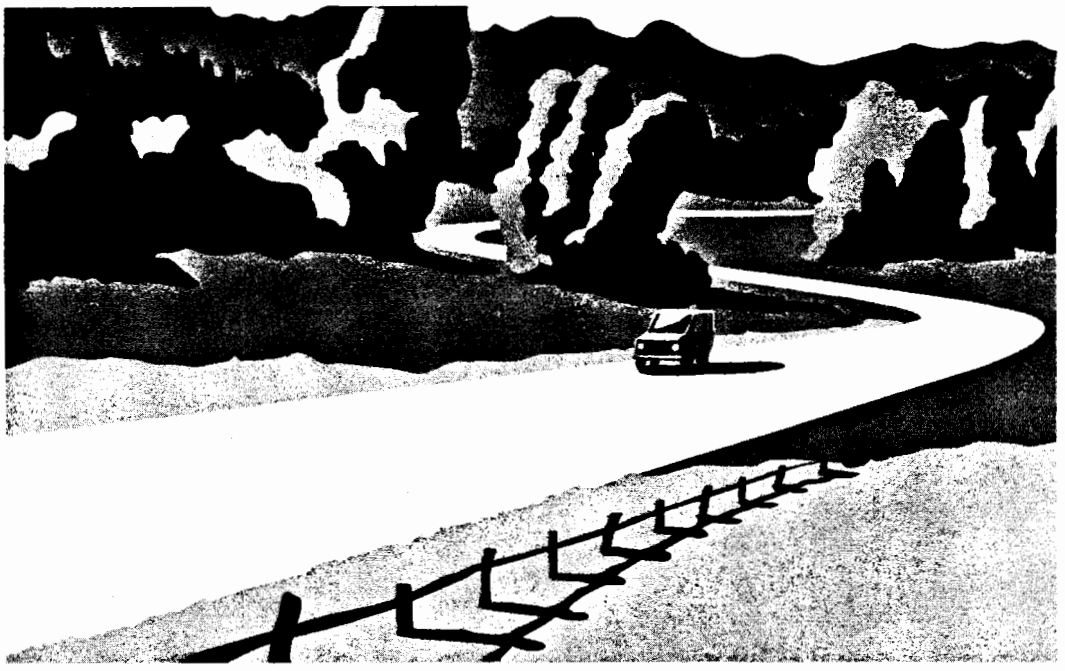
INTERREGIONAL



ROAD SYSTEM PLAN

FEBRUARY 1990

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

INTERREGIONAL ROAD SYSTEM PLAN

FEBRUARY 1990

State of California
Business, Transportation and Housing Agency
Department of Transportation

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DEPARTMENT OF TRANSPORTATION
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February 1, 1990

Members, California Legislature
State Capitol
Sacramento, CA 95814

Dear Members:

In accordance with Section 164.3 of the California Streets and Highways Code (Chapter 105, Statutes of 1989-SB 300, Kopp), we are pleased to transmit the Interregional Road System Plan. This plan identifies projects on which construction can be started not later than June 30, 2000, which will provide the most adequate interregional road system to all economic centers in the state.

The plan identifies approximately $3.0 billion in projects to be developed on the Interregional Road System as selected by the department. These projects will result in a system improvement that, if fully implemented, will achieve the most effective use of available funding.

Sincerely,

ROBERT K. BEST
Director

MAPS, TABLES AND APPENDICES

EXECUTIVE SUMMARY

This Interregional Road System (IRRS) Plan has been prepared in response to Section 164.3 of the Streets and Highways Code. Its purpose is to identify projects on IRRS routes which will provide the most adequate interregional road system to all economic centers in the state.

To achieve the most effective use of available funding, the department identified a subset of the legislatively eligible rural IRRS routes to be developed as a system. Two subsystems are identified: "High Emphasis Routes", and "Other Priority Routes".

The High Emphasis Routes are the major through, trunkline interregional routes that form the backbone of the state's highway network connecting the major economic centers together. The High Emphasis Routes include all of the rural interstates plus 13 non-interstate routes. One of the major objectives of this plan is to develop these High Emphasis Routes to a minimum facility standard.

The Other Priority Routes provide the additional links to the state's other economic centers, and its main recreational areas. The projects shown in the plan on the Other Priority Routes are aimed at correcting current traffic service problems at spot locations and not at achieving a minimum facility standard for the whole route.

This plan identifies about $3.0 billion in projects over the 10-year plan period. Approximately $1.8 billion in projects are directed to developing 13 High Emphasis (non-Interstate) Routes to specific minimum facility standards (e.g., Route 99-freeway). The development of these routes is the department's highest priority for the $1.25 billion identified in statute for the IRRS. Approximately $800 million in projects are proposed on the Other Priority Routes. In addition, there are approximately $400 million in projects proposed on the rural interstate routes.

Figure Verified w/ Vic

The projects proposed in this plan together stand as an interregional road **system improvement,** rather than as just a collection of scattered projects. Overall, they substantially achieve the plan development objectives, particularly in regard to the upgrading of the High Emphasis Routes. Finally, the project proposals are reasonable, given the likelihood of other federal, state and local funding.

Construction of all projects could be started by June 30, 2000, as required by statute. Project programming decisions are to be made through the State Transportation Improvement Program (STIP) process.

I. INTRODUCTION AND PLAN OVERVIEW

When many people think of California, its large cities often come to mind, cities like Los Angeles, San Francisco, or San Diego. But there is another California. This California is more than just the national parks like Yosemite or Sequoia. This is a land of smaller towns, rich agricultural lands, and major recreational areas. Colorful names grace many of the towns in this land such as Susanville, Grass Valley, and Eureka. The highway routes that serve this California, and link together these economic centers and regions, is called the Interregional Road System (IRRS). The improvement of that system is the subject of this plan.

This plan has been submitted by the department in response to Section 46 of Chapter 105, 1989 Statutes (SB 300-Kopp). As codified in Section 164.3 of the Streets and Highways Code, the legislation requires the department to submit a plan which identifies projects that could be under construction on this system by June 30, 2000. This plan is designed to answer five basic questions:

- What is the Interregional Road System?
- How were the routes identified and selected?
- How were the projects selected?
- What projects are being proposed?
- What will the projects accomplish?

Organizationally, the plan is divided into four main parts:

- Legislative Background and System Identification
- Project Identification and Selection
- Plan Funding and Project Lists
- Plan Impact

II. LEGISLATIVE BACKGROUND AND SYSTEM IDENTIFICATION

A. LEGISLATIVE BACKGROUND

The Interregional Road System (IRRS) was conceived as part of a larger effort to address the critical transportation system funding and development needs of the state. As part of the Kopp-Katz-Baker Transportation Blueprint for the Twenty-First Century legislative package, it was recognized that development of the rural state highway network must proceed, along with the development of state highways in urbanized areas, and local roads, rail corridors, and transit services. Like most of the other new programs created in that legislative package, the implementation of this IRRS Plan is dependent on increases in state transportation revenues.

