BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation for the purpose of establishing a list for the fiscal years 2012-2013 and 2013-2014 of existing crossings at grade of city streets, county roads or state highways in need of separation, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.

FILED PUBLIC UTILITIES COMMISSION JULY 28, 2011 SAN FRANCISCO, CALIFORNIA INVESTIGATION 11-07-022

ORDER INSTITUTING INVESTIGATION

Summary

This Order Instituting Investigation (OII) is for the purpose of establishing the Grade Separation Priority List (Priority List) for the fiscal year (FY) 2012-2013 and FY 2013-2014. The OII requests project nominations from interested parties for existing crossings at grade of city streets, county roads, or state highways in need of separation, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways (S&H) Code. Completed nomination applications must be filed by October 21, 2011. Nomination forms and instructions are contained in this OII and are available on-line at the Commission's website at: http://www.cpuc.ca.gov/PUC/transportation/crossings/rrcrossingfundingprg.htm.

Background

Section 2452 of the California Streets and Highways (S&H) Code requires the California Public Utilities Commission (Commission) to establish the Grade Separation Program Priority List (Priority List) for projects and furnish it to the

California Transportation Commission (CTC) by July 1st of each year for use in the fiscal year beginning on that date. The Priority List establishes the relative priorities for allocation of funds to qualified projects of existing crossings at grade, and existing grade separations, and procedures for administering these funds.¹ These projects include construction of new grade separations to replace existing at-grade crossings, or alteration or reconstruction of existing grade separations, on city streets, county roads, and state highways, which are not freeways as defined in S&H Code § 257. For a project that eliminates an existing crossing or alters or reconstructs an existing grade separation, an allocation of up to 80% of the estimated cost of the project may be made, with the local agency and railroad each contributing 10%.

The CTC is responsible for allocating (distributing) the funds to qualified projects; a responsibility it has delegated to the California Department of Transportation (Caltrans).² Requirements for filing an allocation application for Priority List projects with Caltrans are set out in the *California Administrative Code, Title 21, Division 2, Chapter 13, Grade Separation Projects - Applications for Allocations or Supplemental Allocations* (Chapter 13). A copy of Chapter 13 is attached as Appendix 1 to this OII. Section 190 of the S&H Code requires the State's annual budget to include \$15 million for funding of these Priority List projects.

Every two years, the Commission issues a new Order Instituting Investigation (OII), in which it determines the Priority List for the next two

¹ S&H Code § 2450 *et seq.*

² S&H Code § 2453.

Fiscal Years (FY). The Commission adopts the Priority List for the first fiscal year by interim decision issued before that fiscal year begins, then revises the Priority List for the second FY by deleting projects for which funds were actually allocated in the first, adopting a revised Priority List by final decision before the second FY begins. The two-year funding cycle begins again with the issuance of a new OII for the creation of a new Priority List for the following two fiscal years.

In particular, the procedures adopted by the Commission to process this OII requires local agencies to provide planned grade separation project nominations to this Commission in response to a request for nominations in the ordering paragraphs of the new OII. The Commission then reviews each nominated project to ensure that it is eligible for the Grade Separation Program, and holds a series of hearings so that nominating agencies may present each proposal, answer questions about its content, and confirm its accuracy. Attendance and participation in these hearings is mandatory for any project proponent. The Commission's Consumer Protection and Safety Division (CPSD) staff then adjusts the draft Priority List in accordance with evidence received at the hearings. This draft Priority List is then presented to the Commission for adoption by interim decision. Projects for construction of new grade separations for existing crossings at grade, and alteration or reconstructions of existing grade separations are included in the Priority List.

Interim Decision (D.) 10-06-005, dated June 3, 2010, established the 53rd Priority List for FY 2010-2011. By D.11-06-021, we issued our final decision in OII 09-07-028, establishing the 54th Priority List for FY 2011-2012, and furnished the list to Caltrans and CTC before July 1, 2011. That final list will expire on June 30, 2012, necessitating the establishment of a new Priority List for FY 2012-2013 and 2013-2014.

