APPENDIX 1 - California Administrative Code, Title 21, Division 2,
Chapter 13, Grade Separation Projects


# GRADE SEPARATION PROGRAM

TITLE 21. Public Works
Division 2. Department of Transportation
Chapter 13. Grade Separation Projects -- Applications for Allocation or Supplemental Allocations (Register 82, No. 34, filed 8-21-82)

## Article 1. Applications

### §1552. Last Date to File.

April 1 of each fiscal year is the last day on which applications for allocation of grade separation funds in that fiscal year can be filed; provided, however, if April 1 is a Saturday, Sunday or a State of California holiday, then the last date of filing shall be the next business day following April 1. Filing is accomplished by filing the application with the Department of Transportation in the manner hereafter stated.

### §1553. Place to File.

The complete application in triplicate must be received in the Office of the District Director of Transportation, State of California, in the transportation district in which the applicant is located, no later than 4:00 p.m. on the last day for filing.

### §1554. Contents of Application.

The complete application must include a written request for an allocation in a specified monetary amount along with copies of each of the following attached to it:

(a) All necessary orders of the Public Utilities Commission of the State of California. Necessary orders of the Public Utilities Commission include:

(1) An order authorizing construction of the project;

(2) A statement of the applicant's position on the annual priority list established by the Public Utilities Commission pursuant to Streets & Highways Code Section 2452.

(3) In case the applicant and affected railroad or railroads cannot agree as to the apportionment of the cost of the project between them, an order apportioning such cost pursuant to Public Utilities Commission Code Section 1202.5, but in no case shall an allocation be made unless the railroad or railroads contribute no less than the amount required by Section 2454 of the Streets & Highways Code, except as may be otherwise provided by law.

(b) All necessary agreements with the affected railroad or railroads fully executed by railroad or railroads and applicant. The necessary agreements with the railroad include:

(1) Permission to enter upon railway right-of-way for construction, or in lieu thereof, an order of the Public Utilities Commission or of a court of competent jurisdiction authorizing such entry for construction purposes;

(2) A description of the project on a plan setting forth the area and items of the project and the particular area and items of the project to which the railroad or railroads agree to contribute.

(3) The percentage of railroad's or railroads' contribution to the cost of the area and items to which railroad or railroads agree to contribute;

(4) Identification or estimated cost of the area and items to which railroad or railroads do not contribute;

(5) Agreement that railroad or railroads shall contribute a minimum of 10 percent of the project without a maximum dollar limitation on the railroad's contribution, except that the contribution may be less than

10 percent of the cost of the project where expressly so provided by law.

(6) When two or more railroads are affected by a project, their combined contribution must be a minimum of 10 percent of the cost of the project without a maximum dollar limitation on the combined contribution, except that such combined contribution may be less than 10 percent of the cost of the project when expressly so provided by law.

(c) A certified resolution by the applicant's governing body authorizing the filing of application.

(d) Certified resolution by applicant's governing body stating that all matters prerequisite to the awarding of the construction contract can be accomplished within one year after allocation of funds for the project by the California Transportation Commission.

(e) A certified resolution by applicant's governing body stating that sufficient local funds will be made available as the work of the project progresses.

(f) Copies of all necessary Environmental Impact Reports or Negative Declarations, with a certified Notice of Determination and approval or acceptance of these documents by the Lead Agency. In cases where an Environmental Impact Statement or Negative Declaration has been prepared for the project pursuant to the requirements of the National Environmental Policy Act of 1969 and implementing regulations thereto, such documents may be submitted in lieu of an approved Environmental Impact Report or Negative Declaration and Notice of Determination, provided the Environmental Impact Statement or Negative Declaration fully develops the factors required in Title 14, Section 15143, of the State Administrative Code including Title 20, Section 17.1(d)(2), of the State Administrative Code and such Environmental Impact Statement or Negative Declaration has received Federal approval.

(g) General plan of the project, including profiles and typical sections.

(h) Project cost estimate, which is to be broken down to construction, preliminary and construction engineering, work by railroad forces, right of way costs, and utility relocation.

