead Homes, and proposed Park 101 would experience construction impacts. These impacts would include temporary access, air quality, noise, and visual impacts, and in some cases temporary facility closures caused by construction of the HSR Build Alternative. The proposed San Fernando Road Bike Path – Burbank, planned Chandler Road Bikeway, proposed San Fernando Railroad Bike Path, proposed Taylor Yard (Parcel G2), play area at William Mead Homes, and proposed Park 101 would experience permanent construction impacts due to acquisition of portions of the facilities. However, with the exception of the proposed San Fernando Road Bike Path – Burbank, the facilities would not change function.	Temporary construction impacts on parks, recreation facilities, and open space resources include noise, visual, and traffic effects. These effects would be primarily an inconvenience or irritation but not a health or safety risk to children. The permanent construction impacts due to acquisitions would not pose a health or safety risk to children with implementation of IAMFs and mitigation measures.
Cumulative Impacts	None of the environmental elements identified in this table would result in any cumulative impacts.	The impacts would be temporary and would end following construction completion.

Source: California High Speed Rail (2017)

[1] An impact with negligible intensity is defined as an increased risk to the public or the environment related to hazardous materials or substances that is slightly more than, but very close to, existing conditions.

Caltrans = California Department of Transportation
EMF = electromagnetic fields
EMI = electromagnetic interference
HSR = high-speed rail

Operation Impacts of the High-Speed Rail Build Alternative

The impacts on children's health and safety from operation of the HSR Build Alternative were determined by reviewing the operation impacts associated with the environmental elements addressed in the Burbank to Los Angeles Project Section EIR/EIS. Table 3.12-C-5 provides information about the potential impacts and their relevance to children's health and safety after implementation of mitigation measures.

Table 3.12-C-5 High-Speed Rail Build Alternative Operation Impacts on Children's Health and Safety