- 3 -

In this OII, we will consider projects nominated by cities, counties, a separation-of-grade district, and any public entity that provides rail passenger transportation services for inclusion on the Priority List for FY 2012-2013 and 2013-2014.

Ranking Formula

In accordance with S&H Code § 2452, the Commission is responsible for establishing criteria to be used in determining the priority of projects nominated for separation or alteration. The Commission does so using formulas initially developed by the Commission in 1975, but modified since that time. There are two formulas used: 1) One for ranking projects proposing new grade-separation structures for existing crossings; and 2) One ranking projects proposing alteration or reconstruction of existing structures. We adopted the most recent priority evaluation formulas in OII 07-07-006, issued July 12, 2007, which are contained in Appendix 2 - Priority Index Formulas, to this OII.

Ranking Projects Under Construction

S&H Code § 2460.7 authorizes a local agency to construct a project on the Priority List prior to the time that it reaches a high enough position for funding. The following conditions will be applied to prioritize grade separation projects on which construction has commenced:

- 1. The project must have been on the priority list for the fiscal year during which construction commenced.
- 2. The project must be renominated for the fiscal year during which funding consideration is desired.
- 3. The renomination must include the same data as included in the nomination for the fiscal year during which construction commenced, but shall also include the actual cost data.
- 4. Cost data included in the renomination shall be:

- a. Final costs for completed projects, or
- b. Current anticipated final costs for projects still under construction.
- 5. All projects renominated under the provisions of Section 2460.7 shall also comply with the filing requirements in this order.

Notice and Distribution

After this OII is adopted, the Commission's Executive Director must serve a copy of this OII on: Every railroad corporation operating in California; California Department of Transportation; California Transportation Commission; League of California Cities; California State Association of Counties; and Light Rail Transit Agencies. The Commission staff must then mail the notice appearing in Appendix 3 - OII Interested Party Notice Letter, of this OII, to the known railroads, light rail transit agencies, cities, counties and other interested parties. Interested parties may then download this OII from the Commission's website at <u>www.cpuc.ca.gov</u>. This OII will also be published on the Commission's Daily Calendar. Project nomination forms and instructions are found in Appendix 4 – GSN-1 Form and in Appendix 5 –GSN-2 Form, of the OII.

Preliminary Scoping Information

The scope of this proceeding will include all issues raised in this OII, but will not be limited to these issues. Any party may suggest related issues (i.e., issues involving the existing crossings at grade of city streets, county roads, or state highways) for Commission consideration, in accordance with the Commission's Rules of Practice and Procedure.³.

³ http://docs.cpuc.ca.gov/published/RULES_PRAC_PROC/105138.htm

The assigned Administrative Law Judge (ALJ) will, if necessary, convene a prehearing conference to develop a service list for this proceeding and to further delineate issues related to the scope and schedule of this proceeding.

This proceeding is categorized as quasi-legislative because it establishes a priority list affecting an entire regulated industry.

In OII 99-07-001, the Commission established a new procedure for adopting a two-year Priority list, due to statutory time limitations. For this proceeding to be completed in a timely manner, the Priority List established by this OII must serve for both fiscal years in the investigation. The Commission staff is authorized to revise the Priority List for 2012-2013 after the first FY, based upon input from Caltrans (removal of already funded projects) and issue a second, revised Priority List for 2013-2014. This process complies with the statutory deadline of S&H Code § 2452 that requires the Commission to certify an annual Priority List on or before July 1st of each FY.

Any party interested in participating in this OII who is unfamiliar with the Commission's procedures should contact the Commission's Public Advisor Office in San Francisco at (415) 703-2074 or (866) 849-8390 or e-mail <u>public.advisor@cpuc.ca.gov</u>; or in Los Angeles at (213) 576-7055 or (866) 849-8391, or e-mail<u>public.advisor.la@cpuc.ca.gov</u>. The TTY number is (866) 836-7825.

IT IS ORDERED that:

1. An investigation on our own motion is instituted for the purpose of establishing a new Grade Separation Priority List for fiscal years 2012-2013, and 2013-2014, of existing railroad grade crossings of public streets, roads, or highways most urgently in need of separation, and existing separation structures

- 6 -

most urgently in need of alteration or reconstruction as required by California Streets and Highways Code § 2452.