§1555. Project Limitation

Participation of the grade separation fund is limited only to that portion of the project which, in the determination of the California Transportation Commission, is necessary to make the grade separation operable and to effect the separation of grades between the highway and the railroad track or tracks, or necessary to effect the relocation of track or highway. Off-track maintenance roads shall be nonparticipating unless the existing access for maintenance purposes is severely impaired by the project. Participating items include, but are not limited to, approaches, ramps, connections, drainage, erosion control of slopes, such as ivy, iceplant, and rye grass, and preconstruction costs, such as right of way acquisition, preparation of environmental impact reports and utility relocation, necessary to make the grade separation operable. In any dispute as to scope of the project or qualification of an item, the decision of the California Transportation Commission shall be conclusive.

§1556. Allocation Limitation

Initial allocation of grade separation funds by the California Transportation Commission shall be limited to that based upon applicant's estimate of cost of project specified by applicant and utilized by the Public Utilities Commission of the State of California in establishment of applicant's priority pursuant to Streets and Highways Code Section 2452 of the State of California, and in no case shall the original and supplemental allocation for a single project exceed a total of five million dollars ($5,000,000) without specific legislative authorization in effect for the project at the final date and time for filing an application. A planned project must be a complete and operable project, and

effect the separation of grades, relocation of the highways or railroad, in order to qualify for an allocation.

## Article 2. Supplemental Allocations

### §1557. Last Date to File.

The last date on which an application for a supplemental allocation can be filed for the subsequent fiscal year is May 1 of the current calendar year. If May 1 is a Saturday, Sunday, or a State of California holiday, then the last date of filing shall be the next business day following May 1. The applicant must file a formal application with the project final report.

### §1558. Place to File.

The complete application in triplicate must be received in the Office of the District Director of Transportation, State of California, in the transportation district in which the applicant is located, no later than 4:00 p.m. on the last day of filing.

### §1559. Contents of Application

The application must include a written request for a supplemental allocation in a specified amount along with copies of each of the following attached thereto.

(a) A certified resolution by the applicant's governing body certifying that:

(1) Applicant has authority to make request for supplemental allocation;

(2) The project has been completed and has been accepted by the governing body;

(3) The actual and final cost of the project has been determined and set forth in the supplemental application;

(4) All costs set forth in the request for supplemental allocation were necessary to make the grade separation operable and effect the separation of grades or the relocation of track or highway.

(5) That railroad or railroads have contributed 10 percent of the cost of he project unless a lesser contribution is expressly provided by law.

(b) Evidence that funds would have been allocated for the project had the actual cost been used by the Public Utilities Commission of the State of California in determining the project's ranking on the priority list.

(c) A final accounting of the cost of the project with a statement explaining the detail why the original allocation was not sufficient.

APPENDIX 2 - Priority Index Formulas


## Formula For Crossing Nominated For Separation Or Elimination

$$P = \frac{V * (T + 0.1 * LRT) * (AH + 1)}{C} + SCF$$

Where:
- **P** - Priority Index Number
- **V** - Average 24-Hour Vehicular Volume (1 point per vehicle)
- **T** - Average 24-Hour Train Volume (1 point per train)
- **C** - Project Cost Share to be Allocated from Grade Separation Fund (1 point per thousand dollars)
- **LRT** - Average 24-Hour Light Rail Train Volume (1 point per train)
- **AH** - Accident History (up to 3 points per accident)
- **SCF** - Special Conditions Factor = BD+VS+RS+CG+PT+OF (up to 58 pts)
  - **BD** - Crossing Blocking Delay (up to 5 points)
  - **VS** - Vehicular Speed Limit (up to 5 points)
  - **RS** - Railroad Prevailing Maximum Speed (up to 7 pts)
  - **CG** - Crossing Geometrics (up to 17 points)
  - **PT** - Passenger Trains (up to 10 points)
  - **OF** - Other Factors: passenger buses, school buses, trains carrying hazardous materials trains and trucks, and community impact (up to 14 points)

**C = Project Cost Share to be Allocated from Grade Separation Fund**
Up to five million dollars per project will be allocated (S&H Code § 2454(g)) per fiscal year, unless the applicant is seeking multiple-year funding as prescribed in S&H Code § 2454(h). Local agencies are eligible to receive up to $5 million each year, over a period of 5 years. The total amount they may receive is $20 million, not to exceed 80% of the cost, if an at-grade crossing is closed and the project meets other specific requirements. If a crossing is not closed, the maximum allocation is $5 million.

