

Decision No. 83065

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal year 1974-75 of existing and proposed crossings at grade of city streets or county roads 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 2402 of the Streets and Highways Code.

Case No. 9663
(Filed February 13, 1974)

(Appearances are listed in Appendix A)

O P I N I O N

This investigation was instituted by the Commission to establish the 1974-75 railroad-highway grade separation priority list as required by Section 2402 of the Streets and Highways Code which reads in part as follows:

"2402. Prior to July 1 of each year, commencing with 1974, the Public Utilities Commission shall establish a list, in order of priority, of projects which the commission determines to be most urgently in need of separation or alteration. Such priority list shall be determined on the basis of criteria established by the Public Utilities Commission..."

The list is an integral part of a railroad-highway safety program devised by the Legislature. The need for the safety program is described in Section 1(a), Stats 1973, C 1153, as follows:

"The Legislature hereby finds and declares that:

- (a) Concern for public safety and convenience, makes it desirable that an expanded program be undertaken that places the highest priority on eliminating the most hazardous railroad-highway grade crossings that continue to take the lives of the people of this state."

The use to which the priority list is to be put is set out in Section 2403 of the Streets and Highways Code:

"2403. From the funds set aside pursuant to Section 19), as well as from any other funds that may be set aside for purposes of this chapter, the California Highway Commission shall make allocations for projects contained in the latest priority list established pursuant to Section 2402. Such allocations shall be made for preconstruction costs and construction costs; provided that where allocations are made to a local agency, the requirements of Sections 2406 and 2407 shall first be met."

Copies of the Order Instituting Investigation were served upon each city, county, and city and county in which there is a railroad-highway crossing, each railroad corporation involved, the Department of Transportation, the California Highway Commission, the League of California Cities, the County Supervisors Association, and other persons who might have an interest in the proceeding. Nine days of public hearing were held starting in Los Angeles on March 28, 1974 and ending in San Francisco on June 5, 1974, during which time 60 persons appeared and gave testimony or made statements concerning projects or other matters under consideration.

In previous years the California Public Utilities Commission was required by the Streets and Highways Code to establish a priority list by December 31 of each year. Legislation passed in 1973, part of which is cited above, made substantial changes as to the priority list and the allocation of funds for grade separation projects. The major changes are as follows:

1. The Public Utilities Commission is now required to establish a list by July 1 of each year.
2. The list is to be based on criteria established by the Public Utilities Commission.
3. In addition to projects on city streets and county roads, projects on conventional state highways are now eligible for funds.
4. Some projects are now eligible for an allocation of 80 percent of the estimated cost.
5. The total amount to be set aside each year for allocation to projects was raised from a total of \$10 million to \$15 million plus amounts carried over.

The projects which may be listed are described in Section 2400 of the Streets and Highways Code:

"2400. For purposes of this chapter:

- (a) 'Grade separation' means the structure which actually separates the vehicular roadway from the railroad tracks.
- (b) 'Project' means the grade separation and all approaches, ramps, connections, drainage, and other construction required to make the grade separation operable and to effect the separation of grades. Such grade separation project may include provision for separation of nonmotorized traffic from the vehicular roadway and the railroad tracks. On any project where there is only one set of railroad tracks in existence, the project shall be built so as to provide for expansion to two sets of tracks when the Director of Transportation determines that the project is on an existing or potential major railroad passenger corridor. Such project may consist of:

- (1) The alteration or reconstruction of existing grade separations.
- (2) The construction of new grade separations to eliminate existing or proposed grade crossings.
- (3) 'Highway' means any city street, county highway, or a state highway which is not a freeway as defined in Section 257."

The Order Instituting Investigation nominated 94 named proposed grade separation projects for inclusion on the list. Thereafter, local agencies filed in this case the nominations of an additional 30 projects and the California Highway Commission (CHC) nominated 11 projects located on state highways. Southern Pacific Transportation Company and The Western Pacific Railroad Company each nominated one project for the list. Total estimated cost for all projects was \$296 million.

At the hearing a witness for the California Department of Transportation testified that he estimated that approximately \$17.6 million would be available July 1, 1974 for allocation to projects during the year 1974-75. This amount takes into consideration unallocated funds carried over from previous years and the amount to be contributed for the year 1974-75.

The Commission's staff through its witness proposed that the Commission should determine the 1974-75 priority list using the criteria expressed by the following equation:

$$P = \frac{\sum_{o}^{24} (V \times T)}{C} + SCF$$

Where:

P = Priority Index Number

V = Hourly Vehicular Volume

T = Hourly Train Volume

C = Total Cost of Separation
(in thousand dollars)

SCF = Special Conditions Factor

The equation takes the summation of each of 24 hourly vehicular-train products divided by the estimated cost of the project and adds a special conditions factor to arrive at the P number. The 24 hourly summation of vehicular-train products is designed to gain a measure of the actual vehicular-train conflicts and a roughly comparative estimate of the delay time to be eliminated. However, because so few projects nominated by local agencies and others submitted hourly vehicular and train counts but rather submitted daily train and vehicular counts, the staff thought it proper to apply the same criteria to each of the projects and so proposed that a modified equation be adopted as the criteria as follows:

$$P = \frac{\sum_{o}^{24} V}{C} \times \frac{ADT}{24} + SCF$$

ADT = Average Daily Trains

The staff witness stated that the use of the modified equation would result in a lower priority index number at crossings where a majority of the trains actually pass during peak vehicular hours and results in a higher priority index number at crossings where the majority of trains actually pass in the nonpeak vehicular hours.

