

ORIGINAL

Decision No. 91887 JUN 3 1980

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose  
of establishing a list for the  
fiscal year 1980-81 of existing  
and proposed crossings at grade  
of city streets, county roads  
or state highways most urgently  
in need of separation, or  
projects effecting the elimination  
of grade crossings by removal or  
relocation of streets or railroad  
tracks, or existing separations  
in need of alteration or  
reconstruction as contemplated  
by Section 2452 of the Streets and  
Highways Code.

OII No. 61  
(Filed November 30, 1979)

(Appearances are listed in Appendix A.)

O P I N I O N

By its order dated November 30, 1979, the Commission instituted an investigation for the purpose of establishing the 1980-81 Railroad-Highway Grade Separation Priority List as required by Section 2452 of the Streets and Highways Code, which requires that by July 1 of each year the California Public Utilities Commission shall establish a priority list of those railroad grade separation projects, including the elimination of existing or proposed grade crossings, the elimination of grade crossings by removal or relocation of streets or railroad tracks, and the alteration or reconstruction of existing grade separations most urgently in need of separation or alteration. The list, based on criteria established by the

Commission, contains projects on city streets, county roads, and state highways which are not freeways as defined in Section 257 of the Streets and Highways Code. The list is furnished to the Department of Transportation (Caltrans) and the California Transportation Commission and those agencies, pursuant to the provisions of Sections 190 and 2453 of the Streets and Highways Code, allocate at least \$15,000,000 annually to those nominations in accordance with their priority on the list.

Funding for projects included on each annual priority list is provided through Section 190, and the basis for allocation is contained in Sections 2450-2461 of the Streets and Highways Code. On projects which eliminate an existing crossing, or alter or reconstruct an existing grade separation, an allocation of 80 percent of the estimated cost of the project is made with the local agency and railroad each contributing 10 percent. On other projects an allocation of 50 percent of the estimated cost of the project is made for a proposed crossing with the remaining 50 percent contributed by the local agency.

Following issuance by the Commission of an Annual Grade Separation Priority List, applications to Caltrans for an allocation must be made no later than April 1 of each fiscal year. The requirements for filing an application for an allocation of grade separation funds are set forth in Title 21 (Public Works), Chapter 2, Subchapter 13 (Grade Separation Projects) of the California Administrative Code.

The allocation by the Transportation Commission is limited to that necessary to make the separation operable and the initial allocation of funds by the Transportation Commission is not to exceed the applicant's project cost estimate utilized by the Public Utilities Commission in establishing the annual separation priority list.

By Decision No. 90399 dated June 5, 1979 the Commission established the twenty-third priority list of 73 projects for the 1979-80 fiscal year, which will expire on June 30, 1980. A new priority list for the 1980-81 fiscal year is now required.

Public hearings were held in San Francisco and Los Angeles before Administrative Law Judge Daly, and the matter was submitted on March 26, 1980 upon the receipt of late-filed Exhibit 9 and opening and closing briefs, the latter being filed on April 15, 1980.

Copies of the Order Instituting Investigation were served upon each city, county, and city and county in which there is a railroad crossing, each railroad corporation involved, Caltrans, the California Transportation Commission, the League of California Cities, the County Supervisors Association, and other persons who might have an interest in the proceeding.

In response to the Order Instituting Investigation, various public bodies desiring to nominate crossings or separations for the 1980-81 priority list filed with the Commission the following information:

- A. For Existing or Proposed Crossings at Grade Nominated for Elimination by Proposed Separation and Grade Crossings Nominated for Elimination by Removal or Relocation of Streets or Railroad Tracks
1. Identification of crossing, including name of street or road, name of railroad, and crossing number.
  2. Twenty-four hour vehicular traffic count, or for proposed crossings, estimated ADT for 1980.
  3. Number of train movements for one typical day segregated by type, i.e., passenger, through freight, or switching.
  4. Vehicular speed limit and the maximum prevailing train speed.
  5. Quantitative statement as to blocking delay at crossing, in minutes per day.

6. Distance on each side of the crossing to the nearest alternate routes, in feet.
  7. A 10-year accident history of the number of vehicle-object and vehicle-vehicle accidents directly attributable to the presence of the grade crossing.
  8. Width of the crossing in feet and in number of lanes.
  9. Preliminary cost estimate for project with costs separated into right-of-way, engineering, and construction.
  10. Statement as to need for the proposed improvement and agencies' willingness to pursue the project.
  11. Any proposed crossing nominated for separation should be subtyped either:
    - a. A grade crossing is practical and feasible.
    - b. A grade crossing is not practical and feasible.
  12. For grade crossing(s) nominated for elimination by removal or relocation of streets or tracks, the estimated cost of eliminating crossing(s) if grade separation facilities on the existing alignment of the street and railroad tracks were constructed.
- B. For Grade Separations Proposed for Alteration
1. Identification of crossing, including name of street or road, name of railroad, and crossing number.
  2. Twenty-four hour vehicle traffic count.
  3. Number of train movements for one typical day segregated by type, i.e., passenger, through freight, or switching.
  4. Description of existing and proposed separation structure with principal dimensions.
  5. Type of alteration proposed.

6. Preliminary cost estimate of project with costs separated into right-of-way, engineering, and construction.
7. A list and relative description of any of the following, if applicable:
  - a. Substandard highway width or height clearances.
  - b. Highway speed reduction due to alignment.
  - c. Railroad slow order due to structure.
  - d. Highway load limit due to structure.
8. A 10-year history of the number of vehicle accidents at or near the structure.
9. A detailed statement describing acute structural deficiencies, if any, and the probability of structural failure.
10. Statement as to the need for the proposed improvement and agencies' willingness to pursue the project.

Upon receipt of the requested information, the staff applied a formula adopted in determining the 1979-80 Grade Separation Priority List, and introduced the results thereof in Exhibit 2.

