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

California High-Speed Rail Authority

Los Angeles to Anaheim Project Section

Draft Project Environmental Impact Report/Environmental Impact Statement

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

December 2025

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 22, 2024, and executed by the Federal Railroad Administration and the State of California.

TABLE OF CONTENTS

Figures

Tables

ACRONYMS AND ABBREVIATIONS

Term	Definition
CDP	census-designated place
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
HSR	High-Speed Rail
IAMF	impact avoidance and minimization feature
project section	Los Angeles to Anaheim Project Section
RSA	resource study area

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

3.12-F.1 Introduction

This appendix describes potential children's environmental health and safety risks associated with the Shared Passenger Track Alternatives for the Los Angeles to Anaheim Project Section of the California High-Speed Rail (HSR) System in support of Section 3.12, Socioeconomics and Communities, of the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS).

3.12-F.1.1 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.

There are no applicable state regulations to address children's health and safety.

3.12-F.1.2 Methodology and Definitions

The analysis was performed in accordance with Executive Order 13045 and consisted of conducting a demographic analysis and review of the Shared Passenger Track Alternatives to qualitatively assess whether the project would result in children's environmental health and safety risks. The analysis is based on the environmental documentation prepared in support of the Draft EIR/EIS. The following sections of the Draft EIR/EIS 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

For the purposes of this analysis, children are defined as the population in the study area age 18 or younger. The resource study area (RSA) for this analysis includes schools, daycare facilities, and recreation areas where children are likely to congregate within 1,000 feet of the Shared Passenger Track Alternatives footprints.

3.12-F.1.3 Significance

Substantial effects on children's health and safety are defined as impacts and effects on the environment that result in negative impacts on children as a result of one or more of the following:

- Potential respiratory impacts, including asthma, from air pollutant emissions and generation of fugitive dust

- Potential noise impacts on health and learning, especially in areas where children congregate (e.g., schools, parks, and residential areas)
- Potential impacts from the use of chemicals (e.g., dust suppression methods and hazardous materials)
- Potential safety risks to children, especially where the project would be near areas where children congregate

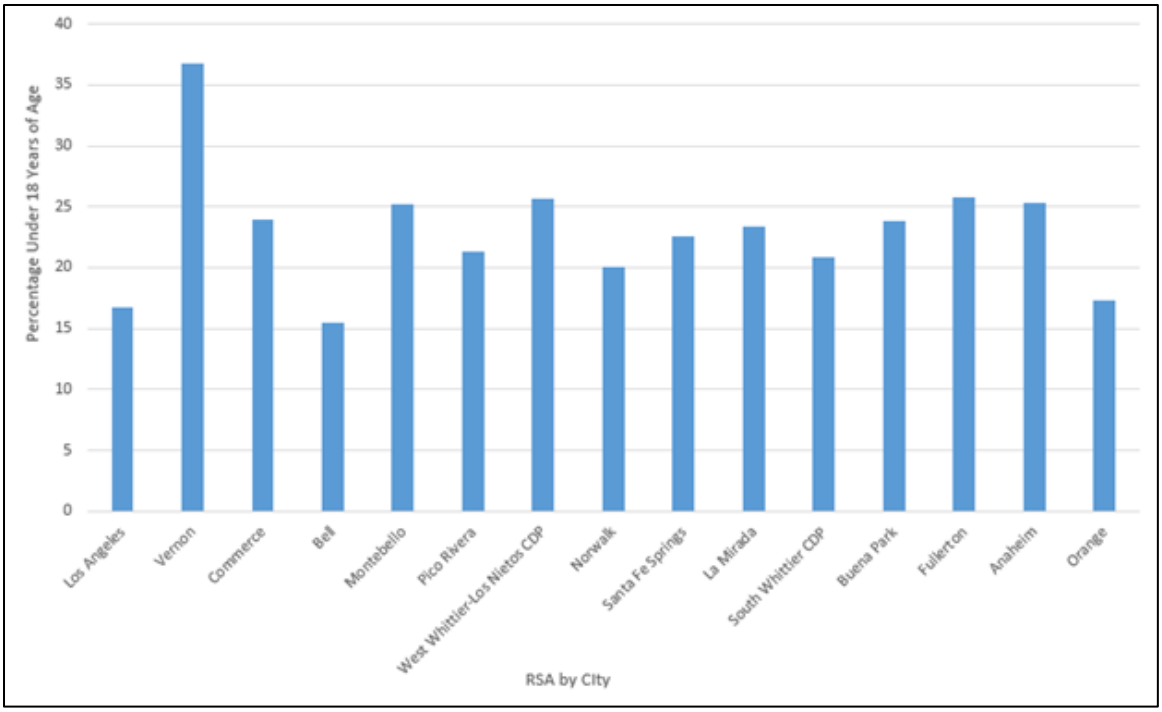
3.12-F.2 Existing Conditions

This section provides information on demographics, community setting, schools, parks, and other community facilities in the children's health and safety RSA.

3.12-F.2.1 Demographics

Figure 3.12-F-1 provides information on the population under the age of 18 in the cities and census-designated places (CDP) within the RSA. The percentage of the population under age 18 in Los Angeles County and Orange County is 21.6 percent and 22.0 percent, respectively (U.S. Census Bureau 2021, Table B01001). The cities within the RSA were examined as a whole because they are smaller and their demographic characteristics are less varied. The boundaries of the cities and CDPs are indicated on Figure 3.12-1 in Section 3.12 of the Draft EIR/EIS.

As described in the *Los Angeles to Anaheim Project Section Community Impact Assessment,* the city of Vernon has the highest percentage of the population under age 18 (36.8 percent) and the city of Bell has the lowest percentage of population under age 18 (15.5 percent) (Authority 2025). For additional information on demographics, refer to Chapter 5 of the Community Impact Assessment.