The estimated cost of a project would be arrived at by using the project cost as estimated by the agency submitting the nomination or where no estimate was submitted by using the following equation:

$$SC = (\text{Road Cost} + \text{Bridge Cost}) \times \text{Difficulty Factor}$$

Where:

SC = Separation Cost

Road Cost = (\$2,000 x Road Width) + \$34,000

Bridge Cost = Cost/Sq. Ft. x (Separation Length x Width)

Cost/Sq. Ft. = Base Cost + Lane Factor

Base Cost = No. Tracks

1	\$17.00
2	17.96
3	18.92
4	20.38

Lane Factor = No. Lanes

2	0.50
4	0.30
6	0.20
8	0.10

Separation Length = (No. Tracks x 15) + 90

Separation Width = No. Lanes

2	40'
4	64'
6	88'
8	112'

Difficulty Factor = No. Lanes

2	1.5
4	3.0
6	4.5
8	5.5

In support of its position to include the cost of a project as a factor in the equation, the staff witness stated that the judgment of the project for the public's safety at railroad-highway crossings must take place because the State, railroads, and community have only limited funds available and thus economics are a part of railroad-highway crossing safety; the public and private sector must receive the most for their dollar spent, so a benefit-to-cost relation must be developed. The staff witness stated that the staff believed that engineering judgment, expressed as the special conditions factor, was needed to impartially compare all four types of projects and that the SCF factor should be divided into the following categories with points awarded for extraordinary conditions in each category:

1. Hazard Factor
 - a. Number and severity of vehicle-train accidents.
 - b. Hazard created in immediate area by presence of grade crossing.
2. Traffic Necessity Factor
 - a. Availability of alternate routes for emergency vehicles.
 - b. Amount of school bus and commercial traffic.
 - c. Significant pedestrian traffic.
3. Community and Economic Development Factor
Positive environmental and economic benefit to the community.
4. Feasibility Factor
Weight to be accorded Streets and Highways Code Section 2400-2411 as relevant to the elimination of the hazards addressed by the priority list, including:

- a. Types and percentages of costs for which allocations may be made (Sections 2403, 2404(a), (b), (c), (d); (e), and (f), and 2407).
 - b. Availability of local funds, compliance with PUC orders, and environmental report requirements (Section 2406).
 - c. Possibility or probability of construction contract being awarded within one year, and of sufficient progress towards completion of the project (Section 2408).
 - d. Possibility of supplementary allocation if construction costs exceed estimates (Section 2409).
 - e. Possibility of project on the state highway system complying with the allocation limitations of Streets and Highways Code 188 and 188.8 (Section 2411).
5. Reconstruction Factor
- a. The physical condition of the existing separation structure itself.
 - b. The number and severity of accidents caused by substandard clearances.
 - c. The need for increased capacity.

The representatives of the Southern Pacific Transportation Company and of The Western Pacific Railroad Company system, interested parties, objected to our placing any project on the list unless a representative of the governmental agency having jurisdiction over the project appeared at the hearing and submitted the project into evidence and subjected himself to cross-examination about the project. The reason for this objection was that the railroads will be required to contribute some money to each of the projects ultimately approved by the CHC, and hence the railroads should be accorded the right to cross-examine concerning each of the projects proposed

for the list as required by due process of the law. The Order Instituting Investigation requested all government agencies and interested parties to submit projects along with information about the projects to the Commission prior to the hearing. The Commission staff summarized these submissions along with the staff's own submissions in Exhibits 2 and 2A introduced into evidence over objections of the railroads. The examiner announced early in the proceedings that the submissions containing the facts and figures summarized in Exhibits 2 and 2A were received into the Commission's formal files in the case and were available for inspection by any interested parties. The Commission staff contends that in establishing the priority list the Commission is performing a legislative function and that there are no statutory or constitutional requirements that an evidentiary hearing be held in connection with the discharge of such function.

The criteria proposed by the staff was criticized in whole or in part by some of the parties to the proceeding: The relative urgent need cannot be determined by the application of an algebraic formula; use of the criteria for alteration projects (grade crossings already separated) was unrealistic; the cost of the project has no bearing on urgent need; using mere staff engineering judgment in assigning the SCF number without a full disclosure of the reason therefor was arbitrary; community and economic development in relation to a project should not be accorded any weight; application of the criteria to some multiple crossing projects results in a distortion giving that project a higher priority number than to other projects; the state of readiness of a project and the ability of the local agency to finance the project should not be accorded any weight in the criteria. The witness for the Southern Pacific system proposed that for the evaluation of reconstruction or alteration projects we use the formula $P = \frac{V}{C} + S_4$ where S_4 equals the obsolescence factor with a maximum of 50 points.

Appendix B lists in alphabetical order the projects nominated for the 1974-75 priority list, and opposite each project is set forth the information necessary to apply the staff's proposed criteria as well as the priority number resulting from the application of the proposed criteria. The staff witness testified that the 94 staff nominations were chosen because, based on information contained in the Commission's records, these projects had the highest V x T products. The estimated cost of each of these projects was arrived at as explained above, or from cost data available from the agency having jurisdiction over the project, or from updated cost data previously submitted by the agency. The vehicle and train counts came either from the Commission's records or from the agency having jurisdiction over the project. Of the 94 projects nominated by the Commission staff, 60 were also nominated by the local or state agency.

Two of the projects, the Farallon Drive crossing in the city of San Leandro and the March Lane crossing in the city of Stockton, were nominated by the railroads involved. The nominations were opposed by the cities involved because the cities are presently applicants before this Commission seeking approval to open an at-grade crossing at those points, and the cities fear that the placing of the projects on the priority list at this time would enable the respective railroads, who are protesting the applications, to collaterally utilize any determination reached in this proceeding in an attempt to foreclose appropriate consideration of the full merits of the applicants' cases. The railroads contend that their nominations are proposed at-grade crossings, and when the projects are measured by the staff's proposed criteria the projects would have a priority number within the span of priority numbers of the other projects under consideration. The staff concurs with the cities.