For the purposes of determining the 1980-81 Grade Separation Priority List, the staff used the following criteria which are similar to those used in the 1979-80 proceeding:

$$P = \frac{V \times T}{C \times 24} + SCF$$

Where:

- P = Priority Index Number
- V = Average 24-Hour Vehicular Volume
- C = Total Costs of Separation Project  
(In Thousands of Dollars)
- T = Average 24-Hour Train Volume
- SCF = Special Conditions Factor

For Existing or Proposed Crossings Nominated  
for Separation or Elimination

$$SCF = G1 + G2 + G3 + G4 + G5 + G6 + G7$$

Where:	<u>Points Possible</u>
G1 = Vehicular Speed Limit	0- 5
G2 = Railroad Prevailing Maximum Speed	0- 5
G3 = Crossing Geometrics	0- 5
G4 = Crossing Blocking Delay	0-10
G5 = Alternate Route Availability	0- 5
G6 = Accident History	0-20
G7 = Irreducibles	<u>0-15</u>
Total Possible	0-65

For Separations Nominated for Alteration or  
Reconstruction

$$SCF = S1 + S2 + S3 + S4 + S5 + S6$$

Where:	<u>Points Possible</u>
S1 = Width Clearance	0-10
S2 = Height Clearance	0-10
S3 = Speed Reduction or Slow Order	0- 5
S4 = Load Limit	0- 5
S5 = Accidents at or Near Structure	0-10
S6 = Probability of Failure and Irreducibles	<u>0-10</u>
Total Possible	0-50

Points in each category were assigned according to the following schedule:

Grade Crossings

G1 = Vehicular Speed Limit

<u>MPH</u>	<u>Points</u>
0-30	0
31-35	1
36-40	2
41-45	3
46-50	4
51-55	5

G2 = Railroad Maximum Speed

<u>MPH</u>	<u>Points</u>
0-25	0
26-35	1
36-45	2
46-55	3
56-65	4
66 +	5

G3 = Crossing Geometrics

0-5 points based on relative severity of physical conditions.

G4 = Crossing Blocking Delay, Total Minutes per Day

<u>Minutes</u>	<u>Points</u>
0-20	0
21-40	1
41-60	2
61-80	3
81-100	4
101-120	5
121-140	6
141-160	7
161-180	8
181-200	9
201 +	10

G5 = Alternate Route Availability

<u>Distance-feet</u>	<u>Points</u>
0-1,000	0
1,001-2,000	1
2,001-3,000	2
3,001-4,000	3
4,001-5,000	4
5,001 +	5

G6 = Accident History (10 years)

Each reportable train-involved accident

Points = (1 + 2 x No. killed +  
No. injured) x PF\*

\*PF = Protection Factor for:

Std. #9 = 1.0  
Std. #8 = 0.4  
Std. #3 = 0.2  
Std. #1 = 0.1

Note 1. No more than 3 points shall be allowed for each accident prior to modification by the protection factor.

Note 2. Each accident shall be rated separately and modified by a factor appropriate to the protection in existence at the time of the accident.

G7 = Irreducibles

- (a) Secondary accidents.
- (b) Emergency vehicle usage.
- (c) Accident potential.

Separations

S1 = Width Clearance		S2 = Separation Height Clearance	
<u>Width (Ft.)</u>	<u>Points</u>	<u>Underpass (Ft.)</u>	<u>Points</u>
9' + 12(N)	0	15' +	0
6' but less than 9' + 12(N)	2	14' but less than 15'	4
3' but less than 6' + 12(N)	4	13' but less than 14'	8
0 but less than 3' + 12(N)		Less than 13'	10
		<u>Overpass (Ft.)</u>	
11(N) but less than 12(N)	6	22½' +	0
Less than 11(N)	8	20' but not less than 22½'	4
	10	18' but not less than 20'	8
		Less than 18'	10

N = Number of Traffic Lines

S3 = Speed Reduction or Slow Order

- None 0
- Moderate 2
- Severe 5

S4 = Load Limit

- None 0
- Moderate 2
- Severe 5



S5 = Accidents at or Near Structure (10 years)

<u>Number</u>	<u>Points</u>
0-10	0
11-20	1
21-30	2
31-40	3
41-50	4
51-60	5
61-70	6
71-80	7
81-90	8
91-100	9
101 +	10

S6 = Irreducibles

- (a) Probability of Failure.
- (b) Accident Potential.
- (c) Delay Effects.

Following the hearing the staff prepared and submitted late-filed Exhibit 9. Based upon the testimony and evidence presented during the course of hearing, changes were made in the number of points originally awarded to projects, as the result of changes in factual data and further explanation of data that were first submitted with the nominations. Changes were also made where local agencies did not provide sufficient evidence or foundation for the information contained in their original nominations. Projects for which no appearance was made were eliminated from consideration.

Projects with points revised because of changes in factual data or because of further explanation of previously submitted information are as follows:

<u>Agency</u>	<u>Crossing Name</u>	<u>Affected Category</u>
Alameda County	Niles-Pls CNL	Crossing Name Project Cost
CALTRANS	237-Santa Clara L-39.8 162-Butte	Project Cost Train Speed Irreducibles
Chico	Dayton Road	Vehicle Volume

<u>Agency</u>	<u>Crossing Name</u>	<u>Affected Category</u>
Corona	Cota Street Cota-Railroad Railroad Street	Vehicle Speed Vehicle Speed Vehicle Speed
El Monte	Peck-Ramona	Train Volume
Fresno County	Herndon Avenue	Train Volume Blocking Delay
Hayward	Tennyson Road A Street Harder Road W. Winton Avenue	Project Cost Project Cost Project Cost Project Cost Train Speed
Los Angeles County	Alondra Blvd. Hollywood Way Bandini Blvd.	Vehicle Speed Vehicle Speed Project Cost Blocking Delay
Los Angeles	Valley Blvd. Nordhoff Street	Project Cost Project Cost
Norwalk	Imperial Highway	Train Speed
Ontario	Euclid Avenue	Project Cost Blocking Delay
Oroville	Bridge Street	Height Clearance
Pomona	Humane Way	Train Volume
Richmond	Castro Street	Project Cost
Sacramento County	U Street	Vehicle Volume Project Cost
Salinas	Boronda Road	Train Volume Train Speed Blocking Delay Accident History Irreducibles
San Gabriel	San Gabriel Lwr.	Train Speed Blocking Delay Train Volume

<u>Agency</u>	<u>Crossing Name</u>	<u>Affected Category</u>
San Jose	Branham Lane	Vehicle Volume
	Bernal Road	Project Cost
		Project Cost
San Luis Obispo	Orcutt Road	Irreducibles
South San Francisco	Grand Avenue	Irreducibles
Sunnyvale	Mary Avenue	Train Volume

The following projects were eliminated from consideration either by request of the nominating agency or because a representative of the nominating agency failed to appear at the hearing in support of the project.