Source: U.S. Census Bureau 2021

Figure 3.12-F-1 Percentage of Population Under 18 Years of Age within the Children's Health and Safety Resource Study Area

3.12-F.2.2 Community Setting

The RSA runs through many urban communities (cities and CDPs): Los Angeles, Vernon, Commerce, Bell, Montebello, Pico Rivera, West Whittier–Los Nietos CDP, Norwalk, Santa Fe Springs, South Whittier CDP, and La Mirada in Los Angeles County, and Buena Park, Fullerton, Anaheim, and Orange in Orange County. These communities consist of residents, businesses, and community resources. For complete information on the community setting, refer to Section 3.12 of the Draft EIR/EIS.

3.12-F.2.3 Schools

3.12-F.2.3.1 School Locations

Table 3.12-F-1 lists school facilities in the RSA, 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 24 schools and early childhood education centers fall within the children's health and safety RSA.

Table 3.12-F-1 Schools within the Children's Health and Safety Resource Study Area

School Name	Address	Facility Type	Distance from Footprint
City of Los Angeles			
FIRST 5 LA	750 N Alameda St	Early childhood center	781 feet
Union Station Gateway Child Development	1 Gateway Plaza Dr	Early childhood center	754 feet

School Name	Address	Facility Type	Distance from Footprint
Proyecto Pastoral at Dolores Mission [Women's Cooperative Child Care Center]	135 N Mission Rd	Early childhood center	674 feet
Nishi Hongwanji Child Development Center – Day Care Center	815 E 1st St	Place of worship; early childhood center	895 feet
Felicitas and Gonzalo Mendez High	1200 Plaza Del Sol E	Public school	909 feet
City of Commerce			
Childtime of Commerce	4820 S Eastern Ave #F	Early childhood center	218 feet
City of Pico Rivera			
Maof Child Care Center	9125 Burke St	Day care	908 feet
Plaza de la Raza / Maizeland	7601 Cord Ave	Early childhood center	292 feet
St. Mariana de Paredes School	7911 Buhman Ave	Private school	812 feet
West Whittier–Los Nietos Census-Designated Place			
Pioneer High School	10800 Benavon St	Public school	50 feet
Los Nietos Middle School	11425 E Rivera Rd	Public school	248 feet
City of Norwalk			
John H. Glenn High School Expansion	13520 Shoemaker Ave	Public school	141 feet
City of La Mirada			
YMCA of Greater Whittier - La Mirada Youth Services Center	14540 San Cristobal Dr	Early childhood center	631 feet
Froebel Daycare	15932 Dalmatian Ave	Early childhood center	154 feet
City of Buena Park			
LiMai Montessori Academy	5309 Beach Blvd	Early childhood center	490 feet
Jesus' Hands	5621 Beach Blvd	Early childhood center	453 feet
Sunny Hills Preschool	8252 Artesia Blvd	Early childhood center	847 feet
City of Fullerton			
Bumblebee Christian Learning Center	2353 Williamson Ave	Early childhood center	687 feet
Color Our World Daycare	1613 W Valencia Dr	Early childhood center	969 feet
Pacific Drive Elementary School	1501 W Valencia Dr	Public school	288 feet
Fullerton First United Methodist Preschool	114 N Pomona Ave	Early childhood center	627 feet
Maple Elementary School	244 E Valencia Dr	Public school	750 feet
City of Anaheim			
Jefferson (Thomas) Elementary	504 E South St	Public school	605 feet
Olive Street Elementary	890 S Olive St	Public school	590 feet

Sources: ESRI 2018; City of Los Angeles 2024; City of Vernon 2024; City of Commerce 2024; City of Montebello 2024a; City of Pico Rivera 2024; City of Whittier 2024; City of Norwalk 2024; City of Santa Fe Springs 2024; City of La Mirada 2024; City of Whittier 2024; City of Buena Park 2024; City of Fullerton 2024; City of Anaheim 2024; City of Orange 2024; County of Orange 2024; County of Los Angeles 2016, 2024; ArcGIS Online 2015; Community Development Commission of the County of Los Angeles 2015; California Department of Public Health 2015; Association of Religion Data Archives 2016; GreenInfo Network 2021

3.12-F.2.3.2 School District Boundaries

Many of the students in the school districts crossed by the proposed project use transportation provided by the school district, rely on family members, or drive themselves to school. Figure 3.12-6, sheets 1 and 2, in Section 3.12 of the Draft EIR/EIS delineate the boundaries of the school districts in the RSA.

3.12-F.2.4 Parks and Recreation

Table 3.12-F-2 lists the parks and recreation facilities in the RSA and includes information on whether the resources are considered passive or active. Passive resources are identified as open space areas with trails 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-F-2 demonstrates that of the 32 parks, recreation facilities, and open space resources in the RSA, 1 is passive and 31 are active.

Table 3.12-F-2 Parks, Recreation, and Open Space Resources within 0.5 Mile of the Project

Name/Address	Jurisdiction	Passive or Active?
Los Angeles River Trail Extension (Planned) Adjacent to the Los Angeles River	Los Angeles County	Active
Yaanga Park 540 N Los Angeles St	Los Angeles	Active
Arts District Park 501 S Hewitt St	Los Angeles	Active
Bandini Park/Batres Community Center 4725 Astor Ave	Commerce	Active
Rio Hondo River Trail Adjacent to the Rio Hondo Creek	Los Angeles County	Active
Rio Hondo River Bike Path Adjacent to Rio Hondo Creek	Los Angeles County	Active
San Gabriel River Trail Adjacent to the San Gabriel River	Los Angeles County	Active
San Gabriel River Bike Path Adjacent to the San Gabriel River	Los Angeles County	Active
John Zimmerman Park 13031 Shoemaker Ave	Norwalk	Active
Coyote Creek North Fork Bikeway Along La Canada Verde Creek from Artesia Blvd/Marquardt Ave in Cerritos to Foster Rd/Marquardt Ave	Los Angeles County	Active
Neff Park 14300 San Cristobal Dr	La Mirada	Active
Coyote Creek Main Branch Bikeway Extension (Planned) Along Coyote Creek from Knott Ave to La Mirada Blvd	Orange County	Active