The main provisions regarding the IRRS are contained in SB 300 (i.e., Chapter 105, 1989 Statutes). They are codified as Sections 164 (d), 164.3 and 164.10 through 164.20 of the Streets and Highways Code. The main provisions:

- Require the department to develop and submit to the Legislature an Interregional Road System Plan by February 1, 1990.
- Identify the eligible system routes.
- Specify that the plan is to identify projects on the eligible IRRS routes, on which construction could be started not later than June 30, 2000, to provide the most adequate interregional road system to all economic centers of the state.
- Limit the eligibility of projects to those that are required to meet the needs of interregional traffic, excluding traffic generated as a result of local growth.
- Outline the process for inclusion of the projects identified in the plan into the State Transportation Improvement Program (STIP).
- Assign $1.25 billion for the IRRS over a 10-year period, from the passage of Senate Constitutional Amendment No. 1 (i.e., "The Traffic Congestion Relief and Spending Limitation Act of 1990").

The full text of the IRRS Plan legislative language is included as Appendix "A".

B. ROUTE IDENTIFICATION AND CLASSIFICATION

1. Legislative Description

Both the requirements for the plan, and the eligible IRRS routes, are defined in statute. Eligible route segments were identified as those located outside the boundaries of urbanized areas of over 50,000 population, as designated by the most recent census of the Bureau of the Census. In total, 81 routes, comprising 8,599 miles, are identified as eligible.

In some cases, the route definitions include their passage through urbanized areas to ease the definition process, and to encourage route integrity. However, as noted above, only rural segments are eligible for IRRS program funding. Urbanized route segments of the IRRS, though, are eligible for funding from one of the other programs authorized in the transportation legislative package, including the Flexible Congestion Relief Program. The eligible IRRS routes identified in Sections 164.10 through 164.20 of the Streets and Highways Code are listed in Appendix "B", and are displayed on Map One.

For descriptive purposes, the following working definition is used for the IRRS:

> The IRRS is a series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions.

2. System Identification And Development Priorities

In developing this plan, the department recognized that the resources available over the 10-year period to develop the IRRS routes are limited. All of the eligible routes are necessary and desirable for interregional travel and should be improved. But if a statewide system improvement is to be achieved with limited funding, then a concentrated, subsystem approach, to focus overall project development, was required. This was the approach taken by the department in the development of this plan.

Using this subsystem plan approach, the department identified a subset of the eligible routes as its Interregional Road System. The legislatively established eligible routes were classified based on: service to economic centers and major recreational areas; availability of alternative routes; and cost effectiveness of route development.The identified subset of routes, when developed as outlined in this plan, will provide the

most adequate interregional road system to serve all economic centers in the state. This identified 5,124-mile subsystem, graphically shown on Map Two, has two components. They are the High Emphasis Routes, and the Other Priority Routes.

- **High Emphasis Routes (3,312 miles)** — These are the major through, trunkline interregional routes that form the backbone of the state's highway network, and serve as the primary links between the state's major economic centers and geographic regions.

  Two classes of highways make up the High Emphasis Routes: Interstates (1519 miles) and Non-Interstates (1793 miles). Interstate routes have been a primary state highway funding focus over the last 30 years, in both urban and rural areas. The result has been that the interstate system in rural areas has been completed to freeway standards, while the major non-interstate routes have not been brought up to a standard necessary to provide an adequate level of service. Consequently, the development of these major non-interstate highways to a minimum standard is the highest priority of this plan. However, as significant service deficiencies do exist on certain rural segments of the interstate system because of statewide growth, several interstate route projects are proposed in this plan.

  IRRS project identification is concentrated on non-interstate High Emphasis Routes, to make significant progress toward developing them to minimum standards to ensure adequate levels of service. These routes, and their minimum facility development standards, are identified in Table One. The High Emphasis Routes are shown on Map Two.

- **Other Priority Routes (1812 miles)** — The High Emphasis Routes do not directly serve all economic centers in the state. Key cities like Hemet, Napa, and Sonora, and recreational areas like Lake Tahoe and Yosemite National Park are not served. Further, vital links between urbanized areas, such as between the Palmdale/Lancaster and the San Bernardino/Riverside urbanized areas, are missing. Thus, the department has identified Other Priority Routes as a second IRRS subsystem grouping. These routes are also shown on Map Two.

TABLE ONE:
NON-INTERSTATE HIGH EMPHASIS ROUTES

Route and Limits		Minimum Route Standard
14	(Route 5 to Route 58)	Freeway
	(Route 58 to Route 395)	Expressway
36	(Route 44 to Route 395)	Expressway
44	(Route 5 to Route 36)	40 foot roadway with passing lanes
46	(Route 101 to Route 5)	40 foot roadway with passing lanes
58	(Route 5 to Route 99)	Expressway
	(Route 99 to Route 14 through Mojave)	Freeway
	(Route 14, east of Mojave to Route 15)	Expressway
86	(Brawley to Route 10)	Expressway
99	(Route 5 near Grapevine to Sacramento)	Freeway
	(Route 5 north of Sacramento to Red Bluff)*	Expressway
101	(Los Angeles to Cloverdale)	Freeway
	(Cloverdale to Oregon)	Expressway
111	(Mexican Border to Brawley)	Expressway
120	(Route 5 to Route 99)	Freeway
152	(Route 101 to Route 99)	Expressway
299	(Route 101 to Route 5)	40 foot roadway with passing lanes; removal of large truck size restrictions
395	(Route 15 to Lee Vining)	Expressway
	(Lee Vining to Nevada)	40 foot roadway with passing lanes
	(Nevada to Route 36)	Expressway

*Note: Routing on the segment between Route 70 north of Sacramento and Route 149 north of Oroville, via either Route 70 or Route 99, will be determined upon completion of planning studies.

Development of these routes, however, differs from the High Emphasis Routes. It is the intent of the department to improve these routes to provide reasonable traffic service, including adequate passing opportunities. On this portion of the system, development is limited to elimination of critical deficiencies.

The **Other Eligible Routes** are those which were not included as either High Emphasis Routes, or Other Priority Routes, and are not identified as part of the department's recommended IRRS. For these routes, the development of projects from one of the other funding programs, such as the Highway System Operation and Protection Plan (HSOPP), is still an option. This includes the development of safety and operational projects.

III. PROJECT IDENTIFICATION AND SELECTION

A. PROJECT IDENTIFICATION AND ELIGIBILITY

Congested traffic, heavy truck volumes, narrow highways and too few passing opportunities are some of the types of problems users experience on the IRRS routes. To fulfill the department's mandate to "...provide the most adequate interregional road system to all economic centers in the state...," these problems had to be addressed in this plan. Further, because of population and economic growth, and increases in recreational activities, rural traffic volumes will continue to increase. Thus, the department also needed to address the roadway service problems that could be anticipated to arise over the 10-year plan period.

These considerations were the foundation of project identification for this plan. Through use of the department's system planning process, projects were identified to resolve these problems. Specifically, four objectives guided the project identification process:

- Develop the high emphasis routes to their minimum facility development standards.
- Improve the IRRS service level, by resolving current system deficiencies, and by anticipating and responding to projected year 2000 system deficiencies.
- Maintain minimum service levels on rural interstate highways.
- Improve the capability of the system to handle interregional goods movement by heavy trucks.