**AH = Accident History** (last 10 years from application filing due date)
Points are awarded as follows for accidents involving trains at crossings with the Crossing Protection Factor (CPF ) based on the crossing's warning devices:

Points = (1 + 2 x No. Killed + No. Injured) x CPF

| | | | | |
|---|---|---|---|---|
| STANDARD | 9 | 8 | 3 | 1 |
| CPF | 1.0 | 0.4 | 0.2 | 0.1 |

Note 1: No more than three points shall be allowed for each accident prior to modification by the protection factor.

Note 2: Each accident is rated separately and modified by a factor based on the warning devices in existence at time of the accident.

**SCF =** Special Conditions Factor = BD+VS+RS+CG+PT+OF

**BD = Blocking Delay Per Train** (The time in which vehicular traffic is delayed to allow a train to pass at a crossing.) The blocking delay, for a typical day, is the elapse time in minutes when trains pass the crossing. The delay is measured from the point that the warning devices are activated at the crossing to the time after the train has cleared the crossing and the warning devices are reset. The BD points are the total delay time, valued in a range from 0 to 5 points.

**VS = Vehicular Speed Limit - Posted Speed Limit**

| | | | | | | |
|---|---|---|---|---|---|---|
| SPEED-MPH | 0-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51+ |
| POINTS | 0 | 1 | 2 | 3 | 4 | 5 |

**RS = Railroad Maximum Speed**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SPEED-MPH | 0-25 | 26-35 | 36-45 | 46-55 | 56-65 | 66-75 | 76-85 | 86+ |
| POINTS | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**CG = Crossing Geometrics** - 0 - 17 points are awarded to each crossing based on the relative severity of physical conditions, i.e. grade, alignment, site distance, track skew angle, traffic signals, entrances and exits, etc.

**PT = Passenger Trains** – Additional points are given to projects that have passenger trains, including light rail transit, travelling through the crossing based on the following:

| NO. OF TRAINS | 1-2 | 3-5 | 6-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 70 + |
|---|---|---|---|---|---|---|---|---|---|---|
| POINTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**OF = Other Factors**- Other Factors are valued in a range from 0 to 14 points based on:

| **CATEGORY** | **POINTS** |
|---|---|
| SCHOOL BUSES | 0-3 |
| PASSENGER BUSES | 0-3 |
| HAZ-MAT TRUCKS* | 0-3 |
| COMMUNITY IMPACT | 0-5 |

*Hazardous material trucks must display the placard with a clearly visible diamond-shaped sign to be counted for this category.

## Formula For Existing Separations Nominated For Alteration Or Reconstruction

$$P = \frac{V * (T + 0.1 * LRT)}{C} + SF$$

Where:

**P** - Priority Index Number
**V** - Average 24-Hour Vehicular Volume (1 point per vehicle)
**T** - Average 24-Hour Train Volume (1 point per train)
**LRT** - Average 24-Hour Light Rail Train Volume (1 point per train)
**C** - Project Cost Share to be Allocated from Grade Separation Fund (1 point per thousand dollars)

**SF** - Separation Factor = WC + HC + SR + AS + POF + AP + DE

- **WC** - Width Clearance (up to 10 points)
- **HC** - Height Clearance (up to 10 points)
- **SR** - Speed Reduction (up to 5 points)
- **AS** - Accidents at or near structure (0.1 pt per accident)
- **POF** - Probability of Failure (up to 10 points)
- **AP** - Accident Potential (up to 10 points)
- **DE** - Delay Effects (up to 10 points)

**C** = **Project Cost Share to be Allocated from Grade Separation Fund**
Up to five million dollars per project will be allocated (S&H Code § 2454(g)) per fiscal year, unless the applicant is seeking multiple-year funding as prescribed in S&H Code § 2454(h). Projects are eligible to receive up to $5 million each year, over a period of 5 years, the maximum is $20 million, not to exceed 80% of the project cost, if an at-grade crossing is closed and the project meets other specific requirements. If a crossing is not closed, the maximum allocation is $5 million.

**SF** = Separation Factor = WC+HC+SR+AS+PF+AP+DE

**WC** = Width Clearance is determined by bridge width (in feet) and the number of traffic lanes in existence (N):

| If the Width is: | POINTS |
|---|---|
| 16'+12(N) | 0 |
| 12' but less than 16' + 12(N) | 2 |
| 8' but less than 12' + 12(N) | 4 |
| Less than 8'+12(N) | 6 |
| 11(N) | 8 |
| Less than 11(N) | 10 |

**HC** = Separation Height Clearance is determined by the height clearance from center of traffic lane and bridge (Underpass) or from top of rail and bridge (Overpass).