Name/Address	Jurisdiction	Passive or Active?
Smith-Murphy Park 5290 Cameron Dr	Buena Park	Active
Brea Creek Bastanchury Corridor (Planned) Along Brea Creek, would run south along Dale St, west along Artesia Blvd, and north along Stanton Ave to rejoin Brea Creek	Buena Park	Active
Adlena Park 300 N Adlena Dr	Fullerton	Active
Fullerton Pooch Park 201 S Basque Ave	Fullerton	Active
Pacific Drive Park 222 Pacific Dr	Fullerton	Active
Janet Evans Swim Complex 801 W Valencia Dr	Fullerton	Active
Independence Park 801 W Valencia Dr	Fullerton	Active
Union Pacific Trail Phase II (Planned) Along the Union Pacific Railroad-owned rail corridor	Fullerton	Active
Ford Park 435 W Wilshire Ave	Fullerton	Active
Amerige Park 300 W Commonwealth Ave	Fullerton	Active
Richman Park 711 S Highland Ave	Fullerton	Active
Union Pacific Park 121 W Truslow Ave	Fullerton	Active
Union Pacific Railroad Right-of-Way Multipurpose Path Along the Union Pacific Railroad–owned rail corridor	Fullerton	Active
Plaza Park 144 E Wilshire Ave	Fullerton	Active
Lemon Park 701 S Lemon St	Fullerton	Active
Truslow Park 401 E Truslow Ave	Fullerton	Active
Citrus Park 104 S Atchison St	Anaheim	Active
Colony Park 501 E Water St	Anaheim	Active

Name/Address	Jurisdiction	Passive or Active?
Magnolia Park 1515 Wright Circle	Anaheim	Passive
Santa Ana River Trail and Parkway Along the Santa Ana River from Prado Dam and the Pacific Ocean	Riverside County, Orange County	Active

Sources: City of Anaheim 2015, 2020; City of Buena Park n.d., 2022; City of Commerce n.d.; City of Fullerton n.d.(a), n.d.(b), n.d.(c); City of La Mirada 2017; City of Montebello 2024b; City of Norwalk Coyote Creek Working Group 2008; City of Pico Rivera 2014; City of Santa Fe Springs 2022; County of Los Angeles 2006, 2012, 2015a, 2015b, 2025; County of Los Angeles and Los Angeles County Public Works 2022; Metro 2023; OCTA 2012, 2023; Orange County Public Works 2017
CDP = Census-Designated Place

3.12-F.2.5 Community Facilities

Table 3.12-F-3 lists other community facilities where children congregate, including religious institutions, museums, libraries, and community centers, in the RSA. Religious facilities represent the majority of the RSA community facilities.

Table 3.12-F-3 Community Facilities within the Children's Health and Safety Resource Study Area

Name	Facility Type	Address
City of Los Angeles		
Chinatown Branch Library	Library	639 N Hill St
Chinese American Museum	Museum	425 N Los Angeles St
Chinese United Methodist Church	Place of worship	825 North Hill St
Fort Moore Pioneer Memorial	Museum	501 N Hill St
Higashi Hongwangji Buddhist Temple	Place of worship	505 E 3rd St
Japanese American Cultural & Community Center	Cultural Center	244 S San Pedro St
Japanese Catholic Ctr	Place of worship	222 S Hewitt St
La Iglesia De Nuestra Señora La Reina De Los Angeles	Place of worship	535 N Main St
La Plaza United Methodist Church	Place of worship	115 Paseo De La Plaza
Los Angeles City Historical Society	Museum	PO Box 862311
Nishi Hongwanji Buddhist Temple & Child Development Center	Place of worship; early childhood center	815 E 1st St
Our Lady Queen of Angels Catholic Church	Place of worship	100 W Cesar E Chavez Ave
Sepulveda House Museum	Museum	622 N Main St
The Geffen Contemporary at Moca	Museum	125 N Central Ave
Thien Hau Temple	Place of worship	756 Yale St
Boyle Heights Christian Center	Place of worship	1516 E 1st St
Dolores Mission Roman Catholic Church	Place of worship	171 S Gless St
Our Lady Queen of Martyrs Roman Catholic Church	Place of worship	1339 Pleasant Ave

Name	Facility Type	Address
Pico Gardens Foursquare Church	Place of worship	320 S Gless St
Weller Street Missionary Baptist Church	Place of worship	129 S Gless St
City of Commerce		
Atlantic Branch Library	Library	2269 S Atlantic Blvd
Bandini Park/Bates Community Center	Parks and recreational facilities	4725 Astor Ave
Iglesia De Dios Pentecostal	Place of worship	5721 Sheila St
Rosewood Park/Community Center	Parks and recreational facilities	5600 Harbor St
St Marcellinus Church	Place of worship	2349 Strong Ave
City of Montebello		
Congregation of the Mission	Place of worship	420 Date St
St. Vincent's Seminary/DePaul Evangelization Center	Place of worship	420 Date St
Templo Evangelico	Place of worship	904 Oakwood St
City of Pico Rivera		
Peace Lutheran Church of Pico Rivera	Place of worship	9412 Shade Ln
Rivera First Baptist Church	Place of worship	9141 Burke St
Rivera Foursquare Church	Place of worship	9034 Burke St
Rivera Library	Library	7828 Serapis Ave
Saint Bartholomew's Episcopal Church	Place of worship	7540 S Passons Blvd
Shia Ithnaasheri Islamic Jamaat	Place of worship	7925 Serapis Ave
St. Mariana De Paredes Catholic Church	Place of worship; private school	7922 Passons Blvd
West Whittier–Los Nietos CDP		
Los Nietos Library	Library	11644 Slauson Ave
Our Lady of Perpetual Help Church	Place of worship	11553 Rivera Rd
City of Norwalk		
County of Los Angeles Public Library - Norwalk Library	Library	12350 Imperial Hwy
St Linus Catholic Church / Elementary School	Place of worship; private school	13913 Shoemaker Ave
Village Baptist Church	Place of worship	12641 E Foster Rd
City of Santa Fe Springs		
Calvary Hosanna Church	Place of worship	13112 Telegraph Rd #A
Kingdom Hall of Jehovah's	Place of worship	11719 Burke St
Prayer Advocates	Place of worship	14535 Valley View Ave
Together Community Church	Place of worship	14515 Valley View Ave #T