The specific project identification process is discussed below:

Roadway Service Level:

Inherent in the process of identifying how a route or a transportation system is operating is the concept of Level of Service (LOS). Level of Service is a qualitative measure that describes how a transportation facility is operating, as perceived by the roadway user. It takes into account such factors as travel time, operating speed, traffic interruptions, safety, driver comfort and freedom to maneuver. It is a function of the physical characteristics of the facility (such as number of lanes, roadway alignment, and lane widths) and the mix of traffic and drivers (commute or recreational drivers, heavy trucks, etc.). LOS is depicted using a six-letter classification series, ranging from

A (you own the road) to F (bumper to bumper, stop and go). In the department's system planning process, each state highway has a defined development concept of how it should operate in the year 2010 (a concept Level of Service), as well as a description of how it is operating today.

For this plan, the goal was to first identify IRRS roadway segments that are operating at LOS E or F, i.e., where traffic demand equals or exceeds their capacity. This analysis assumed that the 1988 STIP project improvements would be completed. Second, using traffic demand forecasts, each roadway segment was reexamined for the year 2000. The deficiencies identified in each stage are shown on Map Three. Generally, new capacity projects were selected for each roadway segment that was identified as deficient (i.e., operating at LOS E or F).

Minimum Facility Development Standards:

For the Non-interstate High Emphasis Routes, an additional project need identifier was used. As these routes form the backbone of the state's highway network, a common facility type to achieve both route continuity and system integrity, was required. Thus, minimum facility development standards, which generally match the route's development concepts, were identified for each of these routes. Projects were identified where the standard is not currently met. These standards are listed in Table One. The roadway standard deficiencies are shown on Map Three.

Other Project Identifiers:

Many route problems, however, do not fall into the above two categories. On many two-lane roads in foothill and mountainous regions, insufficient passing opportunities exist. This problem has become more severe in recent years, due to increasing traffic volumes, and from the extension of solid yellow striping (a.k.a., "barrier striping") to more roadway segments to meet federal safety requirements. In other areas, the width and/or alignment of some highways is inadequate given the roadway volumes being carried today, and/or for the size of trucks using these routes. Projects to resolve these deficiencies were also identified for further analysis.

Besides route eligibility, other directions specified in the new statutes were also considered in the department's IRRS analysis. Those requirements, and how the department responded to them, are identified on the following page.

- "...which construction can be started not later than June 30, 2000...." All projects identified in this plan can be made ready for construction by this date. Actual project delivery schedules is dependent on the year they are included in the State Transportation Improvement Program (STIP).
- "The projects shall be on routes located outside the boundaries of urbanized areas..." This requirement is complied with. However, as permitted by statute, for route continuity purposes, some projects do extend to their first logical terminus inside an urbanized area.
- "...as designated by the most recent census of the Bureau of the Census." It is anticipated that after the 1990 Census, there will be an expansion of the existing urbanized area boundaries. Further, several new urbanized areas will be identified. As a result, many eligible IRRS route segments will no longer be part of the plan, or eligible for IRRS program funding
- "The projects shall be limited to meeting the needs of interregional traffic, excluding traffic generated as a result of local growth." Most routes in rural areas do serve both interregional and local needs. Thus, the department's approach was to identify projects that were not intended solely to serve local development and growth.

As they have a separate funding source, 1988 STIP projects on IRRS routes were treated as a previously funded part of the plan. However, there may be some cases where these projects will not be constructed as proposed due to environmental considerations, changes in local priorities, or increased project costs. Those 1988 STIP projects on the IRRS are identified in Appendix "C".

B. PROJECT SELECTION

The new legislation required the department to reevaluate its highway priorities in rural areas, and revise the project evaluation process to more directly mirror program objectives, and rural highway needs, priorities and conditions. As revised, some of the project evaluation factors that were considered included:

- Will the project reduce congestion and/or provide passing opportunities?
- Does the project have public/regional transportation planning agency (RTPA) support?

- Will the project significantly increase roadway safety and/or resolve roadway geometric deficiencies?
- Is the roadway heavily used by five-axle trucks?
- Would the project result in a system gap closure?
- Is the project on a critical intercity travel, heavy truck, or military installation access route?
- Is the project cost effective, compared to other projects on other routes?

Some of the other factors that were considered included:

- Route Consistency — Is the project required to achieve consistency in the development of the route, and achieve the plan's intent?
- System Coordination — Is it likely that the project will link with another project funded from one of the other new funding programs?
- Level of Local Contributions — Is the region proposing to share a significant portion of the cost of the project?
- Environmental Effects — Would the project have significant adverse environmental effects that cannot be fully mitigated, or can be mitigated only at a very high time and/or financial cost?

In the final statewide selection of projects, two factors were particularly critical:

- Statewide Perspective — Do these projects stand together as an interregional road system improvement, rather than as just a collection of scattered projects? Do the projects together achieve the plan development objectives, particularly in regard to the upgrading of the High Emphasis Routes? Are the project proposals reasonable, given the likelihood of other federal, state and local funding?
- Local Input — Local input into the development of this plan was key. Regional Transportation Planning Agency (RTPA) input was sought. RTPAs' Regional Transportation Plans were reviewed. Copies of proposed project lists were shared and discussed. Input was also sought from California Transportation Commission (CTC) staff, from the CTC's Rural Counties Task Force, and from the CTC itself. Guidance was also sought from the Departmental Transportation Advisory Committee (DTAC), and from legislative staff. This input and guidance was incorporated at each step in the project identification and evaluation process, and in the development of this plan.

IV. PLAN FUNDING AND PROJECT LISTS

A. PLAN FUNDING LEVEL

In the $18.5 billion transportation funding package, $1.25 billion was allocated for Interregional Road System projects. This base amount is a significant investment that will make a substantial core system improvement. But, it is also apparent that the cost of resolving both the facility needs on the High Emphasis Routes, and the deficiencies on the other IRRS routes, far exceed this amount. Thus, a more narrowly focused system is more realistic of what can be accomplished at this funding level over the next ten years. For the most cost effective results, the department proposes that IRRS funding be focused on the development of the High Emphasis Routes identified in this plan.

Overall, though, this plan includes a list of IRRS projects which amount to about $3.0 billion, in 1989 dollars, over the 10-year plan period. This level of funding would be sufficient to complete the most important improvements identified on the the High Emphasis and Other Priority Routes. Most importantly, this level also provides the project flexibility to:

- Respond to funding increases from federal and state sources. For example, in 1991 a new federal transportation bill probably will be enacted. This bill may potentially provide additional funding for IRRS projects. Thus, this plan needs to be large enough so that as additional funding becomes available, additional IRRS projects will be available for project development.
- Replace IRRS projects that are funded from other sources. In some areas, some of the projects included in this plan will be eligible for, and may be funded from, other funding sources or programs. These include the Flexible Congestion Relief, the State/Local Partnership, and the Highway System Operation and Protection Plan (HSOPP). In addition, in some regions, significant local transportation sales tax, developer contributions, or other funds may be made available for IRRS projects. As these projects are partially or fully funded from these sources, other projects must be available to take their place.
- Respond to changing project priorities at the state and/or local level.
- Respond to changing project conditions (such as increased project mitigation

costs and unexpected project delays) which could affect project viability or scheduling.