<u>Agency</u>	<u>Crossing Name</u>
Pittsburg	Railroad Av./SPT Co. Railroad Av./AT&SF
Riverside County	Magnolia Avenue Limonite Avenue
Santa Fe Springs	Carmenita Avenue
Torrance	Torrance RCL

The following projects were eliminated from consideration because they are not feasible as individual projects.

<u>Agency</u>	<u>Crossing Name</u>
San Gabriel	Ramona Street San Gabriel Blvd. Del Mar Avenue Mission Drive

The staff recommends that the Alondra Boulevard and Eastern Avenue projects nominated by the County of Los Angeles be excluded from the 1980-81 Grade Separation Priority List because both received allocations from the Grade Separation Fund in the 1978-79 fiscal year and an additional allocation from funds provided through Senate Bill 620.

Southern Pacific Transportation Company (SP) made a motion to strike the Tennyson Road, Harder Road, and W. Winton Avenue projects nominated by the City of Hayward; the Castro Street project nominated by the City of Richmond; the Branham Lane and Bernal Road projects nominated by the City of San Jose; and the Valley-Eastern project of the City of Los Angeles on the ground that the nominations do not contain all the information, particularly cost information, required by the Commission's Order Instituting Investigation, and the additional information was not provided by the supporting witnesses at the time of hearing. SP contends that if incomplete cost data is presented it will most likely result in a project receiving a higher priority by reason of the use of a lower cost figure.

This problem arises because many projects are in the early stage of planning and costs are based upon ballpark estimates. In many instances the nominating agency has little expectation that it will be able to commence construction within the fiscal year. In prior priority list proceedings, supplemental information has been provided following submission. This procedure was followed by the staff in its preparation of late-filed Exhibit 9.

With the exceptions of the Bernal Road and Branham Lane projects, all of the projects subject to the motions ranged in priority positions from 64 to 70 in Exhibit 2. The relative changes in positions of these projects, as set forth in late-filed Exhibit 9, range from 55 to 68. There is little chance that these projects would qualify for an allocation during the next fiscal year.

The Bernal Road project improved its position, following hearing, moving from a priority position of 22 in Exhibit 2 to 19th position in Exhibit 9. The Branham Lane project, however, dropped from a priority position of 19 in Exhibit 2 to a priority position of 37 in Exhibit 9.

It does not appear that the supplemental information provided following submission has materially improved the position of these crossings to the detriment of other projects and striking them from the list would serve no particular purpose. It is safe to say that with the exception of the Bernal Road project that these projects will again be nominated for the 1981-82 priority list and that at such time more definite cost information will be provided.

SP also made a motion to strike the Peck-Ramona nomination of the City of El Monte and the Grand Avenue nomination of the City of South San Francisco for failure to present witnesses capable of being cross-examined on the nominations.

The witness for the City of El Monte was not able to answer in detail questions relating to the gradient plan and width of the Peck-Ramona nomination, nor was the witness for the City of El Monte or the witness for the City of South San Francisco able to identify the SP representatives who had been contacted by telephone and supplied information on train counts and blocking time.

The El Monte witness testified that final plans for the Peck-Ramona nomination had not as yet been prepared. The only plans for the project are those contained in a four-year-old preliminary study and a copy of these plans was furnished to SP several years ago. According to the witness the project gradient can be determined from these early plans.

According to SP the motions to strike were made for fear that unless disputes concerning the necessity for a grade separation (including disputes concerning design plans which affect the estimated cost of a project) were raised in this proceeding, it would be precluded from raising them in a subsequent application proceeding requesting authority to construct. This was prompted by Commission Decision No. 91469 dated March 18, 1980 in Application No. 59126, which related to a request by the City of Salinas for

authority to construct a grade separation over SP's tracks at Davis Road. In that proceeding the city advanced the Davis Road project as qualifying to replace the Boronda Road crossing, which project placed 22nd on the 1979-80 priority list. In precluding SP from showing that the Boronda/Davis Roads project was placed too high on the priority list, the Commission found that:

- "22. The project is in Priority Position Number 22 as set forth in PUC Decision No. 90399, dated June 5, 1979.
- "23. Pursuant to PUC Decision No. 90399, the Boronda Road grade crossing has been found to be urgently in need of elimination or separation.
- "24. SP was represented in the nomination hearings which were held in 1979 and which culminated in PUC Decision No. 90399. SP did not object to the nomination of the project by City, and SP did not request that the hearings be reopened or that a rehearing be set with respect to this project."

It appears that some confusion over the role or purpose of each type of proceeding has surfaced which should be clarified. The Grade Separation Priority List proceedings have a very narrow purpose--to develop a comparative ranking of projects nominated by state and local agencies and the railroads for grade separation or reconstruction. That ranking is determined by a lengthy list of primarily objective criteria, the factual data being supplied by the nominating party, and tested through cross-examination in public hearing. Because of the many nominations that have to be considered and the limited amount of time for hearing, there is little or no opportunity in the priority list proceeding to consider in detail issues of need or specifics affecting final design or apportionment of cost. Agencies are, in fact, limited at the priority hearings to one witness who can answer questions on the submitted nomination.

Parties do have an adequate chance to challenge the factual data submitted, such as vehicle and train volumes, vehicular and train speeds, accident history, delay, alternate route availability, and, to an extent, the project cost estimate; therefore, a priority list's integrity, once issued, should be maintained.

Applications for authority to construct address only the single project in question and are, therefore, the proper outlet for examining the project's individual merits and questions of need and technical detail. Projects at the priority list proceedings are generally just in the conceptual stage without much idea of specific technical features or requirements. Applications for authority to construct usually come much later, and for many legitimate reasons a project may differ in scope, cost, or functional intent. This is the proceeding which should closely scrutinize a project's detail, including need, technical design, and apportionment of cost. Interested parties, which could include many groups not involved in the priority hearings, should not be restricted by their appearance or position at the priority list hearings nor limited by the findings based on the preliminary nomination. Each request for authority to construct should be evaluated on the merits of the application--the latest and most detailed information available. The motions of SP will therefore be denied.