Name	Facility Type	Address
City of La Mirada		
Prince of Peace Lutheran Church	Place of worship	15246 Barnwall St
Jesus Community Church	Place of Worship	15246 Barnwall St
Trinity Reformed Baptist Church	Place of worship	14407 Rosecrans Ave
City of South Whittier CDP		
Jehovah's Witnesses	Place of worship	12524 Shoemaker Ave
Trinity United Methodist Church	Place of worship	13118 Rainier Ave
City of Buena Park		
Evangelical Formosan Church	Place of worship	5882 Beach Blvd
Hae Orum Church	Place of worship	4115 Artesia Ave
Hana Church	Place of worship	7951 Commonwealth Ave
Korean Community Church	Place of worship	6435 Roland St
Love for One Soul Church	Place of worship	8302 Artesia Blvd
Pentecostal Church of God	Place of worship	6102 Stanton Ave
City of Fullerton		
Agape Church Orange County	Place of worship	336 E Truslow Ave
Christian Community Church of Fullerton	Place of worship	2353 W Valencia Dr
Christian Life Center Fullerton	Place of worship	404 W Wilshire Ave
First Christian Church	Place of worship	109 E Wilshire Ave
First Lutheran Church-Fullerton	Place of worship	215 N Lemon St
Fullerton First United Methodist	Place of worship	114 N Pomona Ave
Fullerton Presbyterian Church	Place of worship	511 S Brookhurst Rd
Fullerton Public Library	Library	353 W Commonwealth Ave
General Assembly & Church	Place of worship	200 N Lawrence Ave
Grace Evangelical Free Church of Fullerton	Place of worship	204 E Amerige Ave
Grace Ministries Intl	Place of worship	165 S Brookhurst Rd
Hungarian Christian Church	Place of worship	235 Magnolia Ave
Jehovah's Witnesses	Place of worship	121 N Gilbert St
Jesus Es El Camino	Place of worship	2003 Raymer Ave #B
Orange Korean Church	Place of worship	643 Malvern Ave
St Luke's Lutheran Church	Place of worship	2000 W Valencia Dr
St Marys Catholic Church	Place of worship	400 W Commonwealth Ave
St Philip Benizi Church	Place of worship	235 S Pine Dr
Temple Baptist Church	Place of worship	1601 W Malvern Ave
Watered Garden Mission	Place of worship	1335 W Valencia Dr #A

Name	Facility Type	Address
Wilshire Avenue Community Church	Place of worship	212 E Wilshire Ave
City of Anaheim		
Anaheim First Church of the Nazarene	Place of worship	1340 N Candlewood St
Angel Stadium	Parks and recreational facilities	2000 E Gene Autry Way
Books on the Go! at ARTIC	Library	2626 E Katella Ave
Church of Christ	Place of worship	408 E Sycamore St
First Southern Baptist Church	Place of worship	1275 E Broadway
Great Light Korean Methodist	Place of worship	630 N Anaheim Blvd
Iglesia Bautista Fundamental La Roca	Place of worship	1520 S Lewis St
Makom Shalom Central – Messianic Congregation	Place of worship	1531 S Sinclair St
Orange County Bread of Life Church	Place of worship	129 E Cypress St
River Church	Place of worship	201 E Broadway
Salvation Army	Place of worship	1300 S Lewis St
Zion Lutheran Church	Place of worship	222 N East St
City of Orange		
Orange Coast Community Church	Place of worship	632 N Eckhoff St

Sources: ESRI 2018; City of Los Angeles 2024; City of Vernon 2024; City of Commerce 2024; City of Montebello 2024a; City of Pico Rivera 2024; City of Whittier 2024; City of Norwalk 2024; City of Santa Fe Springs 2024; City of La Mirada 2024; City of Whittier 2024; City of Buena Park 2024; City of Fullerton 2024; City of Anaheim 2024; City of Orange 2024; County of Orange 2024; County of Los Angeles 2016, 2024; ArcGIS Online 2015; Community Development Commission of the County of Los Angeles 2015; California Department of Public Health 2015; Association of Religion Data Archives 2016; GreenInfo Network 2021
ARTIC = Anaheim Regional Transportation Intermodal Center; CDP = census-designated place

3.12-F.3 Environmental Consequences

This section describes the potential effects on children's health and safety as a result of project construction and operation.

3.12-F.3.1 Overview

Analysis based on the Draft EIR/EIS demonstrates the Shared Passenger Track Alternatives 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 project construction or operation.

3.12-F.3.2 No Project Alternative

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

3.12-F.3.3 Project Impacts

3.12-F.3.3.1 Construction Impacts

The impacts on children's health and safety from project construction were determined by reviewing the construction impacts associated with the environmental elements addressed in the Draft EIR/EIS. Construction impacts were considered after implementation of the California High-Speed Rail Authority's standard impact avoidance and minimization features (IAMF). Table 3.12-F-4 provides information about the potential impacts and their relevance to children's health and safety after implementation of mitigation measures. Construction activities would be temporary and anticipated to take approximately 5 years, although these activities would occur over a longer duration in the station areas (refer to Chapter 2 for further information on the construction period time frame). Because construction impacts would be the same for both Shared Passenger Track Alternatives, they are not discussed separately.