- Identify projects for programming during the 1990s that will be constructed **after** June 30, 2000. Assuming the department's IRRS list of projects will cover a seven-year period (i.e., equivalent to the STIP period), then the 1993 list will have to include projects through FY 2000/2001, the first full fiscal year of the 21st century.

B. PROJECT LISTS

For the reasons cited above, this plan includes about $3.0 billion in projects over the 10-year plan period. Approximately $1.8 billion in projects are proposed on the non-interstate High Emphasis Routes; $800 million on the Other Priority routes, and $400 million on the rural interstate routes. Appendix "D" presents the IRRS projects by route. Appendix "E" lists the projects by county. The projects are summarized in Table Two. The projects, and their general location, are shown in a summarized fashion on Map Four.

TABLE TWO: PROJECT SUMMARY

Project Type	Number of Projects	Project Costs*
New facilities (e.g., bypasses)	54	$1,016
Upgraded facilities (e.g., expressway to freeway, etc.)	19	302
Additional lanes	126	1,405
Truck climbing lanes	11	125
Passing lanes	53	78
Other projects	15	88
Grand Total	278	3,014

* (in millions of dollars)

The department presents these projects in the appendix along with these considerations:

- The project cost shown in the listing is the department's cost estimate for each project as of January, 1989, including right of way and construction. These are current costs and, as such, would have to be adjusted for inflation at the time the project is programmed for construction. Support and construction engineering costs would need to be added to the estimate at that time.

  In addition, many of these projects have been identified without the benefit of the normal project analysis process. For many of these projects, Project Study Reports (PSRs) have not been prepared. Thus, the project location, description, and cost information **should be treated as preliminary.** In some cases, significant changes in project types, costs, and/or limits will occur. In general, additional refinement of these improvements will be required before they can be included in the STIP.
- This plan reflects conditions as they are known or can be predicted at this time. Consequently, this plan will need to be updated in the future.
- The department has put forth in this plan what it believes should be developed, with concentration on the development of the High Emphasis Routes first. The final selection and funding of projects, though, is dependent on the programming process. Under the legislation, as part of its Proposed State Transportation Improvement Program (PSTIP), the department will recommend **from this plan** a list of IRRS projects for inclusion in the State Transportation Improvement Program (STIP). The California Transportation Commission, in the actual programming of projects, will be able to substitute projects from the IRRS Plan for ones proposed by the department. However, such changes will be able to be made only if the department concurs that the changes would not affect interregional road system integrity.

V. PLAN IMPACT

In the development of this plan, the department responded to four objectives (see page 8). These objectives include the development of the High Emphasis Routes, and the improvement of route service levels. If this plan is fully implemented, to a large extent these objectives will be achieved. The remaining roadway service and facility deficiencies are shown on Map Five.

The specific impact of this plan can be characterized as follows:

- Improved facilities will be provided to the motorist, particularly on the High Emphasis Routes. New facilities, such as the Route 101 Willits Bypass, will be built. Routes 99 between Bakersfield and Sacramento will be upgraded to full freeway standards. Additional lanes, such as on Interstate 215, will be provided. Better access control, with the development of roadways to expressway or freeway standards, will result. Approximately 94 percent of the High Emphasis Route minimum facility standards will be achieved with the full implementation of this $3.0 billion plan.
- The service level of the IRRS system will be improved. Congestion, as projected over the 10-year plan period, will be 39 percent less than what would be expected to occur without the plan. Increased passing opportunities, separation of slow truck traffic, and less congestion will make roadway travel faster, easier, and safer.
- Access to rural areas, and between urban areas, will be enhanced. The capability of the system to handle interregional goods movement will be expanded. Truck access barriers, such as those along Route 299 between Redding and Eureka, will be eliminated.

APPENDIX "A":
IRRS PLAN LEGISLATIVE DESCRIPTION

(Streets and Highways Code, Section 164.3)

(SB 300, Section 46)

(Chapter 105, 1989 Statutes)

164.3

(a) The department shall develop an interregional road system plan to be submitted to the Legislature not later than February 1, 1990."

(b) The plan shall identify projects on which construction can be started not later than June 30, 2000, which will provide the most adequate interregional road system to all economic centers in the state. The projects shall be on eligible routes identified pursuant to subdivision (e). The projects shall be on routes located outside the boundaries of urbanized areas of over 50,000 population as designated by the most recent census of the Bureau of the Census, except as necessary to provide connections for continuation of the routes within those urban areas.

(c) From the projects contained in the plan, the department shall by August 1, 1990, and by December 1 of each odd-numbered year thereafter, submit to the commission a list of projects included in the plan which will improve the interregional road system which can be constructed within the funding levels specified in Section 164 of this code and consistent with the funding estimate prepared pursuant to Section 14525 of the Government Code. The projects shall be limited to meeting the needs of interregional traffic, excluding traffic generated as a result of local growth.

(d) The commission may substitute projects included in the plan if the department concurs that the change will maintain interregional road system integrity.

(e) The eligible routes are those specified in Sections 164.10 to 164.20, inclusive.

APPENDIX "B":
IRRS ROUTES LEGISLATIVE DESCRIPTION

(Streets and Highways Code, Sections 164.10-164.20)

(SB 300, Sections 47-57)

(Chapter 105, 1989 Statutes)

For purposes of subdivision (e) of Section 164.3, the eligible interregional and inter-county routes include all of the following:

Route	Route Limits (if stated)
1	*
2	Between the north urban limits of Los Angeles-Long Beach and Route 138.
4	Between the east urban limits of Antioch-Pittsburg and Route 89.
5	*
6	*
8	*
9	Between the north urban limits of Santa Cruz and the south urban limits of San Jose.
10	Between the east urban limits of San Bernardino-Riverside and the Arizona state line.
12	*
14	*
15	*
16	Between the east urban limits of Sacramento and Route 49
17	Between the north urban limits of Santa Cruz and the south urban limits of San Jose.
18	Between the north urban limits of San Bernardino-Riverside and Route 15.
20	*
28	*
29	*

*(If not stated, the entire route is included)

APPENDIX "B":
IRRS ROUTES LEGISLATIVE DESCRIPTION (cont'd)

Route	Route Limits (if stated)
36	Between Route 5 and Route 395.
37	Between the east urban limits of San Francisco-Oakland near Novato and the west urban limits of San Francisco-Oakland near Vallejo.
38	Between the east urban limits of San Bernardino-Riverside and Route 18 west of Big Bear Lake.
40	*
41	Between Route 1 and Yosemite National Park.
44	Between the east urban limits of Redding and Route 36.
46	Between Route 1 and Route 5.
49	Between Route 41 and 89.
50	*
53	*
58	Between Route 5 and Route 15.
62	*
63	Between the north urban limits of Visalia and Route 180.
65	Between the north urban limits of Bakersfield and Route 198 near Exeter.
68	
70	Between Route 149 north of Oroville and Route 395.
74	*
78	*
79	Between Route 8 and Route 15.
80	*
86	Between Route 111 in Brawley and Route 10.
88	*
89	*
95	Between Route 10 and the Nevada state line.
97	*