The Commission has learned, since the date of the hearings on the 1980-81 priority list, that five projects appearing on the 1979-80 priority list, which were also nominated for the 1980-81 priority list, have been approved for allocations. These projects, therefore, will not appear on the 1980-81 priority list. The projects, by agency and crossing name, are:

<u>Agency</u>	<u>Crossing Name</u>
Buena Park	Beach Blvd.
Ontario	Euclid Avenue
Caltrans	St. Rt. 237 Widening
Pomona	Humane Way - SPT
Oroville	Bridge Street

Appendix B lists, in alphabetical order, the projects nominated for the 1980-81 priority list. Included in the table, in addition to information identifying each project, are the vehicular and train volumes, project cost, and the  $\frac{V \times T}{C \times 24}$  calculation for each named project.

Appendix C is a list of point values awarded in each Special Conditions Factor category to existing or proposed crossings nominated for separation or elimination.

Appendix D is a list of point values awarded in each Special Conditions Factor category to existing grade separations nominated for alteration or reconstruction.

The basic procedure employed by the staff for processing and evaluating the nominations was as follows:

1. Nominations were received by the Commission and logged in by the Traffic Engineering Section staff.
2. The data required to complete the formulae and the information identifying the crossing(s) were entered on a crossing file input form.
3. Data entered on the form were transferred to data input cards and entered into the computer.
4. The  $\frac{V \times T}{C \times 24}$  calculation was performed for each project and Special Conditions Factor points were assigned according to the defined schedules by the computer.



5. Totals for each project in the Special Conditions Factor categories were gathered and the Priority Index Number was calculated.
6. The projects were ranked according to their descending Priority Index Number.

Conclusions of Law

1. The criteria set forth in Appendices B, C, and D attached hereto are reasonable and should be used to establish the 1980-81 priority list.

2. The Alondra Boulevard and Eastern Avenue projects nominated by the County of Los Angeles should be excluded from the 1980-81 Grade Separation Priority List because both received allocations from the Grade Separation Fund in the 1978-79 fiscal year and an additional allocation from funds provided through Senate Bill 620.

3. The following projects should be eliminated from consideration because they are not feasible as individual projects.

<u>Agency</u>	<u>Crossing Name</u>
San Gabriel	Ramona Street San Gabriel Blvd. Del Mar Avenue Mission Drive

4. Because a representative of the nominating agency failed to appear in support of the nomination, the following projects should be eliminated from consideration.

<u>Agency</u>	<u>Crossing Name</u>
Pittsburg	Railroad Av./SPT Co. Railroad Av./AT&SF
Riverside County	Magnolia Avenue Limonite Avenue
Santa Fe Springs	Carmenita Avenue
Torrance	Torrance RCL

5. The motions of SP to strike the Tennyson Road, Harder Road, W. Winton Avenue, Castro Street, Branham Lane, Bernal Road, Valley-Eastern, Peck-Ramona, and Grand Avenue nominations should be denied.

6. Because of the many nominations that have to be considered and the limited amount of time for hearing, there is little or no opportunity in the priority list proceeding to consider in detail issues of need or specifics affecting final design or apportionment of cost. The close scrutiny of a project's detail should be considered in an application for authority to construct proceeding.

7. The five projects listed in the body of this decision, which received allocations subsequent to hearing hereon, should be excluded from the 1980-81 priority list.

8. The criteria or rules of the Commission established for use in determining the 1980-81 priority list are subject to modification, and the Commission invites the participation of interested parties to offer their recommendation.

9. The list set out in Appendix E should be established as the 1980-81 Grade Separation Priority List established in accordance with Section 2452 of the Streets and Highways Code.

10. With regard to projects having the same priority index number, consideration should first be given to projects which separate or eliminate existing grade crossings, then to projects for the alteration or reconstruction of existing grade separations, and finally to projects for the construction of new grade separations. Within each of these categories, first consideration should be given to the lowest cost project in order that the maximum number of projects may be accomplished with the available funds.

11. As the statute requires our order by July 1, the effective date of this order should be the date of signing.

O R D E R

IT IS ORDERED that:

1. The list of projects appearing in Appendix E is established as required by Section 2452 of the Streets and Highways Code as

the 1980-81 list, in order of priority, of projects which the Commission determines to be most urgently in need of separation or alteration.

2. The motions of Southern Pacific Transportation Company to strike the Tennyson Road, Harder Road, W. Winton Avenue, Castro Street, Branham Lane, Bernal Road, Valley-Eastern, Peck-Ramona, and Grand Avenue nominations are denied.

3. With regard to projects having the same priority index number, consideration shall first be given to projects which separate or eliminate existing grade crossings, then to projects for the alteration or reconstruction of existing grade separations, and finally to projects for the construction of new grade separations. Within each of these categories, first consideration shall be given to the lowest cost project in order that the maximum number of projects may be accomplished with the available funds.

4. The Executive Director shall furnish a full, true, and correct copy of this opinion and order to the California Transportation Commission.

The effective date of this order is the date hereof.

Dated JUN 3 1980, at San Francisco, California.

John E. Byrne  
President

William L. Patterson

Michael D. Howell

Franklin D. Smith  
Commissioners

Commissioner Claire T. Dodrick, being necessarily absent, did not participate in the disposition of this proceeding.

## APPENDIX A

LIST OF APPEARANCES

Interested Parties: Harold S. Lentz, Attorney at Law, for Southern Pacific Transportation Company and affiliated companies; Roy R. Gifford, for the Western Pacific Railroad Company; E. G. Gilmer, for The Atchison, Topeka & Santa Fe Railway Company; Eugene C. Bonnstetter, Attorney at Law, for the State of California, Department of Transportation; James P. Jones, for the United Transportation Union; Robert S. M. Yee, for the City of South San Francisco; Robert G. Bezzant, for City of San Mateo; George E. Cook, for City of San Carlos; Donald M. Somers, for City of Sunnyvale; Ed Hardin, for City of Hayward; Marvin D. Johnson, for City of Fresno; Thomas M. Perch, for Fresno County; Arnold Joens, for City of Salinas; Ron Miller, for City of Stockton; Art Mendoza, for City of San Jose; James C. Ray, for County of Sacramento; Melvin P. Jones, for City of Rohnert Park; Robert M. Barton, for City of Oroville and Alameda County; Barnabas John Kerekes, for Contra Costa County; Wayne Peterson, for City of San Luis Obispo; Bruce Crandall, for City of Dunsmuir; Douglas Wills, for City of Chico; Earl Pitkin, for City of Los Angeles; Dwight F. French, for City of San Gabriel; David E. Hedlund, for City of Buena Vista; Henry R. Mohle, for City of Corona; G. Brent Muchow, for City of Irvine; Merrell Watts, for City of Oceanside; Harold L. Purdy, for County of Santa Barbara; Eldon Lee, for City of Indio; Calvin K. Wang, for City of Colton; Glenn F. Welch, for City of El Monte; Robert L. Lawson, for Los Angeles County; David K. Hayward, for City of Redondo Beach; and Rosalind A. Daniels, for City of Ontario.