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Transportation	Roadway modifications may change some access and routing of school buses due to road closures, but alternative routes are provided to minimize any impacts. The resulting out-of-direction travel distances required due to road closures would not result in long detours. The HSR Build Alternative would be grade-separated from the existing transportation corridors, so there would be no conflict between school buses and the HSR trains. The HSR Build Alternative provides new grade separations for roadways to cross over or under the existing railroad corridor. These overcrossings would remove existing conflicts with railroads and would improve safety and access for school buses.	There would be no effect on children's health and safety as a result of school district bus transportation changes. There would be beneficial effects because new grade separations would improve safety and access.
Air Quality and Global Climate Change	The HSR Build Alternative would result in a net benefit on regional and statewide air quality from HSR operation because of a decrease in emissions.	All residents in the cities of Burbank, Glendale, and Los Angeles (including children) would benefit from the decrease in air pollutants associated with the projected shift in transportation modes.
Noise and Vibration	HSR Build Alternative operation would result in impacts from increased noise levels. Of the five schools within 700 feet of the HSR Build Alternative, four schools would experience a moderate noise impact and one school would have no impact as a result of the HSR Build Alternative operations. Using sound barriers for mitigation, noise impacts would be reduced because the barriers would shield noise. No schools would be affected by vibration.	With mitigation in the form of sound barriers, the noise effects on children's health and safety would be reduced.
EMF/EMI	The HSR Build Alternative would use radio systems for automatic train control, data transfer, and communications, which could result in EMI with the radio systems in use at nearby schools. Because the HSR radio system would use dedicated frequency blocks and all HSR equipment would meet FCC regulations for EMI, there would be no effect of the HSR Build Alternative on school communication systems. Radio communications systems (e.g., wireless local area networks and internet connections) are expected to be in use at schools along the Burbank to Los Angeles Project Section. Wireless networks used by schools and colleges operate at relatively low power levels and have a limited range of 100 to 300 feet; therefore, EMF impacts at schools, hospitals, colleges, and residences would not be expected to occur. EMF impacts on the general population (including children) at schools, parks, hospitals, colleges, residences, and other uses near the station platforms, track right-of-way, and maintenance facilities would not exceed acceptable health and safety thresholds for human exposure to EMF/EMI.	There would be no effects on children's health and safety as a result of EMF or EMI.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
	While EMF levels inside the traction power facilities along the HSR alignment could exceed acceptable health and safety thresholds for EMF/EMI exposure for people with implanted medical devices, those facilities are unmanned and inaccessible to the general public. Therefore, there would be no health effects on members of the public with implanted medical devices, including children with such devices.	
Hydrology and Water Resources	There would be no operation impacts related to hydrology and water quality as a result of implementing the HSR Build Alternative because of compliance with NPDES permits and project-specific design standards.	There would be no hydrology and water quality impacts related to children's health and safety.
Hazardous Materials and Wastes	During operation of the HSR Build Alternative, only minor amounts of hazardous materials would be used, and all laws, regulations, and ordinances would be followed with respect to the transport, use, storage, and disposal of hazardous materials.	In general, implementation of regulatory requirements would reduce the potential for a severe spill to a negligible intensity; therefore, there would be no effect on children's health and safety.
Safety and Security	Cal. Code Regs. Title 5, Section 14010c, calls for a separation between schools and power transmission lines of 100 feet for 50–133 kV lines. The Burbank to Los Angeles Project Section would be powered by a 25 kV system; therefore, the electrification of the trains itself would not be a safety hazard to schools. The HSR Build Alternative would not require the construction of new power transmission lines in the vicinity of existing or future planned schools. Derailment of a train during a seismic event or other natural disaster could be a substantial safety hazard to schools along the HSR Build Alternative if the train were to leave the HSR right-of-way and collide with other structures or people on adjacent properties. This hazard is associated with the physical mass and speed of the train. Because the HSR system would carry passengers and would be electric-powered, there would be no safety hazard associated with HSR cargo or fuel. The physical impact of a high-speed train leaving the right of-way could only occur within roughly 100 feet of the right-of-way. A basic design feature of an HSR system is to contain trainsets within the operational corridor. Thus, if a derailment were to occur next to a school, the train would remain within the HSR right-of-way.	The electrification of the HSR Build Alternative would have no safety effect on school employees and/or students. Because the train would be contained in the HSR right of-way in the event of derailment and would not contain cargo or fuel that would result in a fire or explosion, the HSR Build Alternative would not substantially increase hazards to nearby schools.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Socioeconomics and Communities	Impacts on communities would result from the displacement of one residential unit (one single-family home) and 111 businesses. Implementation of IAMFs and proposed mitigation measures and relocation services would ensure that displaced residents and their children can relocate within the same communities. No acquisitions of schools or community facilities are associated with operation of the HSR Build Alternative. Partial acquisition of parks and recreational facilities are discussed below.	Operation of the HSR Build Alternative would have no socioeconomic or community effects related to children's health and safety.
Parks, Recreation, and Open Space	Impacts on parks, recreation facilities, open space resources, and school district play areas and recreation facilities would include the direct impacts associated with acquisition of park resources and indirect impacts from HSR Build Alternative operations related to the distance between the HSR Build Alternative and the park, including noise and vibration and visual impacts. Impacts would occur at the proposed Chandler Road Bikeway and the proposed San Fernando Railroad Bike Path due to the acquisition of a portion of the paths that could not be replaced, and at Robert E. Gross Park due to underground noise and vibration.	Although there would be impacts related to acquisition of potions of the two proposed bike paths, mitigation would require the development of replacement park property. With the implementation of mitigation measures to address noise, vibration, and visual effects at Robert E Gross Park, the impacts on children's health and safety would be reduced.
Cumulative Impacts	Beneficial effects would occur with regard to transportation, air quality, and safety and security. No effects would occur due to hydrology and water resources. There are potential effects related to noise and vibration; EMF/EMI; hazardous materials and wastes; safety and security; socioeconomics and communities; and parks, recreation, and open space, but the impacts would be reduced by mitigation measures.	No impacts on children's health and safety are expected as a result of cumulative impacts.

Source: California High Speed Rail (2017)
Authority = California High-Speed Rail Authority
Cal. Code Regs. = California Code of Regulations
EMF = electromagnetic fields
EMI = electromagnetic interference
FCC = Federal Communications Commission
HSR = high-speed rail
kV = kilovolt(s)
NPDES = National Pollutant Discharge Elimination System

Project Construction and Operation of the High-Speed Rail Build Alternative Impact Summary

As detailed in Tables 3.12-D-4 and 3.12-D-5, construction and operation of the HSR Build Alternative would not result in any impacts to children's health and safety.

Project Design Features and Mitigation Measures

The HSR Build Alternative incorporates standardized HSR features to avoid and minimize impacts. These features are referred to as IAMFs. The Authority, in coordination with the property owners, will implement IAMFs during project design, construction, and operation. As such, the analysis of effects of the HSR Build Alternative in this section factors in all applicable IAMFs. The Authority will coordinate with the property owner to obtain a memorandum of agreement after the Record of Decision/Notice of Determination and prior to the start of construction to ensure the required IAMFs are implemented. In addition, the various sections in the Burbank to Los Angeles

Project Section EIR/EIS include mitigation measures that would further reduce children's health and safety impacts identified in this analysis.

REFERENCES

California High-Speed Rail Authority. 2018. *Burbank to Los Angeles Project Section Community Impact Assessment.* February 2018.