*(If not stated, the entire route is included)

APPENDIX "B":
IRRS ROUTES LEGISLATIVE DESCRIPTION (cont'd)

Route	Route Limits (if stated)
99	With routing to be determined via Route 70 or via Route 99, between Route 70 north of Sacramento and Route 149 north of Oroville.
101	*
108	Between Route 120 at Yosemite Junction and Route 395.
111	Between the Mexico border near Calexico and Route 10 near Whitewater.
113	Between Route 80 and Route 5.
116	Between Route 1 and Route 12.
120	Between Route 5 and Route 395.
126	Between the east urban limits of Oxnard-Ventura-Thousand Oaks and Route 5.
127	*
128	*
138	Between Route 5 and Route 18.
139	Between Route 299 and the Oregon state line.
140	Between the east urban limits of Merced and Yosemite National Park.
146	Between Route 101 and Pinnacles National Monument.
149	*
152	Between Route 101 and Route 99.
154	*
156	Between Route 1 and Route 152.
160	Between the north urban limits of Antioch-Pittsburg and the south urban limits of Sacramento.
168	Between the east urban limits of Fresno and Route 168 at Florence Lake Road, and between 168 near Lake Sabrina and Route 395.
178	Between the east urban limits of Bakersfield and Route 14.
180	Between the east urban limits of Fresno and Kings Canyon National Park.
190	Between Route 65 and Route 127.
198	Between Route 5 and Sequoia National Park.

*(If not stated, the entire route is included)

APPENDIX "B":
IRRS ROUTES LEGISLATIVE DESCRIPTION (cont'd)

Route	Route Limits (if stated)
199	*
203	*
205	*
207	*
215	*
243	*
267	*
299	Between Route 101 and Route 89, and between Route 139 and Route 395.
330	Between the north urban limits of San Bernardino-Riverside and Route 18.
371	*
395	*
505	*
580	*
680	*
905	Except within the urban limits of San Diego.

*(If not stated, the entire route is included)

APPENDIX "C":
1988 STIP PROJECTS ON IRRS ROUTES

State Route	County	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1988* State Cost	1988* Local Cost
4	Alpine	2.9	4.5	1.6	Near Lake Alpine	Widen roadway	10	$1,790	
5	Shasta	49.8	51.7	1.9	Fr. 1.0 mi N to 2.9 mi N of Slate Cr. Br. (Seg. #5)	Widen roadway & construct interchange	2	$7,514	
5	Shasta	53.9	56.8	2.9	Fr. 3.5 mi S to 0.6 mi S of Sims Rd. Uc. (Seg. #8)	Reconstruct roadway & add frontage road	2	$8,535	
14	Kern	25.5	30.7	5.2	From 1.8 mi S Phillips Rd. to 4.7 ml S Jawbone Cyn. Rd.	Widen 2 lanes to 4 lane Expressway	9	$4,480	
14	Kern	30.7	35.5	4.8	From 4.7 mi S to 0.1 mi N of Jawbone Cyn. Rd.	Widen 2 lanes to 4 lane Expressway	9	$5,345	
14	Kern	62.1	64.5	2.4	Junction Routes 14/395	Widen 2 lanes to 4 lane Expressway	9	$5,082	
17	Santa Clara	3.8	5.1	1.3	S. of Bear Creek to N of Montevina Rd.	Construct frontage roads	4	$5,374	
18	San Bernardino	49.1	51.6	2.5	Big Bear	Widen 2 lanes to 4 lanes	8	$6,074	$104
46	San Luis Obispo	29.7	32.2	2.5	Rte 101 to Airport Rd.	Widen bridge & roadway to 4 lanes	5	$11,691	
46	San Luis Obispo	32.2	55.1	22.9	Airport Rd. to Route 41 W	Passing Lanes (Portions)	5	$3,651	
49	El Dorado	11.6	13.5	1.9	Fr. Plsnt Vlly Rd to Future Ray Lawyer Dr.	Widen to 40 feet	3		$1,090
49	Placer	7.7	11.2	3.5	0.3 mi N of Dry Crk Rd. to 0.2 mi S of Nevada Cl. (por)	Widen to 4 lanes & left turn lane, bridge replacement	3	$12,421	
53	Lake	0.0	3.5	3.5	Route 29 to 40th Ave.	Widen 2 lanes to 4 lane Expressway & frontage road	1	$13,366	
58	San Bernardino	9.0	24.0	15.0	3.6 mi E of Rt. 395 to 0.6 mi W of Valley View	Widen 2 lanes to 4 lane Expressway	8	$22,596	
58	San Bernardino	28.3	34.9	6.6	Near Summerset Rd. to Route15 (Phase 1)	Realign roadway	8	$29,219	
65	Tulare	21.9	29.5	7.6	North of Porterville	Widen to 4 lane Expressway	6	$9,980	
70	Plumas	8.7	9.3	0.6	Fr. 0.3 mi W to 0.3 mi E Chambers Cr.	Construct EB & WB passing lanes	2	$1,060	
70	Plumas	23.9	24.4	0.5	Fr. 0.2 mi to 0.7 mi E of Rush Cr. Br. #9-26 (Old Jack's Place)	Construct EB & WB passing lanes	2	$574	
80	Solano	27.8	31.2	3.4	0.6 mi W of Rte 505 to 0.2 mi W of Meridian	Widen 6 lane Freeway to 8 lanes	10	$5,750	
80	Nevada	19.3	20.2	0.9	Union Mill Hill Truck lane	Construct truck lane (WB)	3	$871	
86	Imperial	21.2	23.9	2.7	Las Flores Rd. to Elder Rd.	Widen to 4 lane Expressway	11	$1,661	
86	Imperial	23.9	29.0	5.1	Elder Rd. to Lack Rd.	Widen to 4 lane Expressway	11	$10,914	
86	Imperial	29.0	33.6	4.6	From Lack Rd. to 10 ml S of Rt. 78	Widen to 4 lane Expressway	11	$6,142	
86	Imperial	33.6	37.6	4.0	From 10 mi S to 6 mi S of N Jct. Rt. 78	Widen to 4 lane Expressway	11	$5,131	
86	Imperial	37.6	42.7	5.1	From 6 ml S to 0.6 mi S of N Jct. Rt. 78	Widen to 4 lane Expressway	11	$8,965	
86	Riverside	R 2.4	R10.7	8.3	From 0.3 ml S of Ave. 82 to Ave. 66 (Rt. 195)	Construct 2 lane Expressway	11	$17,174	
86	Riverside	R10.7	R12.8	2.1	S of Thermal, from Ave. 66 (Rt. 195) to Ave. 62	Construct 2 lane Expressway	11	$10,024	
86	Riverside	R12.8	R22.5	9.7	From Ave. 62 S of Thermal to 0.2 N of Dillion Rd. in Indio	Construct 2 lane Expressway	11	$18,851	
99	Kern	9.8	18.8	9.0	Fr. 0.5 mi N of Herring Rd. to 0.7 mi S of Panama Ln.	Widen 4 lane Freeway to 6 lanes	6	$9,736	
101	Monterey	R91.5	98.7	7.2	Prunedale Bypass	Right of Way for 4 lane Freeway	5	$4,198	$4,198