2. The Executive Director must serve a copy of this Order Instituting Investigation on the following:

- a. Every railroad corporation operating in California;
- b. California Department of Transportation;
- c. California Transportation Commission;
- d. League of California Cities;
- e. California State Association of Counties; and
- f. Light Rail Transit Agencies.

3. Local agencies in California desiring to have a crossing separation project considered for inclusion in the Grade Separation Priority List for fiscal years 2010-2011, and 2011-2012, to be established under S&H Code Section 2452, shall file the original Grade Separation Nomination Form (GSN)-1 or GSN-2 nomination forms with two copies to:

California Public Utilities Commission Attn: Rosa Muñoz, P.E. Senior Utilities Engineer 320 West 4th Street, Suite 500 Los Angeles, CA 90013

4. Applications on GSN-1 Forms or GSN-2 may be mailed or delivered in person. All nominations are due to the California Public Utilities Commission in Los Angeles postmarked no later than Friday, October 21, 2011. Applications delivered in person are due no later than 4:00 p.m. on October 21, 2011. Applications postmarked or delivered after the deadline will not be processed. Applications are not accepted via fax.

5. Each party is also required to provide one copy of its nomination(s) to **California Department of Transportation** (Caltrans):

Caltrans - Division of Rail Attn: Bruce Plowman, Chief 1120 N Street, MS 74 Sacramento, CA 95814

- 6. Each nomination shall include the following:
 - a. For existing crossings nominated for separation, a completed Nomination Form GSN-1 (Appendix 5).
 - b. For existing grade separation nominated for alteration or reconstruction, a completed Nomination Form GSN-2 (Appendix 6).
 - c. A legible location map of the project, on $8 \frac{1}{2}$ x 11" sheet of paper showing the existing railroads and roadway system.
 - d. Two current 8"x10" photographs of the crossing(s), one from each direction of approach, shall be included with the original nomination. Other nomination copies may contain photocopies of the photographs.

7. Data submitted in the nomination must be based on verifiable facts occurring on or before October 21, 2011. Speculative data involving events anticipated to occur at some time in the future will not be considered. Applications for separations of existing at grade crossings with estimated data (vehicle counts, train counts, blocking delay, etc.), other than the project costs, will not be processed or included on the Priority List.

8. Nomination(s) must not include multiple projects that are separate and distinct and clearly severable. The combining of severable projects precludes the Commission from effectively determining which projects are most urgently in need of separation or alteration as required by California Streets and Highways Code § 2452. All consolidation projects that involve two or more existing at grade crossings must satisfy these criteria to be considered.

9. All project proposals to eliminate existing grade crossings shall include, for each crossing: the crossing location, crossing geometrics, average daily vehicle

and train volumes, blocking delay, speed limits, accident data, ecetera (see sections B through H of GSN-1 in Appendix 4). Applications that include missing or incomplete data will not be used for the priority evaluation.

10. A nominating party may elect to exclude pre-construction costs (engineering, right-of-way, preparation of environmental impact reports, and utility relocation) if those costs are less than the local agency's share of the total costs (California Streets and Highways Code § 2454). The nominating party may be required to submit evidence in support of the fact that the funds have been expended. To the extent that pre-construction costs are excluded from a project's cost for the purpose of a nomination, the costs as nonparticipating, that is, the railroad will not be required to contribute 10 percent of the excluded pre-construction costs.

11. In addition to submitting the GSN-1 or GSN-2, each party, or its representative, nominating a crossing for inclusion in the Priority List is **required to appear in person at the hearings** to present evidence concerning the nomination. Supplemental data may be submitted at the hearings in support of a nomination. The data may include facts not known at time of nomination. The California Public Utilities Commission staff must receive verification of all supplemental data no later than one week after the last scheduled day of hearings.

12. Appearance schedules will be mailed to the interested parties 10 days prior to the scheduled hearings, usually held in the California Public Utilities Commission offices in San Francisco or Los Angeles. All parties will be notified of the dates and locations of the hearings. Appearances will be limited to one witness in support of each project or railroad.

