

DOCUMENT RESUME

ED 452 677

EF 005 899

TITLE School Site Selection and Approval Guide.
INSTITUTION California State Dept. of Education, Sacramento. Div. of
School Facilities Planning.
PUB DATE 2000-00-00
NOTE 36p.
AVAILABLE FROM School Facilities Planning Division, California Department
of Education, P.O. Box 944272, Sacramento, CA 94244-2720.
For full text:
<http://www.cde.ca.gov/facilities/sfpdpublications.htm>.
PUB TYPE Reports - Descriptive (141)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Educational Facilities Planning; Elementary Secondary
Education; *Guidelines; *Public Schools; *Site Selection
IDENTIFIERS *California

ABSTRACT

This guide is designed to assist school districts in selecting school sites that provide both a safe and supportive environment for the instructional program and the learning process, and gain state approval for the selected sites. The guide includes a set of selection criteria that have proven helpful to site selection teams, information about safety factors that should be considered when evaluating potential school sites, and the procedures school districts must follow to gain approval from the California Department of Education for new sites and for additions of land areas to existing sites. Appendices contain an outline of the site selection process; an evaluation checklist for school bus driveways; school site field review, approval procedures, report, and approval letter; the final site approval letter; the factors to be included in geological and environmental hazards reports; reference to codes; and a walkability checklist. (GR)

School Site Selection and Approval Guide

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Curt Robinson

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Prepared by
School Facilities Planning Division
California Department of Education

Available at:

<http://www.cde.ca.gov/facilities/sfpdpublications.htm>

2

BEST COPY AVAILABLE



Publishing Information

The *School Site Selection and Approval Guide* was developed by the School Facilities Planning Division, California Department of Education, and was published by the Department, 721 Capitol Mall, Sacramento, California (mailing address: P.O. Box 944272, Sacramento, CA 94244-2720). It was distributed under the provisions of the Library Distribution Act and *Government Code* Section 11096.

© 2000 by the California Department of Education
All rights reserved

Notice

The guidance in *School Site Selection and Approval Guide* is not binding on local educational agencies or other entities. Except for the statutes, regulations, and court decisions that are referenced herein, the document is exemplary, and compliance with it is not mandatory. (See *Education Code* Section 33308.5.)



Prepared for publication
by CSEA members.

Contents

	<i>Page</i>
Preface	v
Introduction	1
Purpose	1
Role of the California Department of Education	1
Selecting the Proper Site	2
Determining Who Will Select the Site	2
Developing Site Selection Criteria	2
Screening and Ranking Procedures	3
Recommended Resources	4
Impacted Sites	4
Evaluating Safety Factors	5
Proximity to Airports	5
Proximity to High Voltage Power Transmission Lines	6
Presence of Toxic and Hazardous Substances	7
Hazardous Air Emissions and Facilities Within a Quarter Mile	8
Other Health Hazards	9
Proximity to Railroads	9
Proximity to Pressurized Gas, Gasoline, or Sewer Pipelines	11
Proximity to High Pressure Water Pipelines, Reservoirs, Water Storage Tanks	11
Proximity to Propane Tanks	12
Noise	12
Proximity to Major Roadways	13
Results of Geological Studies and Soils Analyses	14
Traffic and School Bus Safety Conditions	15
Safe Routes to Schools	15
Safety Studies for Joint-Use Sites	16
Choosing Appropriate Sites for Joint-Use Facilities	16
Observing California Environmental Quality Act Requirements	18
Lead Agency	18
CEQA Documents Needed for Final CDE Approval	18
Recognizing Land Use Issues	19
Obtaining Site Approval	20

Appendixes

A. Site Selection Process	24
Part 1. Site Selection Criteria	25
Part 2. Site Selection Evaluation	28
Part 3. Comparative Evaluation of Candidate Sites	29
B. Evaluation Checklist for School Bus Driveways	30
C. SFPD 4.0, School Site Field Review	32
D. SFPD 4.01, School Site Approval Procedures	34
E. SFPD 4.02, School Site Report	36
F. SFPD 4.03, School Site Certification	40
G. Final Site Approval Letter	41
H. Factors to Be Included in Geological and Environmental Hazards Report	42
I. Reference to Codes	44
J. Walkability Checklist	46

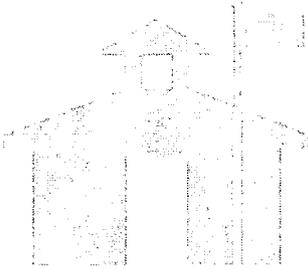
Preface

The California Department of Education's authority for approving proposed sites for schools is contained in *Education Code* Section 17251. The Department's approval is a condition for school districts to receive state funds for the acquisition of sites under the state's School Facilities Program administered by the State Allocation Board. The Department has established standards and regulations that are included in the *California Code of Regulations, Title 5*, sections 14010, 14011, and 14012.

Site size recommendations were changed in 2000 to reflect significant changes in education, such as the lowering of class size in kindergarten through grade three; implementation of the (federal) Education Amendments of 1972, Title IX; parental and community involvement; and use of advanced technology. The expanded use of buildings and grounds for community use and agency joint use and concern for the safety of the students and staff have driven the update of this publication. This guide embodies current standards for educational program and safety.

School districts have expressed appreciation for this guide as they carry out their responsibility to provide adequate land and facilities for their children and communities.

SUSAN LANGE
Deputy Superintendent
Finance, Technology, and Administration



Introduction

Selecting the most appropriate site for a school is an important consideration for a school district and the school community. The location, size, and shape of a school site can materially affect the educational program and opportunities for students. Because program needs differ, school districts must carefully develop selection criteria with the requirements of the local school program in mind. The selection must be based not only on current needs but also on projected needs. It is not a simple task. The primary purpose of this guide is to help school districts make the wisest selection possible.

Purpose

This document has been designed to help school districts (1) select school sites that provide both a safe and a supportive environment for the instructional program and the learning process; and (2) gain state approval for the selected sites. To help in the selection process, the guide includes a set of selection criteria that have proven helpful to site selection teams. The guide also contains information about safety factors that should be considered when evaluating potential school sites and about the procedures school districts must follow to gain approval from the California Department of Education, School Facilities Planning Division, for new sites and for additions of land areas to existing sites.

Role of the California Department of Education

Education Code Section 17251 and the *California Code of Regulations (CCR)*, *Title 5*, sections 14001 through 14012, outline the powers and duties of the Department regarding school sites and the construction of school buildings. Districts seeking state funding must comply with the *Education Code* and *Title 5* sections cited above. Site approval from the Department of Education must be granted before the State Allocation Board will apportion funds. Districts utilizing local funds are encouraged to seek the Department's approval for the benefits that such outside, objective reviews provide to the school district and the community.

Selecting the Proper Site

Determining Who Will Select the Site

When a school district decides to select a new school site, two basic questions must be addressed: (1) Who will be responsible for the school site selection process? (2) What criteria will be considered in selecting the site? This guide contains information school districts can use to answer those questions.