**Underpass**

| Height (feet) | Points |
|---|---|
| 15' and above | 0 |
| 14' but less than 15' | 4 |
| 13' but less than 14' | 8 |
| Less than 13' | 10 |

**Overpass**

| Height (feet) | Points |
|---|---|
| 22.5' and above | 0 |
| 20' but less than 22.5' | 4 |
| 18' but less than 20' | 8 |
| Less than 18' | 10 |

**SR** = Speed Reduction or Slow Order

| | Points |
|---|---|
| None | 0 |
| Moderate | 2 |
| Severe | 5 |

**AS** = Accidents at or near the structure during the last 10 years from the application due date. The AS points are determined by dividing the total number of occurrences by 10 and rounded off to the nearest tenth of a point (86 occurrences = 86 / 10= 8.6 points).

**PF** = Probability of Failure has a 10 point maximum taking structure age into account.

| | Points |
|---|---|
| Minimal / None | 0 |
| Slight | 2-3 |
| Moderate | 4-6 |
| Extreme | 7-10 |

**AP** = Accident Potential – A maximum of 10 points is given for the geometrics at the separation like: road curvature, signage, and illumination.

| | Points |
|---|---|
| None | 0 |
| Slight | 2-3 |
| Moderate | 4-6 |
| Extreme | 7-10 |

**DE** = Delay Effects – A maximum of 10 points is given to conditions that cause traffic delays at the separation like road bottlenecks, slow vehicle usage (trucks, agriculture equipment, lack of left or right turn lanes or other traffic congestion.

| | Points |
|---|---|
| None | 0 |
| Slight | 2-3 |
| Moderate | 4-6 |
| Extreme | 7-10 |

## APPENDIX 3- OII Interested Party Notice Letter

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013
(213) 576-7078 FAX 576-7072

July 25, 2005

To: All Interested Parties

Re: Establishment of the Grade Separation Priority List for fiscal years 2006-2007 and 2007-2008 under Section 2450 et seq. of the California Streets and Highways Code.

The Public Utilities Commission (Commission) issued an Order Instituting Investigation (OII) for establishing the highway-rail Grade Separation Priority List (Priority List) for fiscal years 2006-2007 and 2007-2008. The California Transportation Commission and the California Department of Transportation use the Priority List to allocate $15 million each fiscal year ($5 million maximum per project per fiscal year, unless the project shows a savings to state) to assist local governments in financing grade separations and crossing elimination projects.

If you wish to nominate a grade separation project for inclusion on the Priority List, you must file an application and participate in the Commission's OII. If you are interested, download the OII and appendices from our website at: http://www.cpuc.ca.gov/proceedings. Search for the I.05-07-016. The OII and appendices include explanation and filing requirements of the program, listing the criteria and formulas used to rank all nominations and application forms.

For additional clarifications or comments, please contact me at rxm@cpuc.ca.gov, (213) 576-7078.

Sincerely,

**ROSA MUÑOZ, PE**
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

**Appendix 4- Caltrans, Railroad & Light Rail Transit Agency Mailing List** 

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Chief, Rail Crossing Safety & Track Inspection Branch
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**Appendix 4- Caltrans, Railroad & Light Rail Transit Agency Mailing List** 

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**Appendix 4- Caltrans, Railroad & Light Rail Transit Agency Mailing List** 

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Fish Camp, CA 93623

California Transportation Commission
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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

| | |
|---|---|
| Investigation for the purpose of establishing a list for the fiscal years 2006-2007 and 2007-2008 of existing and proposed crossings at grade of city streets, county roads or state highways in need of separation, or projects affecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code. | Investigation 05-07-016<br>(Filed July 21, 2005) |

# Nomination for Separation or Elimination

# Of

# Existing or Proposed Railroad-Grade Crossing

Nomination by _____

| | |
|---|---|
| Railroad(s) | |
| Road/Highway | |
| PUC Crossing ID No. | |
| DOT ID No. | |

*This packet contains the GSN-1 Form and instructions. – Please carefully read the instructions before completing the form.*