- 9 -

13. Parties anticipating the need for an allocation greater than \$5,000,000 shall be prepared to present evidence at the hearings to justify the additional award. California Streets and Highways Code § 2454 (d)(1) states:

"(d) (1) Notwithstanding the provisions of Subdivision (a) to (c), inclusive, a single project in excess of five million dollars (\$5,000,000), but not exceeding twenty million dollars (\$20,000,000), shall be considered without specific legislative authority, if the project (A) is included in the Public Utilities Commission's priority list of projects scheduled to be funded, (B) eliminates the need for future related grade separation projects, (C) provides projected cost savings of at least 50 percent to the state or local jurisdiction, or both of them, by eliminating the need for future projects, and (D) alleviates traffic and safety problems or provides improved rail service not otherwise possible. Projects approved pursuant to this subdivision shall be funded over a multiyear period, not to exceed five years, and the allocation for any one of those years shall not exceed the amount prescribed by subdivision (c) for a single project."

14. Failure to supply all of the requested information or to appear before the

Commission will constitute grounds for exclusion of a project from the Grade

Separation Priority List.

This order is effective today.

Dated July 28, 2011, at San Francisco, California.

MICHAEL R. PEEVEY President TIMOTHY ALAN SIMON MICHEL PETER FLORIO CATHERINE J.K. SANDOVAL MARK J. FERRON

Commissioners

APPENDIX 1 – California Administrative Code, Title 21, Division 2, Chapter 13, Grade Separation Projects Page 1 of 5 GRADE SEPARATION PROGRAM

TITLE 21. Public Works

Division 2. Department of Transportation Chapter 13. Grade Separation Projects -- Applications for Allocation or

Supplemental Allocations (Register 2009, No. 20)

Article 1. Applications

§1552. Last Date to File.

April 1 of each fiscal year is the last date 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 and Highways Code Section 2452;

APPENDIX 1 – California Administrative Code, Title 21, Division 2, Chapter 13, Grade Separation Projects Page 2 of 5

(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 and 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 railroad 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 and 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 cost 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.

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

Page 3 of 5

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

(d) Certified resolution by the applicant's governing body stating that all matters prerequisite to the awarding of the construction contract can be accomplished within two years after the allocation of the 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 to only 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

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

Page 4 of 5

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 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. A planned project must be a complete and operable project, and effect the separation of grades, relocation of the highway 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. A formal application must be filed by the applicant, accompanied 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 for filing.

§1559. Contents of Application

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

Page 5 of 5

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 is set forth in the supplemental application;

(4) All costs set forth in the request for a 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 the 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 in detail why the original allocation was not sufficient.

Note: Authority and reference cited: Sections 2450-2461, Streets and Highways Code; and City of San Marcos v. California Highway Commission, 60 Cal. App. 3d 383.

(END OF APPENDIX 1)

APPENDIX 2 –Priority Index Formulas Page 1 of 5

Formula For Crossing Nominated For Separation

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

- 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 63 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 19 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(c)(1) per fiscal year, unless the applicant is seeking multiple-year funding as prescribed in S&H Code § 2454(d)(1). Local agencies are eligible to receive up to \$5 million each year, over a period of 5 years for a project. The total amount a project 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. Up to fifteen million dollars (\$15,000,000) to a single project maybe be allocated if that project is the highest ranking project on the priority list (S&H Code § 2454(c)(2)).

AH = Accident History (last 10 years from application filing due date) The total AH score is the sum of points per accident awarded as follows for vehicle and pedestrian accidents involving trains at crossings with the Crossing Protection Factor (CPF) based on the crossing's warning devices:

Points per Accident = $(1 + 2 \times No. Killed + No. Injured) \times CPF$

		Page 2 of	5
STANDARD	9	8	1
CPF	1.0	0.4	0.1

APPENDIX 2 -Priority Index Formulas

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.

Note 3: Pedestrian collisions with the train will be considered at the crossing, excluding all suicides.