Commission Staff: Robert W. Stich.

ALPHABETICAL LIST OF PROJECTS BY NOMINATING AGENCY

AGENCY	CROSSING NAME	PR	BR	MILE POST	SUF	PROP	TYPE PROJ	VEH VOLUME	TRAIL VOLUME	PROJECT COST	V X T ----- C 1 24
ALAMEDA COUNTY	NILES-PLS CML	4		37.2	B		1	53107	5	7238000	2
ALAMEDA COUNTY	LIV-ALT CHSL	1	D	46.0			1	57491	5	3083000	4
BAKERSFIELD	UNION-24TH	1	B	312.3			1	22306	32	5067000	6
BUENA PARK	BEACH BL	2		160.6	B		4	52322	52	5833000	19
CALTRANS	79-RIVERSTONE	1	B	562.4			1	8000	64	3308000	6
CALTRANS	133-SAN BRDO	2		60.9			1	4700	54	4197000	3
CALTRANS	68-MONTEREY	1	E	119.29			1	14500	44	4140000	6
CALTRANS	166-SIA BARBA	1	E	276.8			1	5000	49	2540000	4
CALTRANS	180-FRESNO	2		997.8			1	22600	44	6017000	7
CALTRANS	58-SAN BRDO	2		780.3			1	8200	30	1580000	6
CALTRANS	70-YUBA	1	C	141.7	B		4	16200	40	9445000	3
CALTRANS	84-YOLO	1	A	87.5	B	.	2A	10000	38	2360000	6
CALTRANS	237-SANTA CLA	1	E	37.1	A		4	27500	59	3300000	20
CALTRANS	237-SANTA CLA	1	L	39.8			1	37500	9	9725000	1
CALTRANS	238-ALAMEDA	4	G	1.4	B		4	17000	8	2000000	3
CALTRANS	162-BUITE	4		204.0	B		4	21750	34	5500000	6
CALTRANS	41-FRESNO	1	B	205.9			1	14250	33	7748000	3
CHICO	DAYTON ROAD	1	C	183.8			3	1584	29	629000	3
COLTON	FOGG ST	2	B	4.1	B		4	1842	55	2075000	2
CONTRA COSTA COUNTY	SCHERSVILLE	1	B	52.1			1	13856	4	2296000	1
CONTRA COSTA COUNTY	MORELLO AV	2		1169.1	B		4	3403	20	2070000	1
CORONA	COYA ST	2	B	24.5			1	7051	33	4002000	2
CORONA	COYA-RAILROAD	2	B	24.5			1	9103	34	4050000	3
CORONA	RAILROAD ST	2	B	25.6			1	2052	35	4022000	1
DUNSMUIR	SCHERRER AV	1	C	321.7			1	1682	40	1335000	2

OIT 61 /ALJ/Don

ALPHABETICAL LIST OF PROJECTS BY NOMINATING AGENCY

AGENCY	CROSSING NAME	HR	BR	MILE POST	SUF	PROP	TYPE PROJ	VEH VOLUME	TRAIL VOLUME	PROJECT COST	Y I F	
											-----	C C 24
EL MONTE	PECK-RANDI/A	1	B	455.0			1	40416	24	15115000		3
FRESNO COUNTY	HERNDON AV	2		1007.4			1	9574	26	2376000		4
FRESNO	ASHLAN AV	1	B	199.9			1	10000	56	4043000		6
FULLERTON	GILBERT ST	2		162.4			1	21900	46	5820000		7
HAYWARD	HARDER ROAD	1	D	21.6			1	21000	22	3872000		5
HAYWARD	TENNISON ROAD	1	D	23.0			1	22400	22	4296000		5
HAYWARD	& WINTON AV	1	L	20.2			1	3860	32	5753000		1
HAYWARD	A STREET	4		20.2			1	28074	10	9030000		1
INDIO	MONROE ST	1	B	609.7			1	15700	40	6573000		4
IRVINE	IRVINE LVR	2		180.5			1	38634	18	11000000		3
IRVINE	ALTON PARKWAY	2		185.8		*	28	3980	24	868000		5
LOS ANGELES COUNTY	FLORENCE AV	1	BG	488.3			1	30409	16	6743000		3
LOS ANGELES COUNTY	GRAND AV	1	B	508.0	A	*	2A	9000	49	6369000		3
LOS ANGELES COUNTY	DOUGLAS ST	2	H	15.01	B	*	2A	12000	12	3840000		2
LOS ANGELES COUNTY	GREENWOOD HTB	2		149.5			1	13497	49	6945000		4
LOS ANGELES COUNTY	EASTERN AV	2		147.3			1	16154	46	3679000		8
LOS ANGELES COUNTY	BANDINI BL	3	A	3.4			1	19422	8	7803000		1
LOS ANGELES COUNTY	ALONDRA BL	2		159.6			1	17431	52	12091000		3
LOS ANGELES COUNTY	HOLLYWOOD WAY	1	B	469.4			1	23315	16	9358000		2
LOS ANGELES	VALLEY FL	1	B	425.8			1	18400	34	9155000		3
LOS ANGELES	SANTA FE-WASH	2		143.29	C		1	41013	40	11620000		6
LOS ANGELES	NORTH MAIN ST	1	B	142			1	10600	98	23500000		2
LOS ANGELES	SATECUI ST	1	E	456.0		*	2A	14000	16	10950000		1
LOS ANGELES	MORONJFF ST	1	E	448.5		*	2A	16000	16	4438000		2
NORWALK	IMPERIAL HWY	1	OK	498.0			1	30069	18	4059000		6