Local agency witnesses supporting some of the projects, which consist of a separation in lieu of a proposed at-grade crossing, testified that their agency would never build an at-grade crossing at or near the site of the proposed separation due to impossibility of construction or for other reasons, and the issue was raised as to whether or not such a project could properly be considered a proposed crossing at grade nominated for separation.

The CHC objects to the staff's classification of the Ridge Route Drive project in Orange County as being a proposed crossing nominated for separation rather than as being an alteration of an existing separation. There is currently in existence at that point two large metal pipe culverts side by side through an embankment supporting railroad tracks. The culverts connect two public thoroughfares, are paved, and are habitually used by the public's vehicles though the culverts are not on any state highway, city street, or county road. The staff contends that since the culverts are not on any publicly owned thoroughfare they cannot be considered an existing separation. The CHC contends that the public's habitual use of the culverts, whether on private property or not, renders the way an existing separation.

The inclusion of the city of Banning project on the list, except on a conditional basis, was objected to by the CHC because Banning's application for funds has been approved by the CHC, the CHC has already made an allocation of funds for the project, and the city is presently under contract with the State of California to construct the project. The witness for the city of Banning testified that the actual cost of the project far exceeded the city's estimates and that it does not have enough money to go forward with the project, that the city has requested cancellation of the allocation and its contract

with the CHC, and that upon such cancellation it would hope to proceed under the new law which would require a lower amount of matching funds from the city and permit it to proceed with the project. The staff contends that to remove the project from the list out of hand on the basis of a contract which is not binding on the Commission would not properly serve the purposes of the Commission in establishing a priority list.

Findings

1. The staff's use in its proposed criteria of the product of the average hourly number of vehicles times trains identifies the accident exposure at each railroad-highway crossing and forms a reasonable basis for our ultimate determination of the relative urgency of each project.

2. The funds available for allocation each year are limited, and the inclusion of a factor in the criteria which raises or lowers the rank of a project depending upon the dollar spent in relation to the crossing safety achieved may, as the staff has done in its proposed criteria, be considered in our ultimate determination of the relative urgency of a project. Section 2409 of the Streets and Highways Code implies that we may do so. The last sentence of that section reads: "An allocation, however, need not be made for a supplemental allocation, unless the commission [California Highway Commission] is satisfied that funds would have been allocated for the project had the actual costs been used in determining its ranking on the priority list."

3. To impartially compare all types of projects and to give weight to special tangible and intangible conditions which in the Commission's judgment bear on the urgency of the need for separation or alteration of a particular project, the criteria may include a special conditions factor.

4. We adopt the staff's formula as set out on pages 4 through 8 of the folio as well as the criteria evaluation set out in Appendix B as the criteria and its application for use in establishing the 1974-75 priority list, subject, however, to the following exceptions:

- a. Projects not showing a modicum of probability of funding by the public agency involved during the year 1974-75 (of which there are approximately 50) will not be included on this year's list. Unless overriding considerations exist, the failure of a local agency to take steps to fund the project during the next year reduces the degree of urgency of that project in relation to projects which are or will be funded for the next year, particularly in view of the fact that the new law substantially reduces the percentage of overall cost required to be funded by the local agency.
- b. Proposed alteration and reconstruction projects have been positioned lower on the list to the benefit of some of the projects which will eliminate at-grade crossings in view of the fact that the major object of the program is the elimination of most hazardous grade crossings.
- c. A public agency's support, lack of support, or opposition in regard to a project under its jurisdiction bears upon the degree of urgency of that project and for this reason and the reason set out in Finding 4.a., as well as the fact that the projects are at issue in other Commission proceedings, we have declined to place the Farallon Drive project and the March Lane project on this year's list.
- d. Where local agency financing is currently available but the probability exists that the financing will be lost in the near future, the project's relative position on the list will be enhanced as we have done with the San Marcos, Fullerton, and Livermore projects.

5. In past years we have carried over projects on the list from one year to the next where because of the time element and administrative procedures there is some question that ultimate funding may not be forthcoming unless we do hold over a project. For this reason the Banning project will be included on the 1974-75 list.

6. The Ridge Route Drive project in Orange County is on private property at present but before any work can be done on it the city or county will have to take it over and when it does it will become an existing separation. But for the purposes of this list at this time we will consider it to be a proposed separation because it is on private property.

7. In future years the Type B projects (proposed crossings nominated for separation) should be subtyped as follows: (1) a grade crossing is practical and feasible, and (2) a grade crossing is not practical nor feasible, to assist us in evaluating those projects.

8. The criteria or rules of the Commission established for use in determining the 1974-75 priority list are subject to modification, and we invite the participation of interested parties in these yearly proceedings to suggest modifications. A separate proceeding to establish, change, or modify the criteria, as suggested by some of the parties, is unnecessary.

9. The priority list is for use by another state government agency in allocating government funds by that agency to state and local government agencies for use in helping to defray the cost to the latter agencies of certain railroad-highway projects.

10. There are in excess of 10,000 railroad-highway crossings at grade within this State.

11. The Legislature, in assigning this Commission the task of sorting out and considering over 10,000 possible projects each year for inclusion on the priority list, has delegated to this Commission a legislative function not meant to be subjected to adversary proceedings as in cases requiring evidentiary hearings which, in view of the thousands of possible projects to be sorted out and considered, could lead to interminable proceedings and thwart our statutory duty to establish a list for each year by July 1 when appeals on technical grounds would be filed and above all nullify the safety program held to be of great importance by the Legislature. We will, however, continue to accord interested persons the opportunity to participate in these yearly proceedings through submission of written or oral data and views or arguments with or without the requirements for oral presentation.

12. Written submissions of nominations in response to our Order Instituting Investigation may properly be taken into our consideration in establishing the yearly priority list without the necessity of the person or agency submitting the nomination appearing at the hearing for cross-examination unless requested by the Commission.