APPENDIX "C":
1988 STIP PROJECTS ON IRRS ROUTES (cont'd)

State Route	County	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1988* State Cost	1988* Local Cost
101	Sonoma	T49.8	54.2	4.4	Cloverdale Bypass	Construct 4 lane Freeway on new alignment	4	$38,379	
101	Mendocino	4.9	9.2	4.3	4.9 to 9.2 mi N of Sonoma County line Russian River Br. #10-82	Construct 4 lane Expressway	1	$10,761	
101	Del Norte	20.3	22.3	2.0	2.1 to 0.9 mi S Hamilton Rd.	Construct 4 lane Expressway on new alignment	1	$17,851	
126	Ventura	22.6	27.1	4.5	E. Fillmore Grade xing Powell Rd.	Widen to 4 lanes	7	$12,261	
126	Ventura	27.1	29.7	2.6	0.25 mi W of Pacific to 0.4 mi E of Center street	Widen to 4 lanes	7	$7,906	
126	Ventura	29.7	34.6	4.9	0.4 E Center street to LA County line	Widen to 4 lanes	7	$12,040	
138	LA	57.2	60.2	3.0	106th St/Longview Rd.	Passing lanes, channelization	7	$1,188	$1,188
138	LA	60.2	69.4	9.2	Ave. T / Rt. 18	Passing lanes, widen bridge, channelize	7	$2,353	$2,353
138	San Bernardino	R15.2	16.2	1.0	Rt. 15 to Crowder Creek	Grade and pave on new alignment	8	$1,904	
138	San Bernardino	16.5	19.7	3.2	1.2 mi E/o Rt. 15 to SMT Post Off Rd.	Construct 4 lane Expressway	8	$4,836	
139	Modoc	22.3	23.3	1.0	App 22.1 mi N of Canby fr 0.6 mi N of Hrse Cmp Rd to Qrnt Sta LTC	Construct truck lane (SB)	2	$444	
156	San Benito	2.3	3.3	1.0	In SJ Bautista 0.7 W to 0.3 E Alameda	Widen to 4 lanes, signals	5	$1,040	$750
156	San Benito	7.3	14.3	7.0	Holister Bypass Union/San Felipe	Construct roadway	5	$9,374	$6,250
178	Kern	23.1	23.4	0.3	Fr. 0.2 mi W to 0.1 mi E of Cow Flat Creek	Widen & realign	6	$844	
178	Kern	26.4	28.1	1.7	Fr 0.2 mi W of Demo. Rd to 0.1 mi W of Kern Ri. Cyn Rd (Phase 1)	Passing lane	6	$3,112	
178	Kern	28.1	R31.7	3.6	Fr. 0.1 mi W of Kern Ri. Rd. to Kern Ri. Br. # 50-278	Construct Eastbound passing lane	6	$730	
215	Riverside	R16.5	R17.5	1.0	Haun Rd. - -between Garboni Rd. & Holland Rd.	Pave 2 lane Frontage Rd.	8	$554	
215	Riverside	27.4	34.0	6.6	0.5 mi S of Nuevo Rd to 0.3 mi S of Van Brn Blvd.	Convert to Freeway	8	$37,831	$1,528
299	Humboldt	R29.1	38.8	9.7	Berry Summit Rd. to Rt. 96	Truck passing lanes at selected locations	1	$3,628	
299	Trinity	6.6	7.7	1.1	Fr. 0.3 mi E of Grey Cr. Br. Grey Cr. Rd.	Construct passing lanes EB & WB	1	$984	
395	Kern	30.5	36.8	6.3	6.3 mi S to the Inyo County line	Convert to 4 lane Expressway	9	$8,229	
395	Inyo	0.0	0.7	0.7	Fr. Inyo County line to 0.7 mi N of Inyo County line	Convert to 4 lane Expressway	9	$768	
395	Inyo	25.9	31.2	5.3	Fr. 3.5 mi S to 1.8 mi N Sage Flat Dr.	Convert to 4 lanes	9	$5,449	
395	Inyo	45.0	55.1	10.1	1.2 mi S Cottonwood Rd. to 0.7 mi S of Jct. Rt. 136	Convert to 4 lane Expressway	9	$8,303	
395	Inyo	54.6	59.0	4.4	1.2 mi S to 3.2 mi N Jct. Rt. 136 portions	Widen to 4 lanes	9	$4,481	
395	Inyo	58.8	66.5	7.7	0.1 mi N of Pangborn Ln. S to 0.9 mi N LA aqueduct	Convert to 4 lane Expressway	9	$11,653	
395	Mono	R26.3	33.8	7.5	0.5 mi N Jct. Rt. 203 to 0.1 mi N Owens River Rd.	Convert to 4 lanes	9	$7,156	
395	Mono	40.2	45.2	5.0	Fr. 0.1 mi S Jct. Rt. 158 to 0.8 mi S of Jct. Rt. 120 East	Realign & construct N/B & S/B	9	$8,522	
395	Mono	55.6	58.1	2.5	Fr. 0.1 mi S of Cementary Rd. to 0.1 mi S of Jct. Rt.167	Construct NB & SB passing lanes	9	$3,671	
395	Mono	63.9	65.1	1.2	Fr. 0.4 mi N to 1.6 N Virginia Lakes Rd.	Construct NB & SB passing lanes	9	$2,864	

APPENDIX "C":
1988 STIP PROJECTS ON IRRS ROUTES (cont'd)

State Route	County	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1988* State Cost	1988* Local Cost
395	Mono	79.5	81.0	1.5	Fr. 1.1 mi S to 0.4 mi N of Brigeport Ranger Station	Construct NB & SB passing lanes	9	$1,716	
395	Mono	84.6	86.7	2.1	Fr. 2.5 mi S to 1.4 mi S of Swauger Cyn. Rd.	Construct NB & SB passing lanes	9	$2,327	
395	Mono	110.0	111.0	1.0	Fr. Larson Ln. to 1.0 mi N of Larson Ln.	Construct NB & SB passing lanes	9	$1,205	
395	Lassen	9.5	R15.9	6.4	1.2 mi N of Rt. 70 to Long Valley Cr. Br. #7-23	(2) SB & (1) NB 1 mile passing lanes	2	$1,328	
395	Lassen	10.2	11.5	1.3	5.6 mi N Hallelujah Jct. to 4.4 mi S of Long .	Curve realign. & passing lane	2	$1,659	
395	Lassen	26.6	29.8	3.2	1.4 mi S to 1.4 mi N of Long Valley Cr Br. #7-57	SB & NB 1 mile passing lanes	2	$957	
395	Lassen	35.2	36.2	1.0	Fr. 0.7 mi to 1.7 mi N Co. Rd. #25 (Honeylake)	NB 1 mile passing lane	2	$450	
395	Lassen	40.2	47.3	7.1	0. 2 mi N of Bass Hill Rd. to Honey Lake Campground Rd. (Milford)	Construct NB & SB passing lanes	2	$900	
395	Lassen	48.5	56.7	8.2	Fr. 0.1 mi N County Rd. #353 to County Rd. #235 (Janesville)	Construct NB & SB passing lanes	2	$900	
Grand Total by Funding Source								$488,727	$17,461

High Emphasis Route

* In $1000's

Note: Projects on IRRS routes included in other funding programs are not duplicated on this list.