A key decision the school district must make is whether the site will be selected by district staff or through a selection team process. The School Facilities Planning Division (SFPD) suggests that a selection team recommend a site or sites to the local board of education. Consequently, comments in this guide are directed to team members but are equally applicable to district staff. If the school district establishes a site selection team, the team should include community members, teachers, administrators, public officials, and the architect selected by the school district to design the project. The community members should include people with and without children in the district. A consultant from the California Department of Education (CDE) is available to advise the district on the formation of the team. Some school districts include a school board member as a part of the team. By following this selection process, the committee may become somewhat large but should produce a better school site as a result. Once the composition of the selection team is determined, one of its first tasks will be to establish site selection criteria.

Developing Site Selection Criteria

School site selection is affected by many factors, including health and safety, location, size, and cost. Those persons responsible for the school site selection will have to evaluate both the present characteristics and the possible future characteristics of a site and its surrounding property. Because the site selection team often is unable to locate a site that meets all the criteria agreed on, it should set priorities and be prepared to make

certain compromises. In addition, the team must weigh those site characteristics that may adversely affect the choice. Careful assessment takes time, but the importance of each decision justifies the attention. A public comment period should be incorporated into the process in order to receive information and support from the broader community for both the primary alternatives and the recommended site or sites.

Screening and Ranking Procedures

To help focus and manage the site selection process, SFPD has developed screening and ranking procedures based on the following criteria, listed in general order of importance, commonly affecting school site selection:

1. Safety
2. Location
3. Environment
4. Soils
5. Topography
6. Size and Shape
7. Accessibility
8. Public Services
9. Utilities
10. Cost
11. Availability
12. Public Acceptance

An explanation of these criteria is included in Appendix A, "Site Selection Process." Appendix A also contains three work sheets based on a screening and ranking procedure developed by SFPD.

The first work sheet, "Site Selection Criteria," outlines the 12 major criteria listed above, with several secondary criteria listed as subtopics. The secondary criteria have been designed to help the selection team define more clearly the factors that must be considered and understand better the types of data needed in the selection and acquisition of the school site. After considering both the primary and secondary criteria, the site selection team should be able to rank the sites in order of acceptability by completing the next two work sheets, "Site Selection Evaluation" and "Comparative Evaluation of Candidate Sites."

Although the criteria contained in "Site Selection Criteria" are not the only ones a site selection team should consider, the team might find those criteria useful when explaining to school boards and other interested entities how the selection process was accomplished. School districts purchasing the site with state funds will find the criteria helpful when screening available sites and in identifying at least three acceptable

sites. Districts not applying for state funds are not required by *Education Code* Section 17251 to review a specific number of sites. However, the California Environmental Quality Act requires that “alternative” sites be reviewed in the Environmental Impact Report (EIR). Prudence suggests that identifying alternative sites is a desirable procedure, and SFPD recommends it.

Recommended Resources

School administrators, members of school boards, site selection teams, and other persons involved in facilities planning may find the following documents useful:

School Site Analysis and Development, Resources for School Facilities Planning. Available from the California Department of Education, School Facilities Planning Division, 660 J Street, Suite 350, Sacramento, CA 95814-2413.

The Guide for Planning Educational Facilities (1995). Available from the Council of Education Facility Planners International, 9180 E. Desert Cove Drive, Suite 104, Scottsdale, AZ 85260.

School Site Analysis and Development includes information the school site selection team can use to evaluate a potential site and determine whether it meets the needs of the particular school. The site standards in the book are based on historical school facilities funding programs. School planners should modify the requirements to fit current local educational program requirements.

The Department of Education also recommends that the team base its selection on the school district’s facility master plan that reflects the district’s demographics, potential growth rates, and capacities at existing school sites. In addition, many cities and counties have designated future school sites on general plan land use maps that the team should review.

Impacted Sites

The Department’s recommendations for site size can be found in the publication *School Site Analysis and Development*. A ratio of 1:2 between buildings and developed grounds is incorporated in all tables. Unfortunately, in a number of cases, primarily in urban settings, sites must be smaller than the acreage that appears in the charts. Although open space on a school campus is desirable for athletic fields, free play, parking, emergency access, foot traffic circulation, supervision, and aesthetics, the district often cannot feasibly acquire enough land. Using eminent domain to condemn property is possible; however, displacing families to gain land for a school is a difficult decision for many school districts to make. In such cases SFPD may approve an amount of acreage less than the recommended site size. Policies related to urban impacted areas are being developed. All other site selection procedures outlined in this book should be followed for these sites.

Evaluating Safety Factors

Careful planning on undersized sites must take place in order to provide the children at that school an appropriate educational program. Educational specifications must be examined carefully to ensure that all aspects of the program can take place within the bounds of a smaller site. The school district may consider building multilevel complexes with underground parking to maximize the useable acreage on the site. Off-site issues, such as traffic congestion, should also be addressed in the planning process.

Safety is the first consideration in the selection of school sites. Certain health and safety requirements are governed by state regulations and the policies of SFPD. In selecting a school site, the selection team should consider the following factors: (1) proximity to airports; (2) proximity to high-voltage power transmission lines; (3) presence of toxic and hazardous substances; (4) hazardous air emissions and facilities within a quarter mile; (5) other health hazards; (6) proximity to railroads; (7) proximity to high-pressure natural gas lines, gasoline lines, pressurized sewer lines, or high-pressure water pipelines; (8) proximity to propane tanks; (9) noise; (10) proximity to major roadways; (11) results of geological studies and soils analyses; (12) condition of traffic and school bus safety; (13) safe routes to school; and (14) safety issues for joint-use projects.

Proximity to Airports

The responsibilities of the school district, CDE, and the Department of Transportation (DOT), Aeronautics Program, Office of Airports, concerning the school site's proximity to runways are contained in *Education Code* Section 17215 (as amended by AB 747, Chapter 837, Statutes of 1999). (See *CCR, Title 5, Section 14011[k]*.)

As part of the site selection prescreening process, the school district should determine the proximity of the site to runways. Both CDE and DOT have maps identifying airport locations. If the site is within two miles of an existing airport runway, or a potential runway included in an airport master plan, measured by direct air line from that part of the runway nearest to the school site, the following procedures must be followed before the site can be approved:

1. The governing board of the school district, including any district governed by a city board of education, shall give SFPD written notice of the proposed acquisition and shall submit any information required by the department. SFPD will notify the DOT Aeronautics Program, Office of Airports.
2. The Division of Aeronautics shall investigate the proposed site and, within 30 working days after receipt of the notice, shall submit to the local governing board a written report and its recommendations concerning acquisition of the site. As part of the

investigation, the Aeronautics Program shall give notice to the owner and operator of the airport, who shall be granted the opportunity to comment upon the proposed school site.