13. The list set out on Appendix C should be established as the 1974-75 grade separation priority list established in accordance with Section 2402 of the Streets and Highways Code.

Conclusion

The projects listed on Appendix C should be established as the 1974-75 list, in order of priority, of projects which the Commission determines to be most urgently in need of separation or alteration.

O R D E R

IT IS ORDERED that:

1. The list of projects appearing on Appendix C is established, as required by Section 2402 of the Streets and Highways Code, as the 1974-75 list, in order of priority, of projects which the Commission determines to be most urgently in need of separation or alteration.

2. The Secretary shall furnish a full, true, and correct copy of this decision and order to the Department of Transportation.

The effective date of this order is the date hereof.

Dated at San Francisco, California, this 25th
day of JUNE, 1974.

Veronica L. Sturgeon
President
William J. Gorman
William J. Gorman
William J. Gorman
William J. Gorman
Commissioners

APPENDIX A

LIST OF APPEARANCES

Interested Parties: Alton Ruden, for the City of Oceanside; Michael D. Klipa, for City of Montebello; Roger A. Grable, Attorney at Law, for City of Irvine; Talmadge Burke, Mayor, Clifford Lampman, Arthur E. Coulet, and Leroy E. Moeller, for City of Alhambra; Harold S. Lentz, Attorney at Law, for Southern Pacific Transportation Company and subsidiary railroad corporations; Leslie E. Corkill, for Department of Public Utilities and Transportation of City of Los Angeles; Ronald L. Schneider, Deputy County Counsel, and John J. McBride, for Los Angeles County; Melvin R. Dykman and O. J. Solander, Attorneys at Law, for State of California Department of Transportation and California Highway Commission; Harold Callahan, for County of Santa Barbara and State Department of Transportation; Edward R. James, for City of Pomona; Gerald Wayne Wickstrom, Attorney at Law, for City of Corona; Gerald Taylor, for Buena Park and Oceanside; Charles S. Mink, for Ventura County Department of Public Works; Juan Mijares, Attorney at Law, for City of Barstow; Richard B. Gluck, for City of Claremont; Roger V. Sanchez, Mayor, Pro Tem, for Guadalupe; David F. Dixon, for City of Banning; Councilman Shubin, William Bradley, and Clay Dillman, for City of San Marcos; Rex Davidson, for County of Imperial; Gary P. Dysart, for Cities of Norwalk and Paramount; Frank F. Forbes, for City of San Gabriel; Dwight French, for Cities of San Gabriel and Loma Linda; John R. Price, for City of Santa Fe Springs; Allen D. Morrison, for City of Ontario; M. Glenn Weaver, for City of Torrance; Robert J. Warner, for City of Simi Valley; Ronald L. Johnson, Attorney at Law, for City of San Diego; Hugh L. Berry, for City of Fullerton; John Wallo, for County of San Luis Obispo Engineering Department; Tom Shreve, for City of Santa Clara; Richard W. Bridges and John C. Miller, for The Western Pacific Railroad Company; Ronald Lerl, Supervisor, James Pharris, and John Middlebrook, for County of Yuba; Frances Owen, Mayor, City of Marysville, for Cal Trans 70; Robert N. Trout, for Fresno County Department of Public Works; James Lundgren, for City of Hayward; Harold McDonald and Clay Castleberry, for County of Butte; Ted W. Shettler, for Cities of El Monte, Pomona, and Stockton; Robert M. Barton, for Cities of San Bernardino, Banning, Livermore, Pittsburg, Milpitas, and Sacramento; David Pelz, for City of Davis; Maurice Shiu, for Contra Costa County; Lyle L. Lopus, Attorney at Law, for City of San Leandro; Perry H. Taft, Attorney at Law, for City of Stockton; and Ralph Mohagen, for City of Richmond.

Commission Staff: Freda E. Abbott, Attorney at Law, William L. Oliver and John P. Ukleja.