Table 3.12-F-4 Construction Impacts on Children's Health and Safety

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Transportation	Project construction 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, grade separations, 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. Project 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, and mitigation will involve traffic improvements. During construction, there may be temporary impacts related to school bus detours caused by 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 Safety 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. Traffic improvements (e.g., traffic signal phasing sequence modification, addition of roadway and turn lanes and traffic signals) would also reduce impacts on children's safety.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Air Quality and global climate change	Sensitive receptors, including schools, daycare facilities, elder care establishments, medical facilities, and residential areas within 1,000 feet of the project footprint, are considered most susceptible to the localized air quality impacts from construction. Construction activities would use heavy equipment and trucks, which in turn would cause temporary direct and indirect emissions of air pollutants that could result in inhalation health risks. Demolition activities associated with project construction could release asbestos and lead-based paint, which could present health hazards. Construction would be temporary, and impacts at any particular place and time would depend on the specific construction activity, equipment and vehicle usage, schedule, and proximity to sensitive receptors. These impacts would be reduced through incorporation 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.	With incorporation of IAMFs and implementation of mitigation measures, 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.
Noise and vibration	Construction would require the use of mechanical equipment that would generate temporary noise and vibration increases over a period of 2 to 42 months at any given location, depending on the construction activity. Temporary noise impacts are expected to occur at residences within 645 feet of construction for daytime hours and 2,048 feet of construction for nighttime hours, particularly in residential areas adjacent to the project alignment. Pile driving is the only construction activity that could cause vibration damage to structures at distances of up to 30 feet for the least sensitive buildings and up to 75 feet for the most sensitive buildings. Human annoyance or interference by vibration from construction would be expected within a distance of up to 500 feet and would primarily affect residences adjacent to the project alignment. Construction noise and vibration impacts would be temporary and intermittent. IAMFs incorporated as part of the project 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 incorporation of IAMFs and implementation of 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 project 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.

Environmental Element	Impacts Summary	Relevance to Children's Health and Safety
Hazardous materials and wastes	Construction would involve transporting, using, and disposing of construction-related hazardous materials and wastes. Such construction could potentially 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 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 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.
Safety and security	The general public would not have access to construction areas. The project would grade separate five existing at-grade crossings with the existing railroad tracks, 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 project would include development of a detailed Construction Safety Transportation Management 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 project would implement a Construction Safety Transportation Management 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.

Environmental Element	Impacts Summary	Relevance 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, and other activities 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 would have temporary and permanent impacts on park and recreational facilities because of restricted access and acquisitions. These impacts are further described below. Construction would cause temporary disruption of communities through secondary effects related to traffic, noise and vibration, ambient air quality, utility interruptions, and aesthetic changes during construction activities. Incorporation of IAMFs and implementation of mitigation measures would reduce impacts on community cohesion during construction.	By maintaining access to nearby community facilities and institutions (e.g., schools) frequented by children, the project would have no socioeconomic or community effects related to children's health and safety.
Parks, recreation, and open space	Construction would temporarily diminish access to the Rio Hondo Bike Path, Middle San Gabriel River Bike Trail, Coyote Creek Bikeway/North Fork, and the planned Brea Creek Bike Path. Implementation of mitigation measures would be required to reduce impacts on these four bike paths.	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 as a result of acquisitions would not pose a health or safety risk to children with incorporation of IAMFs and implementation of mitigation measures.
Cumulative impacts	Even with implementation of mitigation, the project in combination with cumulative projects would still have the potential to exceed significance thresholds for noise at sensitive receivers during construction and cumulative noise impacts would be cumulatively considerable. Given the high number of displacements and relocation of businesses that would occur as a result of the project and other cumulative projects, the cumulative impact related to displacement and relocation of business, including environmental justice populations, would be significant and cumulatively considerable.	The Authority would consult with local city and county planning departments and other agencies to adjust construction schedules for adjacent projects or projects in close proximity to the project in order to minimize the potential overlapping noise-generating construction activities. With incorporation of IAMFs and implementation of mitigation measures, the operational noise and vibration effects on children's health and safety would be reduced.

Authority = California High-Speed Rail Authority; EMF = electromagnetic fields; EMI = electromagnetic interference; HSR = high-speed rail; IAMF = impact avoidance and minimization feature

3.12-F.3.3.2 Operational Impacts

The impacts on children's health and safety from project operation were determined by reviewing the operational impacts associated with the environmental elements addressed in the Draft EIR/EIS. Table 3.12-F-5 provides information about the potential impacts and their relevance to children's health and safety after implementation of mitigation measures.

Table 3.12-F-5 Summary of Operational Impacts on Children's Health and Safety

Environmental Element	Shared Passenger Track Alternative A[1]	Shared Passenger Track Alternative B	Relevance to Children's Health and Safety
Transportation	Roadway modifications may change some access and routing of school buses as a result of road closures or near HSR stations, but alternative routes are provided to minimize any impacts. The resulting out-of-direction travel distances required from road closures would not result in long detours. The project would be grade separated from the existing transportation corridors at all but one intersection, so there would be minimal conflict between school buses and the HSR trains. The project 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.	Impacts would be the same as those of Shared Passenger Track Alternative A.	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, especially with traffic improvements (e.g., traffic signal phasing sequence modification, addition of roadway and turn lanes and traffic signals).