3. The governing board of the school district shall not acquire title to the property until the report of the DOT Aeronautics Program has been received. If the report favors the acquisition of the property for a school site or an addition to a present school site, the governing board shall hold a public hearing on the matter prior to acquiring the site.
4. If the report does not favor the acquisition of the property for a school site or an addition to a present school site, the governing board may not acquire title to the property. If the report does not favor acquisition of a proposed site, no state funds or local funds shall be apportioned or expended for the acquisition of that site, construction of any school building on that site, or the expansion of any existing site to include that site.
5. The requirements noted above do not apply to sites acquired before January 1, 1966, or to any additions or extensions to those sites.

Proximity to High-Voltage Power Transmission Lines

Electric power transmission lines maintained by power companies may or may not be hazardous to human health. Research continues on the effects of electromagnetic fields (EMF) on human beings. However, school districts should be cautious about the health and safety aspects relating to overhead transmission lines. School districts should take a conservative approach when reviewing sites situated near easements for power transmission lines.

In consultation with the State Department of Health Services (DHS) and electric power companies, SFPD has established the following limits for locating any part of a school site property line near the edge of easements for high-voltage power transmission lines:

1. 100 feet from the edge of an easement for a 50-133 kV line
2. 150 feet from the edge of an easement for a 220-230 kV line
3. 350 feet from the edge of an easement for a 500-550 kV line

These figures represent kV strengths of transmission lines used by utility companies in January 1993. Utility companies report that strengths for *distribution* lines are below 50 kV.

DHS is completing a multiyear study of EMFs in schools. Results of the study are expected to be published at the end of 2000. The limits noted above for locating school sites near EMF-producing lines may be amended based on the findings of the study.

When evaluating a potential site situated near a power line easement, the site selection team should ask the following questions:

1. Is it necessary for the school district to acquire a site near the easement?
2. Are other options available?
3. Has the school district contacted and discussed with the utility company any plans to (a) increase the voltage of the transmission lines; or (b) build other towers on the easement?
4. Is the line a transmission or distribution line?

Each site will be evaluated according to its own potential hazards by the CDE consultant. (See *CCR, Title 5, Section 14010[c]*.)

Presence of Toxic and Hazardous Substances

The presence of potentially toxic or hazardous substances on, or in the vicinity of, a prospective school site is another concern relating to the safety of students, staff, and the public. Those responsible for site evaluation should give special consideration to the following hazards:

1. Landfill areas on or adjacent to the site
2. Proximity of the site to current or former dump areas, chemical plants, oil fields, refineries, fuel storage facilities, nuclear generating plants, abandoned farms and dairies, and agricultural areas where pesticides and fertilizer have been heavily used
3. Naturally occurring hazardous materials, such as asbestos, oil, and gas

Education Code sections 17071.13, 17072.13, 17210, 17210.1, 17213.1-3, and 17268 became effective January 1, 2000. Together they established requirements for assessments and approvals regarding toxic and hazardous materials that school districts must follow before receiving final site approval from CDE and funds under the School Facilities Program. (A summary of those requirements is noted below.) The school district may submit materials documenting compliance with the toxic and hazardous substances requirements prior to submitting the balance of the site approval package documents required by CDE. A local educational agency (LEA) may elect not to pursue a proposed site at any time during the process. Refer to SFPD Advisory 00-01 and SFPD Form 4.01 for further information. (See *CCR, Title 5, Section 14011[j]*.)

A summary of the requirements is as follows:

- Current and historic uses on and near the proposed school site shall be investigated by a qualified consultant who prepares a Phase I Environmental Site Assessment (paper/data base, site review, and interview investigation) conducted according to the American Society of Testing and Materials standards (ASTM E-1527-2000).

- If the Phase I review concludes that no further investigation is required, two copies of the Phase I assessment and payment for review by the Department of Toxic Substances Control (DTSC) shall be submitted to CDE. CDE will transmit the payment and the Phase I assessment to DTSC for its review and determination. If DTSC concurs with the Phase I assessment, it will issue a determination letter stating that “no action” is required related to hazardous materials.
- If the Phase I review concludes further investigation is needed, or DTSC requires it, the LEA shall enter into an agreement with DTSC and hire a qualified consultant to complete a Preliminary Endangerment Assessment (PEA) under DTSC oversight and review. The PEA includes the sampling of soils and a risk assessment to determine whether a release of a hazardous material has occurred, there is a threat of release, or a naturally occurring hazardous material poses a significant health risk. The LEA will then submit the PEA to DTSC. If no hazardous materials are identified, or if they do not pose a significant health risk, DTSC will approve the PEA and issue a determination letter stating that “no further action” is required.
- If required by DTSC because of health risks associated with hazardous materials identified in the approved PEA, the LEA shall prepare and implement a Response Action (cleanup, removal, or remediation of hazardous materials) under DTSC oversight and approval. DTSC will issue a certification letter when the Response Action is completed. When a Response Action is required for a site, the LEA must obtain a Contingent Site Approval from CDE before the acquisition and implementation of the Response Action to ensure that the site meets all other requirements for CDE approval.

Hazardous Air Emissions and Facilities Within a Quarter Mile
(*Education Code* Section 17213[b] and *Public Resources Code* Section 21151.8[a][2])

The LEA shall consult with the administering agency and the local air pollution control district or air quality management district in order to identify facilities within a quarter mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials, substances, or wastes and shall provide written notification of those findings.

The LEA shall make the finding either that no such facilities were identified or that they do exist but that the health risks do not or will not constitute an actual or potential endangerment of public health at the site or that corrective measures will be taken that will result in emissions

mitigation to levels that will not constitute endangerment. In the final instance the LEA should make an additional finding that emissions will have been mitigated prior to occupancy of the school.

These written findings, as adopted by the LEA governing board, must be submitted to CDE as a part of the site approval package. Often this information is included in the Phase 1 site assessment and in the adopted California Environmental Quality Act (CEQA) document. (See *CCR, Title 5, Section 14011[i].*)

Other Health Hazards (*Education Code* Section 17213[a] and *Public Resources Code* Section 21151.8[a][1]; see also *CCR, Title 5, Section 14011[h].*)

The LEA shall include in an environmental impact report or a negative declaration information needed to determine that the proposed site is not any of the following:

1. The site of a current or former hazardous waste disposal site or solid waste disposal site unless, if the site was a former solid waste disposal site, the LEA governing board concludes that the wastes have been removed
2. A hazardous substance release site identified by the State Department of Health Services (now maintained by DTSC)
3. The site of one or more pipelines, situated underground or aboveground, which carry hazardous substances, materials, or wastes, unless the pipeline is used only to supply natural gas to that school or neighborhood

These written determinations, as adopted by the LEA governing board, must be submitted to CDE as a part of the site approval package. Often this information is included in the Phase 1 site assessment and in the adopted CEQA document.