APPENDIX B

ALPHABETICAL LISTING OF PROJECTS NOMINATED FOR THE
1974-75 GRADE SEPARATION PRIORITY LIST

Sheet 1 of 5

C-9663

Public Agency	Crossing	Railroad	Crossing Number	Estimated Cost	Vehicular ADT	Daily Train Volume	Criteria Evaluation		
							$(V \times T) \div (C \times 24)$	SCP	Total
Alhambra	SPT Lowering	SPT	B-487.4/B-489.4	\$13,200,000	108,712	44	15.1	6	21.1
Anaheim	Katella Avenue	S.T.	BK-512.4	4,500,000	26,200	44	10.7	1	11.7
Anaheim	Lincoln Avenue	SPT	BK-508.5	4,250,000	25,000	84	20.6	5	25.6
Anaheim	State College Boulevard	AT&SF	2-170.3	3,300,000	30,600	6	2.3	5	3
Anaheim	AT&SF/UP Lowering	AT&SF/UP	-	12,000,000	109,230	18	7.4	5	12.4
Bakersfield	Union Avenue	SPT	B-312.3	2,000,000	8,000	36	6.0	-	6.0
Banning	Eighth Street	SPT	B-567.7	1,300,000	2,050	49	3.2	22	25.2
Barstow	Barstow Road	AT&SF	2-746.5	3,065,040	7,950	58	6.3	-	6.3
Belmont*	Ralston Avenue	SPT	E-22.0	3,000,000	23,000	76	24.3	-	24.3
Brea	Birch Street	SPT	BBJ-509.31	900,000	11,200	2	1.0	1	2.0
Buena Park	Beach Boulevard	SPT	BK-504.6	2,381,000	35,584	25	15.6	-	15.6
Burlingame*	Broadway	SPT	E-15.2	5,200,000	20,000	72	11.5	-	11.5
Butte County	Baggett-Marysville	HP	4-202.7	745,000	1,300	57	4.1	-	4.1
Butte County	Midway County Road	SPT	C-179.5	860,000	5,000	22	5.3	3	8.3
CALTRANS*	State No. 17	AT&SF	2-1190.2	3,000,000	20,700	10	2.9	10	12.9
CALTRANS*	State No. 19	SPT	BBC-497.36	1,900,000	25,400	15	8.4	1	9.4
CALTRANS	State No. 29	SPT	AA-61.7/AB-62.0	3,680,000	22,750	30	7.7	20	27.7
CALTRANS	State No. 31	AT&SF	2B-24.1	3,535,000	23,940	52	14.7	12	26.7
CALTRANS	State No. 49	SPT	AH-126.3-B	996,000	13,950	15	8.8	2	10.8
CALTRANS	State No. 70	SPT	C-141.7-B	3,625,000	12,478	40	5.7	5	10.7
CALTRANS	State No. 79	SPT	B-562.4	1,060,000	6,380	52	13.0	-	13.0
CALTRANS	State No. 84-Kegler Drive	SPT	A-87.6	1,500,000	13,200	31	11.3	2	13.3
CALTRANS	State No. 111	SPT	B-611.45	2,179,000	7,800	44	6.6	-	6.6
CALTRANS	State No. 112	SPT	L-14.9	2,380,000	11,480	75	15.1	3	18.1
CALTRANS	State No. 151	SPT	C-266.2-B	300,000	4,900	26	17.7	3	7
CALTRANS	State No. 166	SPT	E-276.8	970,000	5,500	32	7.6	3	10.6
CALTRANS	State No. 237	SPT	E-37.1-A	1,380,000	23,410	54	38.2	1	39.2
Claremont	"BEO" Relocation	SPT	-	100,000	30,000	6	75.0	1	76.0
Contra Costa Co.	Waterfront Road	SPT	B-36.9-A	950,000	2,545	43	4.8	10	14.8
Corona	Lincoln Avenue	AT&SF	2B-25.2	1,299,000	10,000	32	10.3	-	10.3

APPENDIX B

ALPHABETICAL LISTING OF PROJECTS NOMINATED FOR THE
1974-75 GRADE SEPARATION PRIORITY LIST

Sheet 2 of 5

C.9663

Public Agency	Crossing	Railroad	Crossing Number	Estimated Cost	Vehicular ADT	Daily Train Volume	Criteria Evaluation		
							$(V \times T) + (C \times 24)$	SCF	Total
Davis	Richards Boulevard	SPT	A-75.4-B	\$ 253,000	17,834	53	155.7	1	156.7
El Monte*	Peck Road	SPT	B-495.3	1,600,000	30,870	30	24.1	-	24.1
El Monte*	Ramona Boulevard	SPT	B-495.1	2,000,000	31,000	30	19.4	5	24.4
Fresno Co.	Ashlan Avenue	SPT	B-199.9	2,029,000	9,435	36	7.0	1	8.0
Fresno Co.	Chestnut Avenue	SPT	B-210.3	2,016,000	7,940	31	5.1	2	7.1
Fresno Co.	Clovis Avenue	SPT	B-213.3	1,920,000	10,946	23	5.5	2	7.5
Fullerton	Lemon Street	AT&SF/UP	2-165.1/3Y-17.6	2,770,000	16,045	48	11.6	3	14.6
Hayward	"A" Street	SPT	D-20.0	5,000,000	33,918	30	8.5	5	13.5
Hayward	"A" Street	WP	4-20.2	2,500,000	22,201	12	4.4	1	5.4
Hayward	Harder Road	SPT	D-21.6	1,800,000	24,295	19	10.7	3	13.7
Hayward	Tennyson Road	SPT	D-23.0	2,000,000	21,430	11	4.9	2	6.9
Hayward	W. Winton Avenue	SPT	L-20.2	1,500,000	3,063	52	4.4	-	4.4
Huntington Bch.	Ellis Avenue	SPT	-	165,860	1,000	1/wk	0.04	-	0.04
Huntington Bch.	"BAA" Elimination	SPT	-	198,000	35,900	1/wk	1.1	2	3.1
Imperial Co.	Quick Road	SPT	B-728.3-B	105,000	100	29	1.2	25	26.2
Indio	Monroe Street	SPT	B-609.7	3,000,000	30,560	49	20.8	5	25.8
Irvine	Culver Drive	AT&SF	2-180-5	1,325,000	17,000	15	8.0	1	9.0
Kern County	North Chester	SPT	BAH-310.3	1,166,667	14,000	26	13.0	-	13.0
King City	King Street	SPT	-	-	-	-	-	-	-
La Mirada	Alondra Boulevard	AT&SF	2-159.6	2,295,000	13,970	60	15.2	-	15.2
Larkspur	Sir Francis Drake Blvd.	NWP	5-14.7-B	587,000	10,721	2	1.5	-	1.5
Livermore	Murrieta	SPT/WP	4-46.7/D-46.0	750,000	19,760	23	25.2	6	31.2
Loma Linda	Mountain View	SPT	B-543.6	2,550,000	3,909	31	2.0	1	3.0
Los Angeles*	No. Main Street	UP	3B-1.42	2,260,000	11,636	83	17.8	-	17.8
Los Angeles*	Santa Fe	SPT	BBH-496.62	1,500,000	25,000	53	36.8	-	36.8
Los Angeles	Tampa Avenue	SPT	E-448.8	1,800,000	18,423	23	9.8	-	9.8
Los Angeles Co.*	Alameda Street	SPT	BBL-491.91	1,695,000	25,000	4	2.5	-	2.5
Los Angeles Co.	Century Freeway	SPT	Relocation	7,000,000	117,400	4	2.8	5	7.8
Los Angeles Co.	El Segundo Boulevard	AT&SF	2H-14.1	1,292,509	32,830	35	37.0	3	40.0
Los Angeles Co.*	Florence Avenue	SPT	BBH-488.43	1,670,000	26,300	6	3.9	-	3.9