Environmental Element	Shared Passenger Track Alternative A[1]	Shared Passenger Track Alternative B	Relevance to Children's Health and Safety
Air Quality and global climate change	Overall, the project would result in a net benefit on regional and statewide air quality from HSR operation because of a decrease in emissions. Operations HRAs were conducted to evaluate the cancer risk and chronic noncancer risk from DPM emissions generated by the yard equipment activities at Hobart and Commerce Yards to determine the change in health risks caused by the reconfiguration of the yards. Project operation at Hobart Yard would add about 101,094 feet of additional storage and staging tracks, spread across 14 new tracks. The BNSF mainline tracks would also be shifted along some locations in the project corridor. Future activity pertaining to the new tracks and BNSF mainline track shift is unknown and therefore cannot be analyzed in the HRA. Without clear activity data to analyze, it is possible that project operation at Hobart Yard could pose health risk from exposure to DPM. To help mitigate this impact, the Authority would implement mitigation that requires an operational HRA to be conducted prior to the commencement of project operations. Mitigation would also require the analysis and incorporation of additional feasible mitigation to reduce risks to the greatest extent practicable prior to project operations.	Impacts would be the same as those of Shared Passenger Track Alternative A.	All residents in the region, including children, would benefit from the decrease in air pollutants associated with the projected shift in transportation modes. Without knowing if there is a potential health risk impact from DPM emissions at Hobart Yard, or the level of this impact, the Authority is unable to implement feasible mitigation measures. In the absence of certainty, exposure to DPM emissions could result in a risk to children's health and safety in the vicinity of Hobart Yard. However, the future operational HRA may determine that impacts are below the SCAQMD Project-Level thresholds and no additional on-site or off-site mitigation measure would be required. In this case, there would not be a risk to children's health and safety from operational air quality.

Environmental Element	Shared Passenger Track Alternative A[1]	Shared Passenger Track Alternative B	Relevance to Children's Health and Safety
Noise and vibration	Operation of HSR trains would result in operational noise levels exceeding the severe impact criteria at 59 residences and moderate impact criteria at 443 residences. A noise barrier of approximately 875 feet long, extending from 150 feet south of East Cyprus Street to near East Sycamore Street, would be constructed to offset impacts. Because a noise barrier would not meet the mitigation guidelines for the remaining 26 residences with severe noise impacts, these residences would have residual severe noise impacts. For these locations, other measures would be implemented, including noise abatement at receiver locations (for example, sound insulation of buildings), increasing the height/type of noise wall, and easement acquisition. In addition, operational vibration would result in a permanent impact at 517 residences.	Impacts would be the same as those of Shared Passenger Track Alternative A.	With mitigation in the form of sound barriers and other noise abatement, the noise effects on children's health and safety would be reduced.
EMF/EMI	Project operation could result in impacts, which include interference with implanted medical devices from EMF levels at traction power substations and standby generator rooms, corrosion of underground metal structures from ground currents generated by HSR operation, nuisance shocks from underground metal as a result of electrical currents generated by project operation, minor interference with adjacent railroads from the electrical current generated by the HSR system, interference with sensitive equipment at two receptor locations within the RSA, EMI effects at six schools and one daycare, and radio interference with airport communications and navigation systems from the HSR control and communications equipment.	Impacts would be the same as those of Shared Passenger Track Alternative A.	There would be no effects on children's health and safety as a result of EMF or EMI.
Hydrology and water resources	There would be no operational impacts related to hydrology and water quality as a result of project implementation because of compliance with National Pollutant Discharge Elimination System permits and project-specific design standards.	Impacts would be the same as those of Shared Passenger Track Alternative A.	There would be no hydrology and water quality impacts related to children's health and safety.

Environmental Element	Shared Passenger Track Alternative A[1]	Shared Passenger Track Alternative B	Relevance to Children's Health and Safety
Hazardous materials and wastes	During operation, 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.	Impacts would be the same as those of Shared Passenger Track Alternative A.	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	Replacement of existing at-grade roadway-rail crossings with grade-separated crossings would reduce emergency response time and reduce emergency response time impacts. The impact on the public and employees would be reduced because the design would include effective measures to reduce the potential for theft, violence, and terrorism during operation of HSR strains, stations, and other fixed facilities. Derailment of a train during a seismic event or other natural disaster could be a substantial safety hazard to schools along the project section 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. 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.	Impacts would be the same as those of Shared Passenger Track Alternative A.	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 project would not substantially increase hazards to nearby schools.

Environmental Element	Shared Passenger Track Alternative A[1]	Shared Passenger Track Alternative B	Relevance to Children's Health and Safety
Socioeconomics and communities	Impacts on communities would result from the displacement of three residential units and 256 businesses. Incorporation of IAMFs and implementation of proposed mitigation measures and relocation services would ensure that displaced residents and their children can relocate within the same communities. With the Norwalk/Santa Fe Springs HSR Station Option, there would be no additional residential or business displacements. With the Fullerton HSR Station Option, there would be nine additional business displacements. No acquisitions of schools or community facilities are associated with project operation.	Impacts on communities would result from the displacement of three residential units and 274 businesses. Incorporation of IAMFs and implementation of proposed mitigation measures and relocation services would ensure that displaced residents and their children can relocate within the same communities. With the Norwalk/Santa Fe Springs HSR Station Option, there would be there would be no additional residential or business displacements. With the Fullerton HSR Station Option, there would be nine additional business displacements. No acquisitions of schools or community facilities are associated with project operation.	Operation would have no socioeconomic or community effects related to children's health and safety.
Parks, recreation, and open space	Although operational noise and visual changes during operation would not prevent the use of resources adjacent to the project footprint, it may cause some users of those specific resources to instead use nearby recreational resources that experience lower noise levels. In addition, there would be a minor increase in resident and worker population, spread throughout Los Angeles and Orange Counties. However, it would not increase the use of existing neighborhood and regional parks or other recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated. Operation would not result in the physical alteration of the existing facilities or a need to provide new parks or other recreation facilities.	Impacts would be the same as Shared Passenger Track Alternative A.	Operation would have no impacts on parks, recreation, and open space as they relate to children's health and safety.