Other factors to consider are as follows:

- If the proposed land has been designated a border zone property by the Department of Toxic Substances Control, then a school may not be located on the site without a specific variance in writing by DTSC. Contact DTSC, Site Mitigation, (916) 255-3745. See *Health and Safety Code* Section 25220.
- From a nuisance standpoint the site selection committee should also consider whether a site is located near or downwind from a stockyard, fertilizer plant, soil-processing operation, auto dismantling facility, sewage treatment plant, or other potentially hazardous facility.

Proximity to Railroads

When evaluating a site near railroad tracks, a study should be conducted to answer the following questions (See *CCR, Title 5, Section 14010(d)*):

1. What is the distance from the track easement to the site?
2. Are the tracks mainline or spur?
3. What kinds of cargo are carried?
4. What speeds do trains travel at this location?
5. What is the frequency of rail traffic, and how does the rail traffic schedule relate to the school time schedule?
6. Is the proposed site near a grade, curve, bridge, signal, or other track feature?
7. What is the need for sound and safety barriers?
8. If pedestrians or vehicles must cross the tracks, are there adequate safeguards at the crossing?
9. Are there high-pressure gas lines near the tracks that might rupture in the event of derailment?

While most railroads have detailed instructions for handling hazardous materials, there is no setback distance between railroad tracks and schools defined in law. However, the *California Code of Regulations, Title 5, Section 14010(d)*, established the following regulations pertaining to proximity to railroads:

If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track, need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossings, presence of high pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified.

The National Transportation Safety Board has called for a uniform standard separation of at least 100 feet between hazardous materials storage and production facilities and mainline railroad tracks. Hazardous materials authorities have evacuated homes within a radius of 1,500 feet to 2,500 feet of railroad accidents when toxic gas and explosives were involved.

Additional information may be obtained from the California Department of Transportation Railroad Unit (916-654-7076). Operation Life Savers (www.oli.org/oli) provides educational materials regarding railroad safety (800-537-6224). Refer to Public Utilities Commission General Order No. 161, Rule 4, regarding the ability of local agencies to obtain a list of hazardous materials transported on the rail line in question.

Proximity to Pressurized Gas, Gasoline, or Sewer Pipelines

Education Code Section 17213 prohibits the acquisition of a school site by a school district if the site “contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood.” *Public Resources Code* Section 21151.8 uses the same language with reference to approval of environmental impact reports or negative declarations. (See *CCR, Title 5, Section 14010[h]*.)

Proximity to High-Pressure Water Pipelines, Reservoirs, Water Storage Tanks

Large, buried pipelines are commonly used for delivery of water. The ground surfaces over these buried pipelines are covered with roadways or green belts or remain undeveloped, and the general public is unaware of their existence. Designs of such pipelines include a wide margin of safety for the operating water pressures within the pipe, but a severe earthquake, damage by an adjacent construction activity, or highly corrosive conditions in surrounding soils can contribute to leakage or even failure of the pipe. A sudden rupturing of a high-pressure pipeline can result in the release of a large volume of water at the point of failure and fragments of concrete pipe being hurled throughout the immediate area. Subsequent flooding of the immediate area and along the path of drainage to lower ground levels might occur.

To ensure the protection of students, faculty, and school property if the proposed school site is within 1,500 feet of the easement of an above-ground or underground pipeline that can pose a safety hazard, the school district should obtain the following information from the pipeline owner or operator:

1. The pipeline alignment, size, type of pipe, depth of cover
2. Operating water pressures in pipelines near the proposed school site
3. Estimated volume of water that might be released from the pipeline should a rupture occur on the site
4. Owner’s assessment of the structural condition of the pipeline (Periodic reassessment would be appropriate as long as both the pipeline and the school remain operational.)

School districts should determine from topographic maps and in consultation with appropriate local officials the general direction that water released from the pipeline would drain.

If site selection must involve such pipelines, districts should seek to (1) avoid or minimize student use of ground surfaces above or in close proximity to the buried pipeline; (2) locate facilities safely or provide safeguards to preclude flooding in the event of a pipeline failure; and (3) prepare and implement emergency response plans for the safety of students and faculty in the event of pipeline failure and flooding.

Proximity to Propane Tanks

A propane tank explosion is known as a boiling liquid evaporative explosion (BLEVE). The school district should address the safety issues of a propane tank located on or near a school site by answering the following questions:

1. How many tanks are there now and may there be in the future?
2. How far away would tanks be stored from the school boundaries?
3. What is the capacity of the tanks?

Once these answers are established, the district should contact the following state agencies for assistance in evaluating the school's level of safety in the event of explosions and nonexplosive fires:

State Fire Marshal, (916) 445-8200; Hazardous Materials Division,
(916) 445-8477

Public Utilities Commission, Natural Gas Safety Branch, (415)
703-1353

California Department of Industrial Relations, (510) 622-3052
Local fire marshal

Noise

Noise is unwanted or harmful sound; sound that is too loud is distracting or, worse, injurious.

The loudness of sound is measured in decibels. Each decibel level equates to the amount of acoustical energy necessary to produce that level of sound. The decibel scale is exponential. A person's whisper may be measured at 20 decibels. The sound measured at 30 decibels is ten times as loud as the 20-decibel whisper.

The normal range of conversation is between 34 and 66 decibels. Between 70 and 90 decibels, sound is distracting and presents an obstacle to conversation, thinking, or learning. Above 90 decibels, sound can cause permanent hearing loss. The California Department of Transportation considers sound at 50 decibels in the vicinity of schools to be the point at which it will take corrective action for noise generated by freeways. (See *Streets and Highway Code* sections 216 and 216.1.)

If the school district is considering a potential school site near a freeway or other source of noise, it should hire an acoustical engineer to determine the level of sound that location is subjected to and to assist in

designing the school should that site be chosen. The American Speech-Language-Hearing Association (ASLHA) guidelines recommend that in classrooms sounds dissipate in 0.4 seconds or less (and not reverberate) and that background noise not rise above 30 decibels.

Proximity to Major Roadways

The *California Code of Regulations, Title 5, Section 14010(e)*, states: “The site shall not be adjacent to a road or freeway that any site-related traffic and sound level studies have determined will have safety problems or sound levels which adversely affect the educational program.”

Trucks traveling on public roads—including interstate freeways, state highways, and local roads—often contain the same hazardous materials that railcars on railroads contain. Although the quantities of materials being carried on trucks are smaller for a double trailer or tanker in comparison to a railcar, trucks have a greater incidence of accidents, spills, and explosions than do railcars. Moreover, the protective enclosures of a truck are not as strong as are those of a railcar.

When evaluating a site near a major roadway, a school district needs to ask questions similar to those used in evaluating risk from rail lines:

1. What is the distance from the near edge of the roadway right-of-way to the site?
2. How heavy is the traffic flow?
3. How many trucks carrying freight use the roadway during the time students and staff are present?
4. Is a safety or sound barrier necessary?
5. How will students coming across the highway get to school safely?