APPENDIX B

ALPHABETICAL LISTING OF PROJECTS NOMINATED FOR THE
1974-75 GRADE SEPARATION PRIORITY LIST

Sheet 3 of 5

C-9663

Public Agency	Crossing	Railroad	Crossing Number	Estimated Cost	Vehicular ADT	Daily Train Volume	Criteria Evaluation (VxT)÷(Cx24): SCP: Total		
Los Angeles Co.	Florence Ave.	SPT	BG-488.3	\$ 3,449,000	27,000	14	4.6	2	6.6
Los Angeles Co.	Florence Ave.	AT&SF	2-154.87	1,265,000	20,000	44	29.0	-	29.0
Los Angeles Co.	Grand Ave.	SPT/UP	3-26.38/B-508.5	2,241,000	8,000	43	6.4	-	6.4
Los Angeles Co.	Hacienda Blvd.	SPT	B-500.5	3,097,500	31,844	36	15.4	1	16.4
Los Angeles Co.	Hollywood Way	SPT	B-469.4	4,167,000	19,396	15	2.9	2	4.9
Los Angeles Co.	Avenue "J"	SPT	B-406.1	5,486,000	20,749	27	4.3	2	6.3
Los Angeles Co.**	190th St.	AT&SF	2H-19.1-B	1,194,000	23,000	15	12.0	-	12.0
Lynwood *	Atlantic Ave.	SPT	BBL-494.29	1,000,000	26,000	2	2.2	-	2.2
Lynwood *	Long Beach Blvd.	SPT	BBL-492.95	1,695,000	25,000	2	1.2	-	1.2
Manteca	Center St.	SPT/TWS	B-96.5/75B-4.6	700,000	4,363	35	9.1	1	10.1
Manteca	Yosemite Avenue	SPT/TWS	B-96.7/75B-4.8	807,000	18,891	35	34.1	3	37.1
Montebello	Greenwood Avenue	AT&SF	2-149.5	3,500,000	12,186	46	6.7	2	8.7
Montebello	Montebello Avenue	UP	3-8.5	4,000,000	11,456	22	2.6	2	4.6
Mountain View *	Castro Street	SPT	E-35.9	2,200,000	23,617	64	28.6	5	33.6
Mountain View *	Rengstorff Avenue	SPT	E-34.7	3,000,000	15,650	64	13.9	-	13.9
Norwalk	Imperial Highway	SPT	BK-498.0	1,822,490	32,305	10	7.4	5	12.4
Oakland	Adeline Street	SPT/WP	D-5.9-A	3,500,000	10,500	100	12.5	5	17.5
Oakland *	Fruitvale Avenue	SPT	D-9.8	2,000,000	13,087	103	28.1	-	28.1
Oceanside	AT&SF Lowering	AT&SF	-	16,000,000	32,573	18	1.5	5	6.5
Ontario	Grove Street	UP	3-39.0	2,000,000	8,200	20	3.4	2	5.4
Orange County	Los Alisos Boulevard	AT&SF	2-190.7	300,000	2,000	16	4.4	-	4.4
Orange County	Ridge Route Drive	AT&SF	2-187.6	200,000	3,000	16	10.0	-	10.0
Orange County	Victoria Boulevard	AT&SF	2-199.8	580,000	1,000	16	1.1	-	1.1
Paramount	Alondra Boulevard	UP	3A-12.3	1,850,000	19,943	14	6.3	5	11.3
Paramount	Rosecrans Avenue	UP	3A-11.3	2,450,000	24,023	14	5.7	2	7.7
Pittsburg	Removal	SN	8N-1.85/8N-2.6	489,425	15,091	3.5	4.5	10	14.5
Pomona	Dudley Street	UP/SPT	3-30.5/B-513.0	6,075,000	6,000	56	2.3	-	2.3
Pomona	Roselawn	SPT	B-511.8	1,563,000	10,000	41	10.9	-	10.9
Redwood City *	Whipple Avenue	SPT	E-24.8	3,000,000	30,500	76	32.2	5	37.2
Rialto	Riverside Avenue	AT&SF	2-84.8	1,464,000	13,577	11	4.3	2	6.3