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
1	Orange	12	11.5	12.4	0.9	North of Laguna Beach	Widen 4 lanes to 6 lanes	$2,076	
1	Ventura	7	0.0	9.9	9.9	Southern Ventura County	Spot widen to 4 lanes	$4,900	
1	Monterey	5	91.4	95.2	3.8	Castroville to Watsonville	Widen 2 lanes to 4 lane Expressway	$8,000	
1	Monterey	5	95.2	98.4	3.2	Castroville to Watsonville	Widen 2 lanes to 4 lane Expressway	$15,000	
1	Monterey	5	98.4	100.5	2.1	Castroville to Watsonville	Widen 2 lanes to 4 lane Expressway	$7,000	
1	Monterey	5	100.5	101.5	1.0	Castroville to Watsonville	Construct 4 lane Freeway + interchange	$0	$14,000
1	*Route Totals*				*20.9*			*$36,976*	*$14,000*
4	Calaveras	10	R10.3	R13.7	3.4	10 miles west of Altaville	Construct 2 lane Expressway on new alignment	$8,080	
4	Calaveras	10	R13.7	R16.4	2.7	5 miles west of Altaville	Construct 2 lane Expressway on new alignment	$9,931	
4	Calaveras	10	R21.1	R23.4	2.3	Angels Bypass	Construct 2 lane Expressway on new alignment	$8,300	
4	*Route Totals*				*8.4*			*$26,311*	*$0*
5	Kern	6	4.5	15.0	10.5	Lebec to Wheeler Ridge	Widen 8 lane Freeway to 10 lanes	$17,130	
5	Sacramento	3	27.2	33.5	6.3	Sacramento to Metro Airport	Widen 4 lane Freeway to 6 lanes	$12,000	
5	Tehama	2	28.2	42.1	13.9	Hooker Creek Hills	Widen 4 lane Freeway to 6 lanes	$6,000	
5	Shasta	2	0.0	3.7	3.7	Cottonwood Hills	Add lane + widen bridges to 40 feet	$8,570	
5	Shasta	2	22.1	26.0	3.9	Fawndale	Widen 4 lane Freeway to 6 lanes	$700	
5	Shasta	2	28.1	R42.3	14.2	Shasta Lake	Add lane	$5,000	
5	Siskiyou	2	R51.2	R58.2	7.0	Anderson Grade	Add truck climbing lanes	$5,000	
5	*Route Totals*				*59.5*			*$54,400*	*$0*
12	Napa	4	0.0	3.3	3.3	Route 29 to Route 80 (Napa)	Widen 2 lanes to 4 lanes	$15,000	
12	Solano	10	0.0	R2.6	2.6	Route 29 to Route 80 (Solano)	Widen 2 lanes to 4 lane Expressway	$11,191	
12	Solano	10	22.7	25.6	2.9	Rio Vista	Widen & realign	$3,740	
12	*Route Totals*				*8.0*			*$29,931*	*$0*
14	Los Angeles	7	R33.4	43.3	9.9	Santa Clarita to Escondido Summit	Widen 4 lane Freeway to 6 lanes	$20,000	
14	Los Angeles	7	43.3	R58.2	14.9	Escondido Summit to Palmdale	Widen 4 lane Freeway to 6 lanes	$23,000	
14	Kern	9	16.4	25.7	9.3	5 miles north of Mojave	Widen 2 lanes to 4 lane Expressway	$7,983	
14	Kern	9	20.1	20.5	0.4	4 miles north of Mojave	Construct California City Blvd interchange	$5,000	
14	Kern	9	42.2	46.2	4.0	28 miles north of Mojave	Widen 2 lanes to 4 lane Expressway	$5,997	
14	Kern	9	46.0	51.8	5.8	8 miles south of Freeman Junction	Widen 2 lanes to 4 lane Expressway	$7,360	
14	Kern	9	51.8	57.0	5.2	3 miles south of Freeman Junction	Widen 2 lanes to 4 lane Expressway	$6,600	
14	Kern	9	57.0	62.1	5.1	5 miles north of Freeman Junction	Widen 2 lanes to 4 lane Expressway	$6,646	
14	*Route Totals*				*54.6*			*$82,586*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
15	Riverside	8	35.6	37.6	2.0	Corona	Widen 6 lane Freeway to 8 lanes	$6,600	
15	San Bernardino	8	43.1	53.3	10.2	North of Victorville	Widen 4 lane Freeway to 6 lanes	$36,800	
15	San Bernardino	8	70.0	74.4	4.4	Barstow	Widen 4 lane Freeway to 6 lanes	$14,500	
15	*Route Totals*				*16.6*			*$57,900*	*$0*
16	Sacramento	3	4.0	12.0	8.0	South of Mather AFB	Widen 2 lanes to 4 lanes + left turn lane	$10,000	$1,000
16	*Route Totals*				*8.0*			*$10,000*	*$1,000*
17	Santa Cruz	4	10.8	11.9	1.1	11 miles north of Santa Cruz	Add truck climbing lane (NB)	$3,500	
17	*Route Totals*				*1.1*			*$3,500*	
18	San Bernardino	8	31.7	34.5	2.8	Running Springs	Widen 2 lanes to 4 lanes	$3,900	
18	San Bernardino	8	46.6	49.1	2.5	Big Bear	Widen 2 lanes to 4 lanes	$10,200	
18	San Bernardino	8	51.6	53.9	2.3	Big Bear City (W)	Widen 2 lanes to 4 lanes	$5,500	
18	San Bernardino	8	94.4	96.6	2.2	Victorville	Widen 4 lanes to 6 lanes	$2,400	
18	*Route Totals*				*9.8*			*$22,000*	*$0*
20	Mendocino	1	43.0	44.1	1.1	Mendocino/Lake County Line	Add passing lanes	$2,500	
20	Lake	1	0.0	0.6	0.6	Mendocino/Lake County Line	Add passing lanes	$1,000	
20	Colusa	3	3.4	13.0	9.6	Route 16 to Walnut Dr	Add passing lane	$2,000	
20	Yuba	3	8.2	10.1	1.9	10 miles east of Marysville	Widen, realign & add passing lane	$3,000	
20	*Route Totals*				*13.2*			*$8,500*	*$0*
29	Lake	1	19.6	21.5	1.9	Lower Lake Bypass	Construct 4 lane Expressway on new alignment	$7,700	
29	Lake	1	27.9	31.1	3.2	Rte 281 to Rte 175 south of Kelseyville	Widen to 4 lane Expressway	$5,400	
29	Lake	1	31.2	32.4	1.2	South Kelseyville	Add passing lanes	$630	
29	Lake	1	R34.6	R40.9	6.3	Kelseyville to South Lakeport	Widen 2 lane Expressway to 4 lanes	$14,900	
29	Lake	1	35.1	36.1	1.0	Kelseyville	Add passing lanes	$950	
29	*Route Totals*				*13.6*			*$29,580*	*$0*
36	Lassen	2	19.2	23.6	4.4	Eagle Lake Rd	Add passing lanes	$2,000	
36	Lassen	2	23.6	R27.5	3.9	Susanville Bypass	Construct 4 lane Expressway on new alignment	$29,000	