The California Highway Patrol (CHP) maintains records of traffic flow, traffic accidents, and roadway accidents involving hazardous materials. The CHP Commercial Vehicles Section, (916-445-1865), maintains records on traffic flow and accidents involving hazardous materials. The CHP Safety Net Section, (916-375-2838), maintains records on all accidents.

County road departments are also a good source for traffic flow and accident information in the local area. The school district may wish to consult the city or county general plan “Noise Element” to help evaluate school sites near major roadways.

Like railroad setbacks, highway setbacks from schools are not established in law. However, experience and practice indicate that distances of at least 2,500 feet are advisable when explosives are carried and at least 1,500 feet when gasoline, diesel, propane, chlorine, oxygen, pesticides, and other combustible or poisonous gases are transported. In the absence of specific, legally defined setback distances for schools, CDE reviews each case individually.

Results of Geological Studies and Soils Analyses

Education Code sections 17212 and 17212.5 require that a geological study and a soils analysis provide an assessment of the potential for earthquake or other geological hazard damage if the prospective school site is located (1) within the boundaries of any Alquist-Priolo special studies zone; or (2) within an area designated as geologically hazardous in the safety element of the local general plan, as provided in *Government Code* Section 65302(g). Because California is seismically active and new faults are being discovered, SFPD policy is that all proposed school sites have geological studies and soils analyses completed.

Any geological study must be conducted according to provisions contained in *Education Code* Section 17212.5, which states that “no school building shall be constructed, reconstructed, or relocated on the trace of a geological fault along which surface rupture can be reasonably expected to occur within the life of the school building.” (See *CCR, Title 5, Section 14011*[g].)

Earthquakes, Liquefaction, and Landslides. Alquist-Priolo Earthquake Fault Zone maps delineate active fault lines and earthquake fault zone boundaries (previously known as Special Study Zones). For further information on these maps, contact the California Department of Conservation (CDC), Division of Mines and Geology (DMG), at (916) 323-9672 or www.consrv.ca.gov/dmg/rghm. These maps are important because the *California Code of Regulations, Title 5, Section 14010*(f), specifies that new school sites may not contain an active earthquake fault or fault trace.

Districts may also wish to refer to Seismic Hazard Zone maps, also prepared by CDC, which address the hazards of liquefaction and earthquake-induced landslides. For further information, contact DMG at (916) 323-8569 or www.consrv.ca.gov/dmg/shezpl/. These maps are important because the *California Code of Regulations, Title 5, Section 14010*(i), requires that new school sites not be subject to moderate-to-high liquefaction or landslides.

Copies of either of these types of hazard maps for specific communities may be purchased from BPS Reprographic Services, 149 Second Street, San Francisco, CA 94105; telephone (415) 512-6550.

The *California Building Code*, Chapter 16(a), also contains maps and a textual description of areas in the state that are divided into seismic zones III or IV. These designations will affect the structural safety design requirements of the Division of the State Architect. Eventually, these will be replaced by the *International Building Code* and contour maps that will delineate ground acceleration levels.

Areas Subject to Flooding and Inundation. The *California Code of Regulations, Title 5, Section 14010*(g), requires that new school sites are not to be within an area of flood or dam inundation unless the cost of mitigating the impact is reasonable. The overflowing or failure of nearby rivers, streams, dams, levees, detention/retention basins, flood control

channels, water supply aqueducts, irrigation canals, and areas subject to flash flooding and surface runoff is cause for concern. Potential damage may be mitigated by elevation of the site above flood levels, creation or improvement of levees and drainage infrastructure, and emergency notification and evacuation procedures. As a condition of final site approval, the CDE consultant may require a hydrologic study or other means of confirmation that the site will not be subject to flooding or a report of proposed mitigation measures, including estimated costs, or both.

The district should consult the local city or county general plan, responsible flood control agencies, and Flood Insurance Rate Maps (FIRM), which are available from the Federal Emergency Management Agency (FEMA). These official maps delineate flood hazard areas, such as the 100-year flood plain. Copies of flood maps are available for a nominal fee. Contact the following agency for a copy of the current flood map for a specific community: Map Service Center (MSC), P. O. Box 1038, Jessup, MD 20794-1038; telephone (800) 358-9616; www.fema.gov/nfip/readmap.htm.

The Governor's Office of Emergency Services (OES) publishes maps that provide the best estimate of where water would flow if dams were to experience failure. Contact OES at www.oes.ca.gov/dim/nsf for further information.

See Appendix H for factors to be included in geological hazard reports.

Traffic and School Bus Safety Conditions

The school facility should be situated so that students can enter and depart the buildings and grounds safely. As the number of schools providing child care and extended day classes increases, it is important for schools to ensure the safe flow of buses and other traffic through designated areas of the school grounds. When analyzing potential school sites, the selection team should consider a number of safety factors. The size and shape of the site will affect the traffic flow and the placement of pickup and drop-off points for parents.

When designing pickup and drop-off points, the team should remember that the separation of bus traffic from all other traffic is of paramount importance. Roads servicing the area must be of sufficient paved width when the point at which the bus loads and unloads pupils is off the main thoroughfare. The need for left turn lanes must be determined. Driveway openings must conform to local ordinances or regulations. When analyzing potential school sites for traffic and bus safety, site selection teams should use the evaluation checklist contained in Appendix B. CDE consultants can help in evaluating issues of ingress and egress.

Safe Routes to Schools

The national "Walk Our Children to School Day" was established in 1997 by the Partnership for a Walkable America, a national alliance of

public and private organizations committed to making walking safer. Because the physical environment greatly affects how many residents can and will walk, a "Walkability Checklist" is provided in Appendix J. It is an excerpt from the National Safety Council's checklist, which can be accessed at www.nsc.org/walkable.htm. A growing number of communities are implementing measures to make their environments safer for walking.

The California Department of Education recommends that the site selection committee walk the area surrounding each proposed school site. If there are unsatisfactory walking routes for a proposed school site, the school district should consider another site or work with the city or county to have safe walking routes installed before opening the school.

Federal Highway Administration (FHWA) funds may be available to help make school access safer for pedestrians and cyclists. Assembly Bill 1475 (Chapter 663, Statutes of 1999) directs FHWA safety funds to a new program entitled Safe Routes to Schools. Unless this program is extended by the State Legislature, funds are available only from the 1999-2000 and 2000-2001 federal fiscal-year budgets.

The California Department of Transportation (DOT) has the responsibility to distribute the Safe Routes to Schools' program guidelines. Additional information may be obtained at the following Internet addresses:

Caltrans Home Page:	www.dot.ca.gov
Local Programs:	www.dot.ca.gov/hq/LocalPrograms
Traffic Operations:	www.dot.ca.gov/hq/traffops

Safety Studies for Joint-Use Sites

Many school districts plan schools for use in conjunction with park districts, library districts, or other governmental entities. Such cooperative planning is encouraged and may result in recreational and educational areas suitable for use by both students and community members. Special care must be taken to ensure that both students and community members can use the site without compromising the safety and security of the school. Particular attention should be given to placing public parking areas and toilets away from classrooms and student play areas.