## A. Nominating Party

| Agency Name: | | | | | | |
|---|---|---|---|---|---|---|
| Contact Name | Title | Street Address | City | Zip Code | Telephone | E-mail |
| | | | | | ( ) | |
| Alternate | | | | | | |
| | | | | | ( ) | |

## B. Crossing Location and Project Type (List all crossings if a consolidation project)

| | |
|---|---|
| Road / Highway Name | |
| PUC ID NO. | |
| DOT ID NO. | |
| City / County / ZIP Code | |
| Railroad(s) | |
| Project Type | Underpass [ ] Overpass [ ] Elimination [ ] |
| Is project part of a consolidation? | Yes [ ] No [ ] |

## C. Average Daily Vehicle and Train Volumes

| | | | |
|---|---|---|---|
| Autos | | Freight Trains | |
| School Buses | | Passenger Trains | |
| Passenger Buses | | Light Rail Trains | |
| Hazmat Trucks | | | |
| **TOTAL VEHICLE COUNT** | | **TOTAL TRAIN COUNT** | |
| Date of Count(s) | | Date of Count (s) | |

## D. Costs and Contributions

Please fill in the following worksheet to determine the total project costs.

Right-of Way allowance.....….$_____
Preliminary Engineering.....$_____
Construction Engineering.....$_____
**Total Engineering .....** $_____
Bridge Construction.....… $_____
Railroad Work.....….. $_____
Highway Approaches & Connections…..$_____
Utility Relocation.....… $_____
Contingencies.....… $_____
Removing Existing Crossing.....…. $_____
**Total Construction Costs.....….** $_____

**TOTAL PROJECT COSTS $_____**

**ALLOCATED SHARE FROM STATE FUND: $_____**

Contributions:

| | |
|---|---|
| City | $ |
| County | $ |
| Railroad | $ |
| Other (specify) | $ |

## E. Accident History Data

| **Total Number of Trains vs. Vehicle Accidents *** | | | |
|---|---|---|---|
| Source | Date | Killed | Injured |
| Source | Date | Killed | Injured |
| Source | Date | Killed | Injured |
| Source | Date | Killed | Injured |

* List all accidents from October 21, 1996 to October 21, 2005. For each accident specify the accident date, the number of fatalities and injuries.

## F. Blocking Delay and Speed Limits

| | |
|---|---|
| Total Blocking Delay | min. |
| Number of Observed Delays | |
| Information Provided by: | Railroad [ ] Observation [ ] |
| Date Delays Verified | |
| Posted Vehicle Speed Limit | mph |
| Train Speed Limit at Crossing | mph |

## G. Crossing Geometrics

| | |
|---|---|
| Track Skewed Angle = _____° | Is there a parallel road to the track? Yes [ ] No [ ] |
| No. of Tracks = _____ | Are there traffic signals within 50'? Yes [ ] No [ ] |
| Elevated Surface Profile<br>Direction: _____<br>Height: _____ in.<br>Direction: _____<br>Height: _____ in. | Is there an entrance/exit within 150'? Yes [ ] No [ ] |
| | Is there a raised median? Yes [ ] No [ ] |
| | Is there curvature on the road or track? Yes [ ]No [ ] |

## H. Other Information / Attachments

| | |
|---|---|
| Did you enclose a 8 1/2" x 11"location map? | Yes [ ] No [ ] |
| Did you enclose two 8"x10" pictures of crossing? | Yes [ ] No [ ] |
| Did you attach a brief Community Impact evaluation? | Yes [ ] No [ ] |

## I. Declaration

I, _____, declare under penalty of perjury that the information on this form is true and correct to the best of my knowledge. The information has been verified by me or under my supervision and is the most current information available.

Signature: _____ Title: _____ Date: _____

**Introduction:** By July 1 of each year, the California Public Utilities Commission (Commission) is required to establish and furnish to the California Transportation Commission a priority list of railroad grade separation projects most urgently in need of separation or elimination. Nominations of grade separation/elimination projects must be submitted on the GSN-1 Form by October 21, 2005, in the Commission's OII. **All nominations** are reviewed and taken into consideration for the development of the Commission's Priority List. Incomplete and late-filed applications will not be processed or included in the Priority List. Please follow the instructions below to complete the application. Should you need assistance with this form please contact Rosa Muñoz at (213) 576-7078 or at rxm@cpuc.ca.gov.