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

BD = Blocking Delay by Train (The total 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, traveling through the crossing based on the following:

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

APPENDIX 2 – Priority Index Formulas

OF = Other Factors- Other Factors are valued in a range from 0 to 19 points based on:

CATEGORY	POINTS
SCHOOL BUSES	0-3
PASSENGER BUSES	0-3
HAZ-MAT TRUCKS*	0-3
COMMUNITY IMPACT	0-10

*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**

APPENDIX 2 - Priority Index Formulas

Page 4 of 5

Up to five million dollars per project will be allocated (S&H Code § 2454(c)(1) per fiscal year, unless the applicant is seeking multiple-year funding as prescribed in S&H Code § 2454(d)(1). Local agencies are eligible to receive up to \$5 million each year, over a period of 5 years for a project. The total amount a project 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. Up to fifteen million dollars (\$15,000,000) to a single project maybe be allocated if that project is the highest ranking project on the priority list (S&H Code § 2454(c) (2)).

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
Greater than or equal to	0
16'+12(N)	
Greater than 12' + 12(N)	2
but less than $16' + 12(N)$	
Greater than $8' + 12(N)$ but	4
less than $12' + 12(N)$	
Greater than 11(N) but less	6
than 8'+12(N)	
Equal to 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

APPENDIX 2 – Priority Index Formulas	

Page 5 of 5	
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 total AS points is 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

(END OF APPENDIX 2)

APPENDIX 3 - OII Interested Party Notice Letter

Page 1 of 1

STATE OF CALIFORNIA G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION 320 WEST 4TH STREET, SUITE 500 LOS ANGELES, CA 90013 (213) 576-7078 FAX 576-7029 August 5, 2011



EDMUND

To: All Interested Parties

Re: Establishment of the Section 190 Grade Separation Priority List for fiscal years 2012-2013 and 2013-2014 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 Section 190 Grade Separation Priority List (Priority List) for fiscal year 2012-2013 and 2013-2014. The California Transportation Commission and the California Department of Transportation use the Priority List to allocate funds made available to the program to assist local governments in financing grade separations projects for existing at-grade crossings and grade separations in need of alteration or reconstruction.

If you wish to nominate a grade separation project for inclusion on the Priority List, you must complete and file a nomination application and participate in the Commission's OII. If you are interested, download the OII and appendices from our website at:

<u>http://www.cpuc.ca.gov/PUC/transportation/crossings/rrcrossingfundingprg.ht</u> <u>m.</u> Search for I.11-07-XXX.

The OII and appendices include an explanation and filing requirements for participating in the program, including a nomination form with instructions, and listing the criteria and formulas used to rank all nominations. All applications are due Friday, October 21, 2011.

For additional clarifications or comments, please contact me at <u>rosa.munoz@cpuc.ca.gov</u>, (213) 576-7078. Sincerely,



ROSA MUÑOZ, PE Senior Utilities Engineer Rail Crossings Engineering Section Consumer Protection & Safety Division (END OF APPENDIX 3)

APPENDIX 4 – GSN 1 FORM Page 1 of 9

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 2012-2013 and 2013-2014 of existing crossings at-grade of city streets, county roads or state highways in need of separation, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.

Investigation 11-07-XXX (Filed July 30, 2011)

Nomination for Separation

Of

Existing Railroad-Grade Crossing

Nomination by _____

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

This packet contains the GSN-1 Form and instructions. – Please

APPENDIX 4 - GSN 1 FORM Page 2 of 9

carefully read the instructions before completing the form.

APPENDIX 4 – GSN 1 FORM Page 3 of 9

A. Nominating Party – Please include two contacts.

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

APPENDIX 4 – GSN 1 FORM Page 4 of 9

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 COST \$_____

ALLOCATED SHARE FROM STATE FUND: \$_____

Contributions:

City	\$
County	\$
Railroad	\$
Other (specify)	\$

E. Accident History Data

Total Number of Trains vs. Vehicle and Pedestrian Accidents *			
Source	Date	Killed	Injured
Source	Date	Killed	Injured
Source	Date	Killed	Injured
Source	Date	Killed	Injured

* List all accidents separately from October 21, 2001 to October 21, 2011. For each accident specify the accident date, the number of fatalities and injuries.