APPENDIX B

ALPHABETICAL LISTING OF PROJECTS NOMINATED FOR THE
1974-75 GRADE SEPARATION PRIORITY LIST

Sheet 4 of 5

C-9663

Public Agency	Crossing	Railroad	Crossing Number	Estimated Cost	Vehicular ADT	Daily Train Volume	Criteria (VxT)÷(Cx24)	Evaluation SCF	Total
Richmond	Cutting Boulevard	SPT	A-13.8	\$1,750,000	24,000	52	29.7	3	32.7
Richmond	Point Pinole Park	SPT	A-19.3	220,000	750	46	6.5	3	9.5
Richmond	23rd Street	SPT/ATSF	A-14.5/2K-1.8-B	5,250,000	20,000	100	15.9	2	17.9
Richmond	South 47th Street	SPT	A-13.1	1,600,000	9,800	52	13.3	2	15.1
Sacramento	AH - Abandonment	SPT	-	200,000	75,370	2	31.4	1	32.4
Sacramento	28th Street	SPT	A-91.0	243,253	1,570	48	12.9	1	13.9
San Bernardino	Mill Street	ATSF	2B-1.3	2,900,000	9,000	200	25.9	2	27.9
San Bernardino	Rialto Avenue	ATSF	2B-0.7	450,000	11,517	48	51.2	-	51.2
San Carlos	Holly Street	SPT	E-23.2	3,800,000	17,306	76	14.4	1	15.4
San Diego	Harbor Drive	ATSF	2-268.9-A	1,175,000	15,100	47	25.2	15	40.2
San Diego	Imperial Avenue	SD&AE	36D-3.1-B	400,000	9,710	2	2.0	5	7.0
San Diego	Smythe Avenue	SD&AE	36-13.8	900,000	3,300	4	0.6	4	4.6
San Gabriel	"B" Lowering	SPT	-	9,000,000	68,546	44	14.0	5	19.0
San Jose	Bailey Avenue	SPT	E-64.0	2,250,000	562	18	0.2	2	2.2
San Jose	Bernal Road	SPT	E-61.0	3,100,000	3,815	22	1.1	1	2.1
San Jose	Branham Lane	SPT	E-57.3	3,100,000	5,360	22	1.6	2	3.6
San Jose	Brokaw-Murphy Road	SPT	-	2,500,000	21,000	14	4.9	-	4.9
San Jose	3rd/4th Street	SPT	DA-46.4/DA-46.2	4,500,000	11,046	14	1.4	3	4.4
San Leandro***	Farallon Drive	SPT	L-16.7	840,000	8,500	41	17.3	2	19.3
San Luis Obispo	Eighth Street	SPT	E-222.01-A	808,500	302	12	0.2	30	30.2
San Marcos	Mission/Rancho Santa Fe	ATSF	2E-14.5	1,205,000	11,212	10	3.9	-	3.9
San Marcos	Mission/Twin Oak	ATSF	2E-16.5	1,300,000	14,200	10	5.7	2	7.7
San Mateo	Laurie Meadows Drive	SPT	-	2,400,000	11,000	76	14.5	-	14.5
Sta. Barbara Co.	Hollister Avenue	SPT	E-365.7-B	2,600,000	13,010	16	3.3	10	13.3
Santa Clara	Chestnut Street	SPT	L-41.9	180,000	1,605	26	9.7	-	9.7
Santa Clara Co.	Prospect/Stelling	SPT	EN-43.1/EN-42.8	30,000	1,335	2	3.7	-	3.7
Santa Fe Springs	Imperial Highway	ATSF	2-156.1	1,500,000	32,970	34	31.1	5	36.1
Santa Fe Springs	Santa Fe Springs Road	ATSF	2-154.1	1,500,000	5,260	39	5.7	1	6.7
Santa Fe Springs	Telegraph Road	ATSF	2-154.6	1,500,000	25,100	40	27.9	3	30.9
Simi Valley	Madera Road	SPT	E-432.0	2,400,000	19,000	20	6.6	-	6.6

APPENDIX B

ALPHABETICAL LISTING OF PROJECTS NOMINATED FOR THE
1974-75 GRADE SEPARATION PRIORITY LISTSheet 5 of 5
C-9663

Public Agency	Crossing	Railroad	Crossing Number	Estimated Cost	Vehicular ADT	Daily Train Volume	Criteria Evaluation (VxT)+(Cx24)	SCF	Total
South San Francisco *	Grand Avenue	SPT	E-9.3	\$2,000,000	10,000	76	15.8	2	17.8
Stockton***	March Lane	WP	4-96.9	1,000,000	20,000	14	11.7	2	13.7
Stockton	Miner Avenue	WP/SPT	4-93.9-B/D-91.2-B	3,950,000	18,174	54	10.4	11	21.4
Sunnyvale*	Wolfe Road	SPT	E-39.7	3,000,000	15,466	64	13.7	-	13.7
Torrance	Crenshaw Blvd.	AT&SF	2H-20.9	2,500,000	34,138	18	10.2	-	10.2
Torrance	Del Amo Boulevard	AT&SF	2H-19.5-A	2,400,000	20,000	36	12.5	-	12.5
Torrance	SPT Relocation	SPT	"BBQ" Relocation	1,100,000	80,435	3	11.3	-	11.3
Yuba County	Pasado Road	WP	4-176.1	1,070,000	6,000	19	4.4	-	4.4

* Staff Nomination.

** Los Angeles County and Torrance.

*** Railroad Nominations.

PRIORITY LIST OF GRADE SEPARATION PROJECTS OR ALTERATIONS
FISCAL YEAR 1974-75
PURSUANT TO SECTION 2402 OF THE STREETS AND HIGHWAYS CODE

Priority: Number	Crossing No.	Street	Public Agency	Railroad
1	2H-14.1	El Segundo Blvd	Los Angeles Co	AT&SF
2	B-96.7/75B-4.8	Yosemite Ave	Manteca	SPT/TWS
3	2-156.1	Imperial Highway	Santa Fe Springs	AT&SF
4	AA-61.7/AB-62.0	State #29	Caltrans	SPT
5	B-567.7	Eighth Street	Banning	SPT
6	B-500.5	Hacienda Blvd	Los Angeles Co	SPT
7	2-165.1/3Y-17.6	Lemon Street	Fullerton	AT&SF/UPRR
8	A-75.4-B	Richards Blvd	Davis	SPT
9	"B" Line	Lowering	Alhambra	SPT
	B-487.4	Fremont Ave		
	B-488.0	Marengo		
	B-488.2	Marguerita Ave		
	B-488.5	Atlantic Blvd		
	B-488.8	Sixth Street		
	B-488.9	Fourth Street		
	B-489.2	Garfield Ave		
	B-489.4	Chapel Ave		
10	D-20.0	"A" Street	Hayward	SPT
11	BBO Line	Relocation	Claremont	SPT
	BBO-514.71	Berkeley Ave		
	BBO-514.77-C	West First Street		
	BBO-514.81-C	Cornell Ave		
	BBO-514.89	Oberlin Ave		
	BBO-514.93-C	North First Street		
	BBO-514.96	Indian Hill Blvd		
	BBO-515.04	Yale Ave		
	BBO-515.13	Harvard Ave		
	BBO-515.21	College Ave		
12	2B-0.7	Rialto Ave	San Bernardino	AT&SF
13	2-268.9-A	Harbor Drive	San Diego	AT&SF
14	2B-24.1	State #31	Caltrans	AT&SF