**INSTRUCTIONS:**

**A. INFORMATION ABOUT THE NOMINATING PARTY:**

In the spaces provided, enter name, address, e-mail address and contact person along with contact's title and phone number. If you have hired a consultant to process the nomination, please provide the consultant's company name and phone number in the "Alternate" section.

**B. CROSSING LOCATION AND PROJECT TYPE:**

Provide the PUC and DOT crossing identification numbers for the proposed project along with the street location, city, county and zip code of the crossing and the name of the railroad(s) company operating the tracks. If the project involves the construction of a new grade separation at a site where there is no existing at grade crossing, then enter "NEW" for the PUC Crossing Number. Also specify the type of project the grade separation proposal involves with respect to train traffic. For example, if a bridge is to be built where the roadway goes over the tracks, the project is an "OVERPASS". If a bridge is to be built where roadway goes underneath the tracks, then the project is an "UNDERPASS".

*NOTE: If your project involves more than one crossing, list each crossing separately in part B of GSN-1 form and answer "Yes" to the Consolidation question under Project Type.*

**C. AVERAGE DAILY VOLUME:**

For all categories specified in this section, provide the vehicle and train count of a typical day. In the "AUTOS" category, specify the total number of vehicles flowing through the crossing that are not specified in the other categories. For example: all automobiles, pick-up trucks, vans, limos, 4WD Vehicles, etc should be counted in the "AUTOS" category. Count school buses, passenger buses, and hazardous-material trucks separately.

For the train counts specify the total number of trains that use the crossing into three categories: Freight Trains (UP, BNSF, Short Lines, etc.), Passenger Trains (Amtrak, Metrolink, Caltrain, etc.), and Light Rail Trains (San Diego Trolley, VTA, etc.).

Include the date when the count(s) was (were) taken. This date should be within the last year of filing the application. If a later dated vehicle count is used, then specify in the affidavit that the vehicle count is an accurate representation of current traffic flow.

**D. COSTS AND CONTRIBUTIONS:**

Complete the work sheet to determine the total project costs. Also enter the amount of the costs that are expected from the sources specified on GSN-1 form. Indicate the amount sought from the state fund either the partial amount needed to fund the project, the maximum state allocation of five million dollars per project, or the amount if applicant is seeking multiple-year funding.

**E. ACCIDENT HISTORY DATA**

Provide the total number of train versus vehicle accidents that have occurred at the crossing(s) proposed for the grade separation project from October 21, 1996 to October 21, 2005 (10-year period). Attach a list of all accidents to the original GSN-1 Form. For each accident, specify the location (if more than one crossing is involved with the project), accident date, the number of fatalities, the number of injuries, and the data source.

**F. BLOCKING DELAY AND SPEED LIMITS**

The blocking delay is the time, in minutes, from when the crossing signals are active until the train clears the crossing and the signals return to their upright position. In this section, specify the

requested blocking delay information for a typical day. For example: Three trains use the crossing on a daily basis. The blocking delay is 5 min. for the first train, 3.5 min. for the second, and 7.75 min. for the third train. The total blocking delay is the sum of each delay for a total of 16.25 min.

**VEHICULAR & TRAIN SPEED LIMIT:** Specify the posted vehicular speed limit in direction of traffic flow that passes through crossing. If no signs are posted then assume 35 mph as the vehicular speed limit in urban areas, for rural areas 55 mph. Also specify the train speed limit at the crossing location.

**G. CROSSING GEOMETRICS:**

Provide the information requested about the physical attributes of existing crossing using the following guidelines:

**TRACK SKEWED ANGLE**: The skewed angle is the angle measurement, in degrees, from the tracks to the perpendicular of the roadway. Measure the angle using the vertex at the intersection between the curb or edge of roadway and the railroad track. Use the curb or edge of the roadway as an axis and measure the angle to the rail edge nearest to the curb. The track skewed angle is the absolute value of 90° less the measured angle (i.e. |90° - measured angle |).

**NUMBER OF TRACKS**: Specify the total number of tracks at the existing crossing.

**ELEVATED SURFACE PROFILE**: The elevated surface profile is the change in height from the top of the nearest rail track to the top of the roadway 30-ft. from the tracks. The measurement should be in inches and the direction in which traffic is flowing should be specified as “N” for North, “S” for South, “E” for East and “W” for West.