Frequently, school districts agree to cooperate with a local governmental entity, recreation district, or possibly an adjacent school district when planning a new facility, such as a new library, technology center, performing arts center, swimming pool, gymnasium, multipurpose room, or sports complex. Likewise, a commercial or industrial complex may be jointly planned to include a school. More efforts at saving dollars and acreage will occur as funding and space become scarce resources. The construction and land costs saved may be significant. In some cases the costs may increase because of joint use, but the benefits to communities

Choosing Appropriate Sites for Joint-Use Facilities

can offset the increased expenses. By providing combined and expanded resources and services within a single facility, the school district fosters enhanced community activities.

Agreements must be crafted between the school districts and other appropriate entities regarding site acquisition, mutually acceptable arrangements for space, staffing, maintenance, materials acquisition, and other matters related to the administration and operation of the joint-use facility. In some cases the shared community facility is also shared between school sites, such as a middle and a high school. In those cases careful planning must take place about what can and what cannot be shared. In many districts more than one facility is used jointly with the community. The fields, theatres, classrooms, and virtually the entire campus become available for joint use. The school is no longer seen as a separate, stand-alone entity.

Examples of Successful Joint-Use or Strategic Alliance Projects in California

<i>Facility</i>	<i>Location</i>
Community Performing Arts Complex	Elk Grove Unified School District, Sacramento City/County Library
Softball Complex	Clovis Unified School District, City of Clovis
Park and Aquatics Center	Roseville Joint Union High School District, City of Roseville
Field Areas	Woodland Joint Unified School District, City of Woodland
Theatre and Gymnasiums	Poway Unified School District, Cities of Poway and San Diego
Gymnasium/Fitness Center	Lodi Unified School District, City of Lodi
Technology Center	San Diego County Office of Education
Medical Magnet School/Hospital	Los Angeles Unified and Compton Unified School Districts, King Drew Medical Magnet High School
High School/Community College Campus	San Diego City Unified School District, San Diego City College
On-site School/Business Entity	Hewlett Packard, Santa Rosa Elementary School District
Senior Center/District Office	Carlsbad Unified School District, Carlsbad Senior Center
Multipurpose Room, Kitchen, Platform	Pauma Elementary School District, Non-Profit Foundation, HUD
Library/Media Center, Eastlake High	Sweetwater Union High School District, City of Chula Vista

Observing California Environmental Quality Act Requirements

When planning the acquisition of a site for a joint-use facility, the school district must consider many issues, as follows:

- Safety and security
- Access, day and night year-round, including by public transportation
- Location, as a prominent landmark that encourages community use
- Appropriate size, including adequate space for buildings, grounds, and convenient, plentiful parking

The California Environmental Quality Act (CEQA) is located in the *Public Resources Code* Section 21000 et seq.; the CEQA guidelines are found in the *California Code of Regulations, Title 14*, Section 15000 et seq. Enacted in 1970, CEQA was primarily intended for use by public agencies in considering the potential environmental implications of their actions when approving projects. The Act establishes a duty for public agencies, including school districts, to analyze, avoid, mitigate or, where feasible, minimize foreseeable environmental damage.

Lead Agency

The lead agency is the single agency responsible for determining the type of environmental analysis CEQA requires and for approving and carrying out the project. The local educational agency (LEA) (i.e., school district or county office of education) is the lead agency under CEQA for school facility construction projects and land acquisition.

One of the requirements for the final site approval by the California Department of Education is the LEA's completion of the CEQA process prior to site acquisition. Although the Department will review adopted CEQA documents as part of its site approval process, the Department is not responsible for ensuring that the LEA properly followed all CEQA requirements or for challenging LEA decisions under CEQA. In most cases the LEA will be required to produce and adopt a Negative Declaration or an Environmental Impact Report (EIR) for site acquisitions. This CEQA document will also usually encompass the proposed school construction project.

CEQA Documents Needed for Final CDE Approval

As part of the Department's final site approval process, the LEA must submit a copy of the following documents to the School Facilities Planning Division in the site approval package (see Appendix D, SFPD 4.01):

- LEA-certified final EIR or adopted Negative Declaration (including the Initial Study/Environmental Checklist)

- Stamped Notice of Completion (NOC) or comment-period closure letter from the Governor's Office of Planning and Research (OPR), State Clearinghouse (SCH)
- Stamped Notice of Determination (NOD) filed with the County Clerk

CDE recommends that the DTSC review and approval process be completed prior to completing the CEQA process. However, if a Preliminary Endangerment Assessment is required, the LEA should coordinate with DTSC when completing the CEQA and public participation process.

For further information on CEQA, contact the Governor's Office of Planning and Research, State Clearinghouse, at 1400 Tenth Street, Room 222, Sacramento, CA 95814; mailing address: P. O. Box 3044, Sacramento, CA 95812-3044; telephone (916) 445-0613; or Web site <http://www.opr.ca.gov/clearinghouse.html>. To view or download CEQA or its guidelines, go to <http://ceres.ca.gov/ceqa/>.

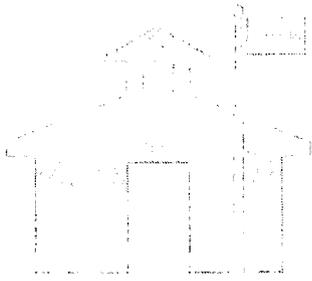
Recognizing Land-Use Issues

Several local, regional, and statewide land-use issues must be considered when evaluating and selecting a school site. Many of these issues are considered part of the district's compliance with CEQA.

Cities and counties have the responsibility to adopt local ordinances, policies, plans, and zoning maps regarding allowed and prohibited land uses. General plans may also contain the jurisdiction's *preferred* approximate location of future school sites. While plan coordination is advisable and notification is *required* prior to acquisition, school districts retain the authority to overrule local zoning and general plan land-use designations for schools if specified procedures are followed. (See *Government Code* sections 53094, 65402(a), and 65403 and *Public Resources Code* Section 21151.2.)

The California Coastal Commission is a statewide land-use planning agency that a school district may have to consult when selecting school sites. This agency is responsible for planning and regulating development along California's coastal zone, which may extend up to five miles inland. (See *Public Resources Code* Section 30000 et seq. and *California Code of Regulations, Title 14*, sections 13001–13666.4.)

State law also encourages public agencies, including school districts, to avoid acquiring land that is designated in the general plan and zoned for agricultural use or sites that fall under Williamson Act agricultural preserves and contracts. Should agricultural land acquisition be necessary, however, districts will need to follow the procedures described in *Education Code* Section 39006 (repealed in 1996, replaced in 1998) and *Government Code* Section 51290 et seq.