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ALPHABETICAL LIST OF PROJECTS BY NOMINATING AGENCY

AGENCY	CROSSING NAME	PR	OR	MILE POST	SUF	PROP	TYPE PROJ	VEH VOLUME	TRAFFIC VOLUME	PROJECT COST	V X T ----- C X 24
OCEANSIDE	COMBINED LWR	2		225.9			1	33816	55	12600000	6
ONTARIO	EUCLEID AV	3		37.7			1	24057	57	7114000	8
OROVILLE	BRIDGE ST	4		205.3	A		4	9474	24	595000	16
POMONA	HUMANE WAY	3		29.6	A		4	1980	20	710000	2
POMONA	HUMANE WAY	1	D	511.3	A		2A	18000	21	1765000	9
REDONDO BEACH	INGLEWOOD AV	2	H	16.7			1	34136	12	2585000	7
RICHMOND	CASTRO ST	3A		0.15			1	7000	36	4370000	2
ROHNERT PARK	ROHNERT PA EX	5		47.4			1	15521	10	2470000	3
SACRAMENTO COUNTY	U STREET	1	A	102.5			1	4600	44	5320000	2
SALINAS	BORONDA RD	1	E	116.7			1	8816	24	7296000	1
SANTA BARBARA COUNTY	HOLLISTER AV	1	E	365.7	B		4	15075	17	2132000	5
SAN CARLOS	HOLLY STREET	1	E	23.2			1	19285	59	7604000	6
SAN GABRIEL	SAN GABR LWR	1	D	490.2			1	71607	42	13500000	9
SAN JOSE	BERNAL RD	1	E	61.0			1	12430	30	2605000	6
SAN JOSE	BRANHAM LN	1	E	57.3			1	5350	30	2765000	2
SAN LUIS OBISPO	ORCUTT RD	1	E	253.3			1	11432	14	3697000	2
SAN MATEO	SANTA INEZ AV	1	E	17.3	B		4	860	56	577000	3
SAN MATEO	POPLAR AV	1	E	17.2	B		4	8900	56	705000	29
SAN MATEO	MONTIC DIABLO	1	E	17.4	B		4	1130	56	577000	5
SAN MATEO	FILTON AV	1	E	17.5	B		4	4000	56	576000	16
SOUTH SAN FRANCISCO	GRAND AVENUE	1	E	9.3			1	19810	70	13515000	4
STOCKTON	HAMMER LAKE	4		96.5			1	25000	17	5247000	3
SUNNYVALE	WOLFE RD	1	E	39.7			1	27228	70	6260000	13
SUNNYVALE	MARY AV	1	E	37.9			1	23368	51	12950000	4

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SPECIAL CONDITIONS FACTORS FOR GRADE CROSSINGS NOMINATED FOR SEPARATION OR ELIMINATION

AGENCY	CROSSING NAME	PR	BR	MILE POST	SUF	PROP	VEH SPD LIMIT G1	TRAIN SPEED G2	XING GECK G3	BLKAG DELAY G4	ALT RTE G5	ACC HEST G6	IRR G7	TOTAL SCF
ALAMEDA COUNTY	NILES-PLS CML	4		37.2	B		0	3	5	1	2	20	15	46
ALAMEDA COUNTY	LIV-ALT CNL	1	D	46.0			2	3	5	1	5	11	15	42
BAKERSFIELD	UNION-24TH	1	B	312.3			1	3	4	8	2	6	11	35
CALTRANS	79-RIVERSIDE	1	B	562.4			1	3	2	8	1	0	8	23
CALTRANS	138-SAN BRDO	2		60.9			5	1	4	6	5	10	8	39
CALTRANS	68-MONTEREY	1	E	119.29			1	0	2	6	1	2	7	19
CALTRANS	166-SANTA BARBA	1	E	276.8			0	3	2	6	4	5	7	27
CALTRANS	180-FRESNO	2		997.8			0	0	2	7	1	5	8	23
CALTRANS	58-SAN BRDO	2		780.3			5	4	3	2	5	5	8	32
CALTRANS	64-YOLO	1	A	87.5	B		3	5	0	3	3	0	5	19
CALTRANS	237-SANTA CLA	1	L	39.8			5	2	2	1	4	6	9	29
CALTRANS	41-FRESNO	1	B	205.9			0	1	3	3	0	3	8	18
CHICO	DAYTON ROAD	1	C	183.8			3	1	4	5	5	0	6	24
CONTRA COSTA COUNTY	SOMERSVILLE	1	B	52.1			1	2	2	0	3	0	6	14
CORONA	CGTA ST	2	D	24.5			1	1	2	4	2	0	7	17
CORONA	COTA-RAILROAD	2	B	24.5			2	1	3	4	5	0	9	24
CORONA	RAILROAD ST	2	B	25.6			2	1	5	3	5	0	9	25
DUNSMUIR	SCHERRER AV	1	C	321.7			0	0	5	10	5	1	15	36
EL MONTE	PECK-RANDON	1	B	495.0			2	4	3	4	4	20	15	52
FRESNO COUNTY	HERNDON AV	2		1007.4			5	3	3	2	5	14	10	42
FRESNO	ASHLAN AV	1	B	199.9			5	1	5	10	5	0	10	36
FULLERTON	GILBERT ST	2		162.4			1	5	4	1	5	0	9	25
HAYWARD	HARPER ROAD	1	D	21.6			1	1	3	1	3	1	6	16
HAYWARD	TENNYSON ROAD	1	D	23.0			1	1	2	1	4	3	6	18
HAYWARD	W WINTON AV	1	L	20.2			1	3	2	2	5	0	5	18

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SPECIAL CONDITIONS FACTORS FOR GRADE CROSSINGS NOMINATED FOR SEPARATION OR ELIMINATION