**PARALLEL ROAD TO TRACKS WITHIN 100 ft**: Is there an adjacent road running parallel to the track(s)? Mark “Yes” if there is a parallel road, or “No” if there is not.

**TRAFFIC SIGNALS WITHIN 50 ft**: Are there any traffic signals within 50 feet of crossing? (not the active warning devices at the crossing). Mark "Yes" if there is a traffic signal, or "No" if there is not.

**ENTRANCE / EXIT WITHIN 150 ft**: Is there a driveway entrance or exit within 150 ft from crossing? Mark "Yes" if there is a driveway entrance or exit, or "No" if there is not.

**RAISED MEDIAN PROTECTION**: Is there a raised median protection at the crossing? Mark "Yes" if there is a raised median, or "No" if there is not.

**CURVATURE OF ROAD OR TRACK**: Is the road and/or track curvature sufficient to impair visibility by vehicular traffic? If highway/roadway visibility is hindered, mark "Yes". If curvature does not interfere with visibility mark "No".

## H. ATTACHMENTS

Please attach an 8 ½" x 11" location map and two 8" x 10" photographs of the proposed crossing location (one from each approach) showing the entire crossing and pertinent crossing geometrics. Also attach a brief explanation of the community impact including its justification, how it meets transportation planning goals, and impacts especially emergency vehicle usage.

## I. DECLARATION

Please complete the declaration with the information requested and sign.

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

| | |
|---|---|
| Investigation for the purpose of establishing a list for the fiscal years 2006-2007 and 2007-2008 of existing and proposed crossings at grade of city streets, county roads or state highways in need of separation, or projects affecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code. | Investigation 05-07-016<br>(Filed July 21, 2005) |

# Nomination for Alteration or Reconstruction

# Of
# Existing Grade Separation

Nomination by _____

| | |
|---|---|
| Railroad(s) | |
| Road/Highway | |
| PUC Crossing ID No. | |
| DOT ID No. | |

*This packet contains the GSN-2 Form and instructions. – Please carefully read the instructions before completing the form.*

## A. Nominating Party

| Agency Name: | | | | | | |
|---|---|---|---|---|---|---|
| Contact Name | Title | Street Address | City | Zip Code | Telephone | E-mail |
| | | | | | ( ) | |
| Alternate | | | | | | |
| | | | | | ( ) | |

## B. Crossing Location and Project Type (List all crossings if a consolidation project)

| | |
|---|---|
| Road / Highway Name | |
| PUC ID NO. | |
| DOT ID NO. | |
| City / County / ZIP Code | |
| Railroad(s) | |
| Project Type | Underpass [ ] Overpass [ ] Elimination [ ] |
| Is project part of a consolidation? | Yes [ ] No [ ] |

## B. Clearances

| | |
|---|---|
| Horizontal Width | ft. |
| Height Clearance | Ft. |
| Number of Lanes | |
| Separation Type | Underpass [ ] Overpass [ ] |

## C. Speed Reduction or Slow Order

| | |
|---|---|
| Vehicle Speed Reduction | mph |
| Railroad Slow Order | mph |
| Is there a center divider? | Yes [ ] No [ ] |

## E. Average Daily Vehicle & Train Volumes

| Transportation Mode | COUNT | COUNT DATE |
|---|---|---|
| Total Number of Vehicles | | |
| Total Number of Trains | | |
| Freight Trains | | |
| Passenger Trains | | |
| Light Rail Trains | | |

## D. Accident History Data

| **Total Number of Trains vs. Vehicle Accidents *** | | | |
|---|---|---|---|
| Source | Date | Killed | Injured |
| Source | Date | Killed | Injured |
| Source | Date | Killed | Injured |
| Source | Date | Killed | Injured |

* List all accidents from October 21, 1996 to October 21, 2005. For each accident specify the accident date, the number of fatalities and injuries.

## G. Costs and Contributions

Please fill in the following worksheet to determine the total project costs.