Environmental Element	Shared Passenger Track Alternative A[1]	Shared Passenger Track Alternative B	Relevance to Children's Health and Safety
Cumulative impacts	Greater traffic volumes and the increase in the number or length of trains associated with cumulative roadway, rail, and development projects, in combination with traffic and rail noise associated with the project, would result in noise level increases. Cumulative operational noise impacts would be cumulatively considerable and, given that many of these effects would occur in areas with greater percentages of minority and low-income populations than the counties within which they are located, these impacts would also result in adverse, significant, and cumulatively considerable effects on environmental justice populations. However, beneficial effects would occur with regard to transportation and air quality on a regional scale, and safety and security on a more localized scale.	Impacts would be the same as those of Shared Passenger Track Alternative A.	The Authority would consult with local city and county planning departments and other agencies to adjust construction schedules for adjacent projects or projects close to the project section in order to minimize the potential overlapping noise-generating construction activities. With incorporation of IAMFs and implementation of mitigation measures, the operational noise and vibration effects on children's health and safety would be reduced.

[1] The impacts of the HSR station options were assessed, and where the effects are different in nature or scope, those differences are noted in the table (refer to the socioeconomics analysis). Where nothing is noted, the HSR station options do not have impacts different from those of Shared Passenger Track Alternative A.

Authority = California High-Speed Rail Authority; BNSF = BNSF Railway; DPM = diesel particulate matter; EMF = electromagnetic field; EMI = electromagnetic interference; HRA = health risk assessment; HSR = high-speed rail; IAMF = impact avoidance and minimization feature; RSA = resource study area; SCAQMD = South Coast Air Quality Management District

3.12-F.3.3.3 Project Construction and Operation Impact Summary

As detailed in Table 3.12-F-4 and Table 3.12-F-5, project construction and operation would not result in any impacts on children's health and safety.

3.12-F.3.4 Project Design Features and Mitigation Measures

The Shared Passenger Track Alternatives incorporate standardized HSR features to avoid and minimize impacts. These features are referred to as IAMFs. The Authority, in coordination with the property owners, will incorporate IAMFs during project design, construction, and operation. Therefore, the analysis of effects factors in 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. The full text of each IAMF applicable to the Los Angeles to Anaheim Project Section is provided in Appendix 2-A, Impact Avoidance and Minimization Features, of the Los Angeles to Anaheim Project Section Draft EIR/EIS. In addition, Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures; Chapter 4, Draft Section 4(f) and Section 6(f) Evaluations; and Chapter 5, Community Analysis, in the Draft EIR/EIS include the full text of mitigation measures that would further reduce children's health and safety impacts identified in this analysis.

3.12-F.4 References

ArcGIS Online. 2015. Fire Stations (ArcGIS Online dataset Fire_Stations/CA_Fire). http://services.arcgis.com/BLN4oKB0N1YSgvY8/arcgis/rest/services/Fire_Stations/FeatureServer (accessed September 2016).

Association of Religion Data Archives. 2016. ARDA Religious Centers in Southern California (ArcGIS Online dataset: ARDA - SoCal Religious Centers). http://services.arcgis.com/o6oETlrWetREI1A2/arcgis/rest/services/ARDA_SoCalReligiousCenters/FeatureServer (accessed September 2016).

California Department of Public Health. 2015. CA Licensed Healthcare Facilities (ArcGIS Online dataset: CA_HealthcareFacilities\CA_HealthcareFacilities_CDPH_re091714). http://services.arcgis.com/jDGuO8tYggdCCnUJ/arcgis/rest/services/CA_HealthcareFacilities/FeatureServer (accessed September 2016).

California High-Speed Rail Authority (Authority). 2025. *Los Angeles to Anaheim Project Section Community Impact Assessment.*

City of Anaheim. 2015. Parks Division – Anaheim Parks. http://local.anaheim.net/comm_svc/parks/ (accessed May 2017).

———. 2020. *City of Anaheim Bicycle Master Plan*. https://www.anaheim.net/DocumentCenter/View/33379/2020-Bicycle-Master-Plan-and-Appendices (accessed November 2020).

———. 2024. Parks and Facilities. https://www.anaheim.net/916/Parks-Facilities (accessed August 2024).

City of Buena Park. No date. Parks: Friendship (Smith-Murphy) Park. https://www.buenapark.com/city_departments/community_services/parks/friendship_park.php (accessed October 2024).

———. 2022. *Buena Park 2035 General Plan*. Buena Park, CA: December 7, 2010; last updated 2022. https://www.buenapark.com/city_departments/community_development/planning_division/general_plan.php#outer-544 (accessed December 2023).

———. 2024. Community Services. https://www.buenapark.com/city_departments/community_services/index.php (accessed August 2024).

City of Commerce. No date. Facilities. www.ci.commerce.ca.us/Facilities (accessed May 2017).

———. 2024. Parks and Community Centers. https://www.ci.commerce.ca.us/residents/parks-recreation/parks-community-centers (accessed August 2024).

City of Fullerton. No date (a). List of Parks. https://www.cityoffullerton.com/government/departments/parks-recreation/parks-trails-and-fields/fullerton-parks-and-trails/list-of-parks (accessed December 2023).

———. No date (b). Recreational Trails. https://www.cityoffullerton.com/home/showpublisheddocument/2432/637455176331500000 (accessed December 2023).

———. No date (c). Construction Plans for Union Pacific Trail – Phase II FY 2024-25. https://www.cityoffullerton.com/home/showpublisheddocument/9470/638721159655470000 (accessed January 2025).

———. 2024. Parks and Recreation. https://www.cityoffullerton.com/government/departments/parks-recreation/parks-trails-and-fields (Accessed August 2024).

City of La Mirada. 2017. Parks. www.cityoflamirada.org/departments/community-services/parks (accessed May 2017).

———. 2024. City Facilities, Maps, and Directions. https://www.cityoflamirada.org/city-services/city-facilities-maps-and-directions (accessed August 2024).

City of Los Angeles. 2024. Recreation Centers. https://www.laparks.org/reccenter (accessed August 2024).

City of Montebello. 2024a. Parks and Facilities. https://www.montebelloca.gov/departments/recreation_community/facilities (accessed August 2024).