AGENCY	CROSSING NAME	RR	RR	MILE POST	SUF	PROP	VEH SPD LIMIT G1	TRAIN SPEED G2	XIAG GEOM G3	BLKAG DELAY G4	ALT RTE G5	ACC HIST G6	IRR G7	TOTAL SCF
HAYWARD	A STREET	1		20.2			0	4	5	0	1	2	8	20
INDIO	HENRGE ST	1	B	609.7			1	5	4	9	5	3	10	37
IRVINE	IRVINE LWR	2		120.5			5	5	3	1	2	2	10	28
IRVINE	ALTON PARKWAY	2		185.8		*	5	5	0	0	3	0	4	17
LOS ANGELES COUNTY	FLORENCE AV	1	BG	488.3			1	0	3	3	2	2	7	18
LOS ANGELES COUNTY	GRAND AV	1	B	506.0	A	*	3	4	0	6	2	0	4	19
LOS ANGELES COUNTY	DOUGLAS ST	2	H	15.01	B	*	2	0	0	1	2	0	5	10
LOS ANGELES COUNTY	GREENGLD MTH	2		149.5			2	4	3	5	3	3	8	28
LOS ANGELES COUNTY	EASTERN AV	2		147.3			2	4	4	8	3	2	7	30
LOS ANGELES COUNTY	BANDINI BL	3	A	3.4			3	0	3	6	1	3	9	25
LOS ANGELES COUNTY	ALONDA BL	2		159.6			2	5	3	6	5	3	10	34
LOS ANGELES COUNTY	HOLLYWOOD WAY	1	B	469.4			1	3	3	2	4	3	10	26
LOS ANGELES	VALLEY BL	1	B	485.8			1	0	3	3	4	3	7	21
LOS ANGELES	SANTA FE-WASH	2		143.29	C		2	0	3	8	2	5	10	30
LOS ANGELES	NORTH MAIN ST	3	B	1.42			1	0	5	10	1	2	11	30
LOS ANGELES	SATICOY ST	1	E	456.0		*	2	4	0	2	2	0	5	15
LOS ANGELES	NORDHOFF ST	1	E	448.5		*	1	4	0	0	1	0	6	12
NORWALK	IMPERIAL HWY	1	BA	490.0			2	0	3	3	2	3	9	22
OCEANSIDE	COMBINED LWR	2		225.9			0	1	4	5	3	11	13	37
ONTARIO	EUCLED AV	3		37.7			1	4	2	6	1	7	14	35
POMONA	HUMANE WAY	1	R	511.3	A	*	2	4	0	4	1	0	5	16
REDDING BEACH	INGLENOLD AV	2	H	16.7			1	0	3	1	5	4	9	23
RICHMOND	CASTRO ST	34		0.15			0	0	2	7	3	0	7	19
ROHNERT PARK	ROHNERT PARK EX	5		47.4			1	2	1	1	2	0	4	11
SACRAMENTO COUNTY	U STREET	1	A	102.5			0	1	3	10	5	1	6	26

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SPECIAL CONDITIONS FACTORS FOR GRADE CROSSINGS NOMINATED FOR SEPARATION OR ELIMINATION

AGENCY	CROSSING NAME	RR	RR	MILE POST	SUF	PROP	VEH SPD LIMIT G1	TRAIN SPEED G2	XING GEOM G3	BLKNG DELAY G4	ALT RTE G5	ACC HIST G6	IRR G7	TOTAL SCF
SALINAS	GORONDA RD	1	E	116.7			5	3	1	2	5	5	6	27
SAN CARLOS	HOLLY STREET	1	E	23.2			0	4	2	4	4	2	10	26
SAN GABRIEL	SAN GABL LWR	1	G	490.2			1	1	5	3	2	5	15	32
SAN JOSE	BERNAL FD	1	E	61.0			2	5	4	7	5	1	8	32
SAN JOSE	BRANHAM LN	1	E	57.3			1	5	3	7	2	1	8	27
SAN LUIS OBISPO	ORCUTT FD	1	E	253.3			2	0	3	6	5	0	8	24
SOUTH SAN FRANCISCO	GRAND AVENUE	1	E	9.3			1	4	5	7	3	7	13	40
STOCKTON	HANKER LANE	4		98.5			3	4	1	3	5	1	7	24
SUNNYVALE	WULFE RD	1	E	39.7			1	5	3	4	2	1	11	27
SUNNYVALE	MARY AV	1	E	37.9			1	5	4	2	3	4	9	28

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## APPENDIX

SPECIAL CONDITIONS FACTORS FOR SEPARATIONS NOMINATED FOR ALTERATION OR RECONSTRUCTION

AGENCY	CROSSING NAME	RR	BR	MILE POST	SUF	PROP	WIDTH CLEAR S1	HEIGHT CLEAR S2	SPEED RELOC S3	LOAD LIMIT S4	ACC STRUC S5	IRR S6	TOTAL SCF
BUENA PARK	BEACH BL	2		110.6	B		10	4	2	5	10	6	37
CALTRANS	70-YUBA	1	C	141.7	B		4	4	5	2	1	8	24
CALTRANS	237-SANTA CLA	1	E	37.1	A		0	0	5	0	8	5	18
CALTRANS	238-ALAMEDA	4	G	1.4	B		8	4	2	0	0	5	19
CALTRANS	162-BUTTE	4		204.0	B		2	4	0	2	1	8	17
COLTON	FOGG ST	2	B	4.1	B		10	10	5	0	1	9	35
CONTRA COSTA COUNTY	MORELLO AV	2		1169.1	B		10	4	2	0	0	9	25
OROVILLE	BRIDGE ST	4		205.3	A		6	4	5	0	0	7	22
POHONA	HUMANE WAY	3		29.8	A		4	0	0	0	0	5	9
SANTA BARBARA COUNTY	HOLLISTER AV	1	E	365.7	B		0	4	5	0	10	9	28
SAN MATEO	SANTA INEZ AV	1	E	17.3	B		2	10	0	0	0	8	20
SAN MATEO	POPLAR AV	1	E	17.2	B		4	8	0	0	1	8	21
SAN MATEO	MONTE DIABLO	1	E	17.4	B		2	10	0	0	0	9	21
SAN MATEO	TILTON AV	1	E	17.5	B		2	10	5	0	2	10	29