Obtaining Site Approval

After deciding on a site or sites, the school district site selection team should proceed as follows:

1. Schedule a field visit with the CDE consultant.
 - a. If the site is to be purchased with state funds, CDE approval is required before state funds can be apportioned. Provide the CDE consultant with maps of three approvable sites for review purposes. The consultant will view the sites and provide the district a written evaluation of the site(s) on SFPD Form 4.0, "School Site Field Review" (Appendix C). The consultant will indicate which sites are approvable and will rank the sites relative to each other. The consultant will also provide the district three forms required for final approval of the site:

SFPD 4.01, "School Site Approval Procedures"
(Appendix D)

SFPD 4.02, "School Site Report" (Appendix E)

SFPD 4.03, "School Site Certification" (Appendix F)

These forms may also be found on the SFPD Web site.

CDE will issue a Final Site Approval Letter (Appendix G) valid for five years.

- b. If the site is to be purchased with other than state funds, and the school district will not seek state reimbursement at a future date, the district can voluntarily ask CDE to review the site to confirm its suitability as a school site. The district should follow the same procedures outlined above.
2. Request that CDE arrange an investigation of the site, in accordance with *Education Code* Section 17215 (amended in 1999 by AB 747), by the Department of Transportation, Aeronautics

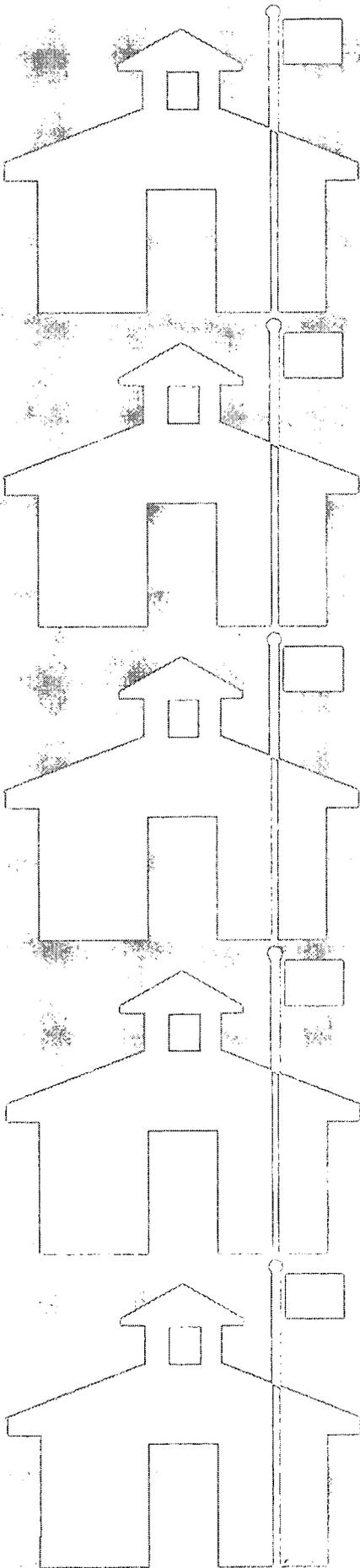
Program, Office of Airports, if the site is within two miles of an airport runway.

For further information on requirements for purchasing sites with state funds or with funds other than state funds, see *Education Code* sections 17211 and 17251(a) and (b) and *California Code of Regulations, Title 5*, Section 14012.

Refer to the section "Toxic and Hazardous Substances," under "Evaluating Safety Factors," for what must be done regarding a Phase I Environmental Site Assessment.

Many statutes and regulations other than those of CDE and the State Allocation Board, Office of Public School Construction, apply to the purchase and use of land for a school. School districts should confer with legal counsel or their county office of education superintendent, or both, prior to acquiring property.

For additional information regarding any changes in issues relating to school site selection, school districts should contact SFPD at 916-322-2470 or refer to the SFPD Web site at www.cde.ca.gov/facilities.



Appendixes

- A. Site Selection Process
 - Part 1. Site Selection Criteria
 - Part 2. Site Selection Evaluation
 - Part 3. Comparative Evaluation of Candidate Sites
- B. Evaluation Checklist for School Bus Driveways
- C. SFPD 4.0, School Site Field Review
- D. SFPD 4.01, School Site Approval Procedures
- E. SFPD 4.02, School Site Report
- F. SFPD 4.03, School Site Certification
- G. Final Site Approval Letter
- H. Factors to Be Included in Geological and Environmental Hazards Report
- I. Reference to Codes
- J. Walkability Checklist

BEST COPY AVAILABLE

Appendix A

Site Selection Process

When a school district is planning to acquire a site for a school, the district must take various factors into consideration. The School Facilities Planning Division has developed three work sheets to assist the district in assessing potential sites and making preliminary selections. The work sheets, which are included in this appendix, outline a set of 12 primary criteria governing school site selection and consist of three components: *site selection criteria*, *site selection evaluation*, and a *comparative evaluation of candidate sites*. These components allow for a comprehensive examination of sites to determine strengths and weaknesses (*site selection criteria*); a ranking of each site (*site selection evaluation*); and, finally, a comparison of sites by the rating factors and total scoring (*comparative evaluation of candidate sites*).

The criteria are consistent with the California *Education Code*, *California Code of Regulations, Title 5*, *California Public Resources Code*, and California Department of Education policies and guidelines.

Although these standards are not the *sole criteria* to be considered by a school district's site selection committee, the committee may find them useful in evaluating various sites, identifying at least three acceptable sites from which a final choice can be made and, eventually, explaining the site selection process to interested entities.

Each primary element listed on the "Site Selection Criteria" work sheet contains secondary measures that provide the committee the opportunity to apply a specific set of guidelines to each potential site as well as aid in an analysis of a site. The secondary criteria may also be used by the committee to understand better the types of data needed in identification, selection, and final acquisition of a school site. After considering both primary and secondary standards on the work sheet, the committee should rank the sites in order of acceptability by completing the second and third work sheets.