———. 2024b. *Montebello Bicycle Master Plan.* Montebello, CA. Adopted April 2024. https://www.montebelloca.gov/UserFiles/Servers/Server_58672/File/Departments/Planning%20&%20Comm.%20Dev/Planning%20Division/Specific%20Plans/3.2024_Final_Montebello%20Bicycle%20Master%20Plan_low%20res%20(1).pdf (accessed September 17, 2024).

City of Norwalk. 2024. City Facilities. https://www.norwalk.org/i-want-to/find/city-facilities (accessed August 2024).

City of Norwalk Coyote Creek Working Group. 2008. *Coyote Creek Bikeway Master Plan.* www.rmc.ca.gov/plans/coyote_ck_bikeway_plan/Coyote6-26-FINAL_DOC.pdf (accessed May 2017).

City of Orange. 2024. Parks and Facilities. https://www.cityoforange.org/our-city/departments/community-services/parks-and-facilities (accessed August 2024).

City of Pico Rivera. 2014. *General Plan*, Land Use Element and Environmental Resource Element. https://www.pico-rivera.org/general-plan/ (accessed December 2016).

———. 2024. Parks and Facilities. https://www.pico-rivera.org/parks-facilities (accessed August 2024).

City of Santa Fe Springs. 2022. *City of Santa Fe Springs 2040 General Plan*. https://www.santafesprings.org/departments/planning_and_development_department/planning/planning_handouts_and_maps.php#outer-136 (accessed December 2024).

———. 2024. Facilities. https://www.santafesprings.org/departments/community_services/about_us/facilities.php (accessed August 2024).

City of Vernon. 2024. Facility Directory Table List. https://www.cityofvernon.org/Home/Components/FacilityDirectory/FacilityDirectory/3/ (accessed August 2024).

City of Whittier. 2024. Parks, Recreation, and Community Services. https://www.whittierprcs.org/ (accessed August 2024).

Community Development Commission of the County of Los Angeles. 2015. Community Development Commission of the County of Los Angeles. 2015. CDC Public Housing Sites Points (GIS Shapefile CDC_PUBLIC_HOUSING_SITES_POINTS.shp). http://egis3.lacounty.gov/dataportal/2015/10/27/cdc-public-housing-sites-points/ (accessed September 2016).

County of Los Angeles. 2006. *San Gabriel River Corridor Master Plan*. https://trails.lacounty.gov/Files/Documents/1185/SGRT%20MasterPlan.pdf (accessed April 2025).

———. 2012. *County of Los Angeles Bicycle Master Plan*. March. https://dpw.lacounty.gov/pdd/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf (accessed May 2017).

———. 2015a. *Quick Guide to Rio Hondo River Trail.* June. https://trails.lacounty.gov/Files/QuickGuide/RioHondo.pdf (accessed December 2023).

———. 2015b. *Quick Guide to San Gabriel River Trail.* June. https://trails.lacounty.gov/Files/QuickGuide/SanGabrielRiver.pdf (accessed December 2023).

———. 2016. Points of Interest from the Location Management System (LMS) (GIS featureclass: LMS_Data_20160114.gdb\LMS_Data_20160114). http://egis3.lacounty.gov/lms (accessed September 2016).

———. 2024. Things to Do. https://lacounty.gov/residents/things-to-do/ (accessed August 2024).

———. 2025. Los Angeles County Bikeways Map. https://dpw.lacounty.gov/bike/map.cfm (accessed February 2025).

County of Los Angeles and Los Angeles County Public Works. 2022. *LA River Master Plan*. June. https://pw.lacounty.gov/uploads/swp/LARiverMasterPlan-FINAL-DIGITAL-COMPRESSED.pdf (accessed October 2024).

County of Orange. 2024. Building and Facilities. https://www.ocgov.com/about-county/info-oc/touch-county/oc-directory/building-facilities (accessed August 2024).

Environmental Systems Research Institute (ESRI). 2018. U.S. and Canada Parks (GIS geodatabase featureclass: parks.sdc\parks), U.S. Institutions (GIS geodatabase featureclass: institutions.sdc\institutions), and U.S. and Canada Large Area Landmarks (GIS geodatabase featureclass: landmarks.sdc\landmarks). www.esri.com.

GreenInfo Network. 2021. California School Campus Database. https://www.californiaschoolcampusdatabase.org (accessed August 2025).

Los Angeles County Metropolitan Transportation Authority (Metro). 2023. LA River Path Project. https://www.metro.net/projects/lariverpath/ (accessed January 2025).

Orange County Public Works. 2017. High Speed Rail Los Angeles to Anaheim Environmental Impact Analysis for the California High-Speed Rail Authority. Email message to Andrew Johnson. February 9, 2017.

Orange County Transportation Authority (OCTA). 2012. *Fourth District Bikeways Strategy*. February. https://octa.net/pdf/4thDistrictBikewaysReport.pdf (accessed December 2023).

———. 2023. OC Loop. https://www.octa.net/getting-around/active/oc-bike/oc-loop/ (accessed December 2023).

U.S. Census Bureau. 2021. 2017–2021 American Community Survey 5-Year Estimates. Tables DP03 (Selected Economic Characteristics), DP04 (Selected Housing Characteristics), DP05 (Demographic and Housing Estimates), B01001 (Sex by Age), B11001 (Household Type), B16002 (Household Language by Linguistic Isolation), B18101 (Sex by Age by Disability Status), B2535 (Median Year Structure Built), B25046 (Aggregate Number of Vehicles Available by Tenure), B26001 (Group Quarters Population), S0101 (Age and Sex),S1101 (Household and Families), S1701 (Poverty Status in the Past 12 Months), S1903 (Median Income in the Past 12 Months, 2021 Inflation-Adjusted Dollars), S2502 (Demographic Characteristics for Occupied Housing Units). https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2021/5-year.html (accessed November 2023).