Right-of Way allowance.....….$_____
Preliminary Engineering.....$_____
Construction Engineering.....$_____
**Total Engineering .....…** $_____
Bridge Construction.....…. $_____
Railroad Work.....…… $_____
Highway Approaches & Connections….$_____
Utility Relocation.....….$_____
Contingencies.....….$_____
Removing Existing Crossing.....$_____
**Total Construction Costs.....…...$**_____

**TOTAL PROJECT COSTS $_____**

**ALLOCATED SHARE FROM STATE FUND: $_____**

Contributions:

| | |
|---|---|
| City | $ |
| County | $ |
| Railroad | $ |
| Other (specify) | $ |

## H. Probability of Failure

| | |
|---|---|
| Specify the date that the structure was built? | |
| When was structure last evaluated? * | |
| Has the structure been retrofitted to current standards for seismic safety or other improvements? ** If so, indicate completion date of retrofit work. | Yes [ ] No [ ] |

* Please attach a copy of the evaluation results with recommendations for corrective action(s).
** Please attach a summary of work performed and completion date(s).

## I. Attachments

| | |
|---|---|
| Did you enclose an 8 ½" x 11" location map? | Yes [ ] No [ ] |
| Did you enclose two 8"x10" pictures of crossing? | Yes [ ] No [ ] |

## J. Declaration

I, _____, declare under penalty of perjury that the information on this form is true and correct to the best of my knowledge. The information has been verified by me or under my supervision and is the most current information available.

Signature: _____ Title: _____ Date: _____

**Introduction:** By July 1 of each year, the California Public Utilities Commission (Commission) is required to establish and furnish to the California Transportation Commission a priority list of railroad grade separation projects most urgently in need of separation or elimination. Nominations for alteration or reconstruction of existing separation projects must be submitted on the GSN-2 Form by October 21, 2005, in the Commission's OII. **All nominations** are reviewed and taken into consideration for the development of the Commission's Priority List. Incomplete and late-filed applications will not be processed or included in the Priority List. Please follow the instructions below to complete the application. Should you need assistance with this form please contact Rosa Muñoz at (213) 576-7078 or at rxm@cpuc.ca.gov.

**INSTRUCTIONS:**

**A. INFORMATION ABOUT THE NOMINATING PARTY:**

In the spaces provided, enter name, address, e-mail address and contact person along with contact's title and phone number. In the "Alternate" section, list consultant information if they are processing the nomination.

**B. CROSSING LOCATION AND PROJECT TYPE:**

Provide the PUC and DOT crossing identification numbers for the existing structure along with the street location, nearest cross street, city, county and the railroad track owner. Please specify if the project is an alteration or reconstruction. If the reconstruction involves the relocation of the existing separation, then enter "NEW" for the Federal and PUC numbers.

**C. CLEARANCES:**

Provide the information requested about the physical attributes of existing separation. The Horizontal Width should be measured between the edge of roadway/curb to the opposite edge of roadway/curb. For the Height Clearance, measure from the top of rail to bottom of structure, or, measure from the center of the roadway to bottom of structure. Also specify if the structure is an Overpass or Underpass.

**D. SPEED REDUCTION AND/OR SLOW ORDER**

Quantitatively identify any vehicular speed reduction that may be due to the presence of the

structure. For example, speed over the structure being reduced from 60 mph to 30 mph. Information regarding a railroad slow order may be obtained from the railroad company (see Appendix 4 for list of Railroads).

**E. AVERAGE DAILY VEHICLE & TRAIN VOLUMES**

Provide an average 24-hour day count of vehicles and trains and enter the date when count was taken. The count should be completed by the filing due date and should not be more than one year old. If a current count is not available, provide the information along with the date of the most current count. Do not estimate the data.

**F. ACCIDENT HISTORY DATA:**

Provide a count of the total number of accidents that may be attributed to the presence of the grade separation structure. Include a copy of the data and source(s).

**G. COSTS AND CONTRIBUTIONS:**

Complete the worksheet to determine the total project costs. Also enter the amount of the total costs expected from the sources on GSN-2 Form. Indicate the amount sought from the state fund either the partial amount needed to fund the project, the maximum state allocation of five million dollars per project, or the amount if applicant is seeking multiple-year funding.

**H. PROBABILITY OF FAILURE DATA:**

Please specify the date the structure was constructed and the date the structure was last evaluated for probability of failure. Attach a copy of the evaluation with recommendations for corrective action(s) to the original GSN-2 Form. If retrofitting work is in progress or has been completed, attach a summary of work completed and the completion dates. Also specify if other work is being planned for completion prior October 21, 2005.

**I. ATTACHMENTS**

Please attach a location map and two photographs of the existing structure (one from each approach) showing the entire separation and pertinent crossing geometrics.

**J. DECLARATION**: Please complete the declaration with the information requested and sign.