DOT 61 /ALJ/

PROJECTS NOMINATED BY PRIORITY INDEX NUMBER

AGENCY	CROSSING NAME	RR	BR	MILE POST	SUF	PROP	V X T	SCF	PRIORITY INDEX NUMBER	PRIORITY NUMBER
							C X 24			
EL MONTE	PECK-RAMONA	1	R	495.0			3	52	55	1
SAN MATEO	POPLAR AV	1	E	17.2	B		29	21	50	2
ALAMEDA COUNTY	MILES-PLS CAL	4		37.2	B		2	46	48	3
FRESNO COUNTY	HERNOON AV	2		1007.4			4	42	46	4
ALAMEDA COUNTY	LIV-ALT CNSL	1	O	46.0			4	42	46	5
SAN MATEO	FILTON AV	1	E	17.5	B		16	29	45	6
SOUTH SAN FRANCISCO	GRAND AVENUE	1	E	9.3			4	40	44	7
OCEANSIDE	COMBINED LMR	2		225.9			6	37	43	8
FRESNO	ASHLAN AV	1	B	199.9			6	36	42	9
CALTRANS	138-SAN BROD	2		60.9			3	39	42	10
BAKERSFIELD	UNION-21TH	1	B	312.3			6	35	41	11
INDIO	MONROE ST	1	B	609.7			4	37	41	12
SUNNYVALE	WOLFE RD	1	E	39.7			13	27	40	13
QUANAHUIR	SCHERRER AV	1	C	321.7			2	36	38	14
CALTRANS	58-SAN BROD	2		780.3			6	32	38	15
SAN JOSE	BERNAL FD	1	E	61.0			6	32	38	16
COLTON	FOGG ST	2	B	4.1	B		2	35	37	17
LOS ANGELES	SANTA FE-WASH	2		143.29	C		6	30	36	18
SAN GABRIEL	SAN GABL LWR	1	B	490.2			3	32	35	19
SANTA BARBARA COUNTY	HOLLISTER AV	1	E	365.7	B		5	28	33	20
FULLERTON	GILBERT ST	2		167.4			7	25	32	21
LOS ANGELES COUNTY	GREENWOOD MTR	2		149.5			4	28	32	22
SAN CARLOS	HOLLY STREET	1	E	23.2			6	26	32	23
SUNNYVALE	MARY AV	1	E	37.9			4	28	32	24
LOS ANGELES	NORTH MAIN ST	3	B	1.42			2	30	32	25

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PROJECTS NOMINATED BY PRIORITY INDEX NUMBER

AGENCY	CROSSING NAME	KR	BR	MILE POST	SUF	PROP	V X I ----- C X 24	SCF	PRIORITY INDEX NUMBER	PRIORITY NUMBER
CALTRANS	166-SIA BARBA	1	E	276.8			6	27	31	26
IRVINE	IRVINE LWR	2		180.5			3	28	31	27
REDONDO BEACH	INGLEWOOD AV	2	H	16.7			7	23	30	28
CALTRANS	180-FRESNO	2		997.8			7	23	30	29
CALTRANS	237-SANTA CLA	1	L	39.8			1	29	30	30
SAN JOSE	BRANHAM LN	1	E	57.3			2	27	29	31
CALTRANS	79-RIVERSIDE	1	B	562.4			6	23	29	32
NORWALK	IMPERIAL HWY	1	DK	698.0			6	22	28	33
SACRAMENTO COUNTY	U STREET	1	A	102.5			2	26	28	34
SALINAS	BORONOA PD	1	C	116.7			1	27	28	35
LOS ANGELES COUNTY	HOLLYWOOD WAY	1	B	669.4			2	26	28	36
CHICO	OAYTON ROAD	1	C	183.8			3	24	27	37
CORONA	COTA-RAILROAD	2	B	24.5			3	24	27	38
STOCKTON	HAMMER LANE	4		98.5			3	24	27	39
CALTRANS	70-TUBA	1	C	141.7	B		3	24	27	40
SAN LUIS OBISPO	ORCUTT RD	1	E	253.3			2	24	26	41
CORONA	RAILROAD ST	2	B	25.6			1	25	26	42
LOS ANGELES COUNTY	BANDINE BL	3	A	3.4			1	25	26	43
SAN MATEO	MONTE DIABLO	1	E	17.4	B		5	21	26	44
CONTRA COSTA COUNTY	MORELLO AV	2		1169.1	B		1	25	26	45
CALTRANS	68-MONTEREY	1	E	119.29			6	19	25	46
CALTRANS	84-YOLO	1	A	87.5	B		6	19	25	47
LOS ANGELES	VALLEY BL	1	R	485.8			3	21	24	48
HAYWARD	TENNYSON ROAD	1	D	23.0			5	18	23	49
SAN MATEO	SANTA INEZ AV	1	E	17.3	B		3	20	23	50

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PROJECTS NOMINATED BY PRIORITY INDEX NUMBER

AGENCY	CROSSING NAME	RR	BR	HILL POST	SUF	PROP	V X T			SCF	PRIORITY INDEX NUMBER	PRIORITY NUMBER
							C	X	24			
CALTRANS	162-BUITE	4		204.0	B		6		17	23	51	
CALTRANS	238-ALAMEDA	4	G	1.4	B		3		19	22	52	
IRVINE	ALTON PARKWAY	2		185.8		*	5		17	22	53	
LOS ANGELES COUNTY	GRAND AV	1	B	508.0	A	*	3		19	22	54	
HAYWARD	HARDER ROAD	1	O	21.6			5		16	21	55	
RICHMOND	CASTRO ST	34		0.15			2		19	21	56	
LOS ANGELES COUNTY	FLORENCE AV	1	BG	488.3			3		18	21	57	
CALTRANS	41-FRESNO	1	B	205.9			3		18	21	58	
HAYWARD	A STREET	4		20.2			1		20	21	59	
CORONA	COTA ST	2	B	24.5			2		17	19	60	
HAYWARD	W NINTON AV	1	L	20.2			1		18	19	61	
LOS ANGELES	SATECOY ST	1	E	456.0		*	1		15	16	62	
CONTRA COSTA COUNTY	SOMERSVILLE	1	B	52.1			1		14	15	63	
ROHNERT PARK	ROHNERT PA EX	5		47.4			3		11	14	64	
LOS ANGELES	NORDHOFF ST	1	E	448.5		*	2		12	14	65	
LOS ANGELES COUNTY	DOUGLAS ST	2	H	15.01	B	*	2		10	12	66	
POMONA	HUNANE WAY	3		29.8	A		2		9	11	67	

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