Part 1 Site Selection Criteria

Site Identification		Grade Level
Location	Gross Acres	Estimated Value

	OK	Potential Problem
<p>Safety <i>(These factors should be avoided.)</i></p> <ul style="list-style-type: none"> Adjacent to or near roadways with a high volume of traffic Within 1,500 feet of railroad tracks Within two miles of an airport runway Close to high-voltage power lines Close to high-pressure lines; for example, natural gas, gasoline, sewer, or water lines Contaminants/toxics in the soil or groundwater, such as from landfills, dumps, chemical plants, refineries, fuel tanks, nuclear plants, or agricultural use of pesticides or fertilizer* Close to high-decibel noise sources Close to open-pit mining On or near a fault zone or active fault In a dam inundation area or 100-year flood plain Social hazards in the neighborhood, such as a high incidence of crime and drug or alcohol abuse <p><i>*Note: A Phase I Environmental Site Assessment must be conducted for the selected site.</i></p>		
<p>Location</p> <ul style="list-style-type: none"> Safe walking areas Centrally located to avoid extensive transporting and to minimize student travel distance Compatible with current and probable future zoning regulations Close to libraries, parks, museums, and other community services Favorable orientation to wind and natural light 		
<p>Environment</p> <ul style="list-style-type: none"> Free from sources of noise that may impede the instructional process Free from air, water, and soil pollution Free from smoke, dust, odors, and pesticide spray Provides aesthetic view from and of the site Compatible with the educational program 		
<p>Soils</p> <ul style="list-style-type: none"> Proximity to faults or fault traces Stable subsurface and bearing capacity Danger of slides or liquefaction Percolation for septic system and drainage Adequate water table level Existing land fill is reasonably well compacted <p><i>Note: A geological hazard report must be conducted to determine soil and seismic conditions</i></p>		

Part 1 Site Selection Criteria (Continued)

	OK	Potential Problem
Topography Feasibility of mitigating steep grades Rock ledges or outcroppings Surface and subsurface drainage Level area for playfields		
Size and Shape Net acreage consistent with standards of California Department of Education as noted in "School Site Analysis and Development" Length-to-width ratio does not exceed 2:1 Sufficient open play area and open space Potential for expansion for future needs Area for adequate and separate bus loading and parking		
Accessibility Obstacles, such as crossings on major streets and intersections, narrow or winding streets, heavy traffic patterns Access and dispersal roads Natural obstacles, such as grades or gullies Freeway access for bus transportation Routing patterns for foot traffic Remote areas (with no sidewalks) where students walk to and from school Easily reachable by emergency response vehicles		
Public Services Fire and police protection, including firelines Available public transportation Trash and garbage disposal		
Utilities Availability of water, electricity, gas, sewer Feasibility of bringing utilities to site at reasonable cost Restrictions on right of way		
Cost Reasonable costs for purchase of property, severance damages, relocation of residents and businesses, and legal fees Reasonable costs for site preparation, including, but not limited to, drainage, parking driveways, removal of existing buildings, and grading Toxic cleanup beyond the owner's obligation Environmental mitigation Reasonable maintenance costs		

Part 1 Site Selection Criteria (Continued)

Availability	OK	Potential Problem
On the market for sale		
Title clearance		
Condemnation of buildings and relocation of residents		
Public Acceptance		
Public acceptance of the proposed site		
Receptivity of city or county planning commission		
Zoned for prime agriculture or industrial use		
Negative environmental impact report		
Coordination of proposed school with future community plans		
Comments:		

Part 2 Site Selection Evaluation

Site Identification		Grade Level
Location	Gross Acres	Estimated Value

FACTORS		0	1	2	3	4	5		Total Points
Safety (20 possible points)	<i>Dangerous</i>							<i>Safe</i>	x 4 =
Location (15 possible points)	<i>Remote</i>							<i>Convenient</i>	x 3 =
Environment (10 possible points)	<i>Polluted</i>							<i>Clean</i>	x 2 =
Soils (10 possible points)	<i>Unstable</i>							<i>Stable</i>	x 2 =
Topography (10 possible points)	<i>Unsuitable</i>							<i>Suitable</i>	x 2 =
Size and Shape (10 possible points)	<i>Insufficient</i>							<i>Sufficient</i>	x 2 =
Accessibility (10 possible points)	<i>Obstructed</i>							<i>Accessible</i>	x 2 =

FACTORS		0	1	2	3		Total Points
Public Services (3 possible points)	<i>Unserviced</i>					<i>Serviced</i>	x 1 =
Utilities (3 possible points)	<i>Unavailable</i>					<i>Available</i>	x 1 =
Cost (3 possible points)	<i>Expensive</i>					<i>Economical</i>	x 1 =
Availability (3 possible points)	<i>Difficult</i>					<i>Easy</i>	x 1 =
Public Acceptance (3 possible points)	<i>Conflict</i>					<i>Harmonious</i>	x 1 =

Total Points _____
(Possible 100)

Note: Rank each site separately. A score of zero on a critical factor such as *safety*, for example, indicates that the negative aspects of that factor could not reasonably be mitigated. Therefore, the site should be eliminated from consideration, regardless of potential high scores on other factors.

Part 3 Comparative Evaluation of Candidate Sites

Date _____

		Candidate Sites									
Rating Factors	Possible points										
Safety	20										
Location	15										
Environment	10										
Soils	10										
Topography	10										
Size and Shape	10										
Accessibility	10										
Public Services	3										
Utilities	3										
Cost	3										
Availability	3										
Public Acceptance	3										
Total Points	100										

Appendix B

Evaluation Checklist for School Bus Driveways

 Name of school

Date

 Location of school

Note: A *yes* answer for each of the items indicates a well-planned traffic pattern for school buses.

- | | <i>Yes</i> | <i>No</i> | <i>Does not
apply</i> |
|--|--------------------------|--------------------------|---------------------------|
| 1. School bus loading and unloading areas are provided on the school site. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. When loading and unloading of pupils take place on the main thoroughfare, the roadway has a minimum width of 40 feet of hard surface. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The driveway leading to and from the loading and unloading area for school buses has a minimum width of 30 feet of paved surface. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. If diagonal parking is provided for buses in the loading and unloading area, a minimum width of 60 feet of paved surface is available. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Parking for loading and unloading of pupils at school is bumper to bumper or diagonal. In either case the necessity for backing a vehicle does not exist. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The school bus driver is not required to back a vehicle anywhere on school property. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. All school bus movement on the school grounds is one way in a counterclockwise direction. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. School bus traffic does not completely encircle the school building. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. The school bus driver has proper sight distance at all points along the driveway. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Appendix B (Continued)

	<i>Yes</i>	<i>No</i>	<i>Does not apply</i>
10. Crosswalks for pupils do not traverse the entrance to the school bus driveway.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Separation is maintained between school bus traffic and all other traffic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Vehicular pickup points for non-bused pupils are located on driveways separate from those used by school buses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Curbing and suitable drainage are provided along driveways.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Curbing and driveway construction complies with state highway specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. At areas of ingress and egress to and from the school, the minimum radius on the inner edge of the driveway pavement is from 50 to 100 feet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. On the school site the minimum radius on the inner edge of the driveway pavement is 60 feet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. At least a 50-foot tangent section is provided between reverse curves.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. A maximum grade of 2 percent is adhered to at ingress and egress points.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. A maximum grade of 5 percent is adhered to on the school bus driveway located within the school site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. A clear view of at least 200 feet exists in both directions from the school loading and unloading zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. A clear view of at least 200 feet exists in both directions from the entrances and exits of the site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature of person making report

Signature of Director of School Transportation



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS



This document is covered by a signed “Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a “Specific Document” Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either “Specific Document” or “Blanket”).