APPENDIX 4 – GSN 1 FORM Page 5 of 9

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	Is there an entrance/exit within 150'? Yes [] No
Direction:	[]
Height: in.	Is there a raised median? Yes [] No []
Direction:	
Height: in.	Is there curvature on the road or track? Yes []No

H. Other Information / Attachments

Did you enclose an 8 1/2" x 11"location map?	Yes []]	No [
Did you enclose an 8"x10" photo of each crossing's	Yes []	No []
approach?		
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: _____

APPENDIX 4 – GSN 1 FORM Page 6 of 9

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. Nominations of grade separation projects must be submitted on the GSN-1 Form by October 21, 2011, 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 rosa.munoz@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. Please include two contacts. 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 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".

APPENDIX 4 – GSN 1 FORM Page 7 of 9

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 (UPRR, BNSF Railway, 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 Section 190 Grade Separation 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 and pedestrian accidents that have occurred at the crossing(s) from October 21, 2001 to October 21, 2011 (10-year period). Pedestrian collisions with the train will be considered at the crossing, excluding all suicides. Attach a copy of the law enforcement report for all accidents to the original GSN-1 Form that is not found on the Federal Railroad Administration website: http://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx. For

APPENDIX 4 – GSN 1 FORM Page 8 of 9

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.

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.

APPENDIX 4 – GSN 1 FORM Page 9 of 9

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 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

Attach an 8 ½" x 11" location map and an 8" x 10" photograph of the crossing location (one from each approach) showing the entire crossing and pertinent crossing geometrics at least one hundred feet back. Also attach a brief explanation of the community impact including its justification, how it meets transportation planning goals, the potential for emergency vehicle blockage if the crossing is near a hospital, or if the path over the crossing is classified as an emergency vehicle route, is it a school bus or passenger bus route, location of nearby fire/police station(s), is the crossing part of a designated hazardous material carrier route, a major arterial route; classification as a state highway/route, or describe if no grade-separation crossings are in the city/area.

I. DECLARATION

Please complete the declaration with the information requested and sign. (END OF APPENDIX 4)

APPENDIX 5 - GSN 2 FORM Page 1 of 6

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 2012-2013 and 2013-2014 of existing crossings at-grade of city streets, county roads or state highways in need of separation, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.

Investigation 11-07-XXX (Filed July 30, 2011)

Nomination for Alteration or Reconstruction Of Existing Grade Separation

Nomination by _____

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

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

APPENDIX 4 - GSN 1 FORM Page 2 of 7

A. Nominating Party – Please include two contacts.

Agency						
Name:						
Contact	Title	Street	City	Zip	Telephone	E-
Name		Street Address	-	Zip Code		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 []
Is project part of a consolidation?	Yes [] No []

C. Clearances

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

D. Speed Reduction or Slow Order

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

APPENDIX 4 – GSN 1 FORM Page 3 of 7

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		

F. Accident History Data

Total Number Accidents *				
Source	Date	Killed	Injured	
Source	Date	Killed	Injured	
Source	Date	Killed	Injured	
Source	Date	Killed	Injured	

* List all accidents from October 21, 2001 to October 21, 2011, separately. 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	E FUND: \$

APPENDIX 4 - GSN 1 FORM Page 4 of 7

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	es [1	No[]
completion date of retrofit work.		1	

* 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 $8 \frac{1}{2}$ x 11" location map?	Yes []	No []
Did you enclose an 8"x10" photo of each crossing's	Yes []	No []
approach?		

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:
	I IIIC	Dute

APPENDIX 4 - GSN 1 FORM Page 5 of 7

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. Nominations for alteration or reconstruction of existing separation projects must be submitted on the GSN-2 Form by October 21, 2011, 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 rosa.munoz@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. Please include two contacts. 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

APPENDIX 4 – GSN 1 FORM Page 6 of 7

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

APPENDIX 4 – GSN 1 FORM Page 7 of 7

the completion dates. Also specify if other work is being planned for completion prior October 21, 2011.

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.

(END OF APPENDIX 5)