PRIORITY LIST OF GRADE SEPARATION PROJECTS OR ALTERATIONS
FISCAL YEAR 1974-75
PURSUANT TO SECTION 2402 OF THE STREETS AND HIGHWAYS CODE

Priority: Number :	Crossing No.	Street	Public Agency	Railroad
15	D-46.0/4-46.7	Murrieta	Livermore	SPT/WPRR
16	C-179.5	Midway County Rd	Butte Co	SPT
17	B-728.3-B	Quick Rd	Imperial Co	SPT
18	C-141.7-B	State #70	Caltrans	SPT
19	E-222.01-A	Eighth Street	San Luis Obispo	SPT
20	BK-512.4	Katella Ave	Anaheim	SPT
21	B-469.4	Hollywood Way	Los Angeles Co	SPT
22	4-176.1	Pasado Rd	Yuba Co	WPRR
23	2E-16.5	Mission/Twin Oak	San Marcos	AT&SF
24	E-24.8	Whipple Ave	Redwood City	SPT
25	E-35.9	Castro Street	Mountain View	SPT
26	A-13.8	Cutting Blvd	Richmond	SPT
27	2-154.6	Telegraph Rd	Santa Fe Springs	AT&SF
28	2-154.87	Florence Ave	Los Angeles Co	AT&SF
29	2B-1.3	Mill Street	San Bernardino	AT&SF
30	B-609.7	Monroe Street	Indio	SPT
31	E-22.0	Ralston Ave	Belmont	SPT
32	E-495.3	Peck Rd	El Monte	SPT
33	4-93.9-B/D-91.2-B	Miner Ave	Stockton	WPRR/SPT
34	"B" Line	Lowering	San Gabriel	SPT
	B-490.2	Ramona Street		
	B-490.3	Mission Street		
	B-490.7	Del Mar		
	B-491.2	San Gabriel		
35	E-9.3	Grand Ave	So San Francisco	SPT
36	D-5.9/D-5.9-A	Adeline Street	Oakland	SPT
37	BK-504.6	Beach Blvd	Buena Park	SPT
38	E-23.2	Holly Street	San Carlos	SPT
39	2-159.6	Alondra	La Mirada	AT&SF
40	B-36.9-A	Waterfront Rd	Contra Costa Co	SPT

PRIORITY LIST OF GRADE SEPARATION PROJECTS OR ALTERATIONS
FISCAL YEAR 1974-75
PURSUANT TO SECTION 2402 OF THE STREETS AND HIGHWAYS CODE

Priority: Number	Crossing No.	Street	Public Agency	Railroad
41	8N-1.85-8N-2.6	Removal	Pittsburg	SN
	8N-1.85	Montezuma		
	8N-1.9	West Street		
	8N-2.0	Cutter Street		
	8N-2.05	York Street		
	8N-2.1	Black Diamond		
	8N-2.2	Railroad		
	8N-2.3	Cumberland		
	8N-2.4	Los Mendanos		
	8N-2.45	East Street		
	8N-2.6	Harbour Street		
42	E-21.0	Laurie Meadows Dr	San Mateo	SPT
43	A-91.0	28th Street	Sacramento	SPT
44	E-39.7	Wolfe Rd	Sunnyvale	SPT
45	E-365.7-B	Hollister Ave	Santa Barbara Co	SPT
46	A-14.5/2K-1.8-B	23rd Street	Richmond	SPT/AT&SF
47	2H-19.5	Del Amo	Torrance	AT&SF
48	BK-498.0	Imperial Highway	Norwalk	SPT
49	E-15.2	Broadway	Burlingame	SPT
50	3A-12.3	Alondra Blvd	Paramount	UPRR
51	B-511.8	Roselawn	Pomona	SPT
52	2B-25.2	Lincoln Ave	Corona	AT&SF
53	2-187.6	Ridge Route Dr	Orange Co	AT&SF
54	E-448.8	Tampa Ave	Los Angeles	SPT
55	A-19.3	Pt. Pinole Park	Richmond	SPT
56	2-180.5	Culver Drive	Irvine	AT&SF
57	2-149.5	Greenwood Ave	Montebello	AT&SF
58	B-210.3	Chestnut Ave	Fresno	SPT
59	BG-488.3	Florence Ave	Los Angeles Co	SPT
60	E-432.0	Madera Rd	Simi Valley	SPT

PRIORITY LIST OF GRADE SEPARATION PROJECTS OR ALTERATIONS
FISCAL YEAR 1974-75
PURSUANT TO SECTION 2402 OF THE STREETS AND HIGHWAYS CODE

Priority: Number	Crossing No.	Street	Public Agency	Railroad
61	"2" Line	Lowering	Oceanside	AT&SF
	2-228.0	Cassidy		
	2E-0.3	Hill Street		
	2-227.2	Oceanside		
	2-226.4	Tyson Street		
	2-226.8	Wisconsin Street		
	2-225.9	Sixth Street		
	2-226.1	Third Street		
62	2-84.8	Riverside Ave	Rialto	AT&SF
63	2-746.5	Barstow Rd	Barstow	AT&SF
64	3-39.0	Grove Street	Ontario	UPRR
65	B-543.6	Mountain View	Loma Linda	SPT
66	E-64.0	Bailey Ave	San Jose	SPT
67	BBJ-509.31	Birch Street	Brea	SPT
68	5-14.7-B	Sir Francis Drake Byd	Larkspur	NWP
69	BAA-522.09	Ellis Ave	Huntington Beach	SPT