36	Lassen	2	R27.5	R29.4	1.9	Susanville Bypass Extension	Widen 2 lane Expressway to 4 lanes	$6,000	
36	*Route Totals*				*10.2*			*$37,000*	*$0*
38	San Bernardino	8	45.7	49.5	3.8	Big Bear City (E)	Widen 2 lanes to 4 lanes	$2,500	
38	*Route Totals*				*3.8*			*$2,500*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
41	Kings	6	4.4	5.4	1.0	13 miles south of Kettleman City	Add passing lanes	$1,150	
41	Kings	6	12.2	13.2	1.0	5 miles south of Kettleman City	Add passing lane (NB)	$1,040	
41	Kings	6	13.5	15.4	1.9	4 miles south of Kettleman City	Add passing lane (SB)	$1,500	
41	Kings	6	0.9	1.9	1.0	17 miles south of Kettleman City	Add passing lanes	$570	
41	Kings	6	7.0	8.0	1.0	10 miles south of Kettleman City	Add passing lanes (SB)	$580	
41	Kings	6	39.4	R42.0	2.6	Near Lemoore	Widen 2 lanes to 4 lane Expressway	$9,070	
41	Fresno	6	R0.0	R6.1	6.1	20 miles south of Fresno	Widen 2 lane Expressway to 4 lanes	$7,200	
41	Fresno	6	R6.1	R20.1	14.0	10 miles south of Fresno	Construct 4 lane Expressway on new alignment	$20,025	$20,025
41	Fresno	6	R32.6	R33.5	0.9	North of Fresno	Construct 4 lane Freeway on new alignment	$4,500	$4,500
41	Madera	6	0.0	2.2	2.2	North of Fresno	Construct 4 lane Freeway on new alignment	$20,800	
41	Madera	6	2.2	3.6	1.4	2 miles north of Fresno	Construct 4 lane Freeway on new alignment	$8,800	
41	Madera	6	12.6	13.6	1.0	15 miles south of Coarsegold	Add passing lane (SB)	$1,700	
41	Madera	6	14.5	15.5	1.0	13 miles south of Coarsegold	Add passing lane (SB)	$1,690	
41	Madera	6	20.9	22.0	1.1	6 miles south of Coarsegold	Add passing lane (SB)	$1,120	
41	Madera	6	22.0	23.1	1.1	4 miles south of Coarsegold	Add passing lane (SB)	$1,140	
41	Madera	6	25.4	27.3	1.9	2 miles south of Coarsegold	Add passing lane (SB)	$2,400	
41	Madera	6	35.3	36.3	1.0	Oakhurst	Widen 2 lanes to 4 lanes	$3,050	$3,050
41	*Route Totals*				*40.2*			*$86,335*	*$27,575*
44	Shasta	2	R3.8	R7.7	3.9	Palo Cedro Fwy	Add lane (EB), modify interchange	$13,500	
44	Shasta	2	R11.4	R12.4	1.0	The Dips	Construct 4 lane Expressway on new alignment	$3,125	
44	Shasta	2	R14.8	R15.9	1.1	Bear Creek	Add passing lanes (EB & WB)	$920	
44	Shasta	2	R21.4	32.1	10.7	Shingletown	Add passing lanes	$4,000	
44	Shasta	2	R25.3	R26.1	0.8	Shasta Forest	Add passing lanes (EB) & improve curve	$576	
44	Shasta	2	36.4	37.2	0.8	Starlight Pines	Add passing lanes (EB)	$400	
44	Shasta	2	52.7	53.3	0.6	Eskimo Hill	Add passing lanes (WB)	$360	
44	Shasta	2	65.2	66.2	1.0	Hat Creek Rim	Add passing lanes (EB)	$457	
44	Lassen	2	27.0	37.3	10.3	Worley Ranch	Add passing lanes	$1,500	
44	*Route Totals*				*30.2*			*$24,838*	*$0*
46	San Luis Obispo	5	32.2	36.4	4.2	5 miles east of Paso Robles	Widen 2 lane Expressway to 4 lanes	$9,000	
46	San Luis Obispo	5	36.4	40.6	4.2	8 miles east of Paso Robles	Widen 2 lane Expressway to 4 lanes	$13,400	
46	San Luis Obispo	5	40.6	43.5	2.9	12 miles east of Paso Robles	Widen 2 lane Expressway to 4 lanes	$6,600	
46	Kern	6	7.3	20.5	13.2	Kecks Corner to Route 33	Widen to 40 feet	$6,100	
46	Kern	6	20.5	32.5	12.0	Route 33 to Route 5	Widen to 40 feet	$8,770	
46	*Route Totals*				*36.5*			*$43,870*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
49	Calaveras	10	2.2	3.9	1.7	5 miles south of Angels Camp	Widen & realign	$4,120	
49	Amador	10	3.1	3.9	0.8	Jackson	Widen to 4 lanes + left turn lane	$700	
49	Amador	10	6.5	R13.7	7.2	Sutter Creek/Amador City Bypass	Construct 2 lane Expressway on new alignment	$27,700	
49	Placer	3	11.2	11.4	0.2	Auburn to Grass Valley	Construct 4 lane Expressway	$1,000	
49	Nevada	3	0.0	2.0	2.0	Auburn to Grass Valley	Construct 4 lane Expressway	$10,000	
49	Nevada	3	2.0	7.3	5.3	Auburn to Grass Valley	Construct 4 lane Expressway	$11,000	$11,000
49	Nevada	3	7.2	13.3	6.1	Auburn to Grass Valley	Right of Way only for 4 lane Expressway	$15,000	
49	Nevada	3	8.8	10.1	1.3	Auburn to Grass Valley	Add signals & passing lanes (NB)	$1,500	
49	*Route Totals*				*24.6*			*$71,020*	*$11,000*
50	El Dorado	3	R2.0	R3.2	1.2	Bass Lake Grade	Add truck climbing lane (EB)	$1,000	
50	El Dorado	3	17.3	18.1	0.8	Placerville Freeway	Convert 4 lane Expressway to 4 lane Freeway	$50,000	
50	El Dorado	3	20.8	R25.8	5.0	Camino	Construct Freeway + interchange	$17,000	
50	El Dorado	3	54.7	56.0	1.3	3 miles west of Strawberry	Extend passing lanes (WB & EB)	$3,000	
50	*Route Totals*				*8.3*			*$71,000*	*$0*
53	Lake	1	0.0	1.1	1.1	Lower Lake Bypass	Construct 4 lane Expressway on new alignment	$5,000	
53	Lake	1	1.4	3.5	2.1	Clearlake Expressway	Convert to Freeway	$7,000	
53	*Route Totals*				*3.2*			*$12,000*	*$0*
58	Kern	6	35.4	R46.1	10.7	10 miles west of Bakersfield	Construct 4 lane Expressway on new alignment	$18,500	
58	Kern	9	80.3	89.5	9.2	5 miles west of Tehachapi	Add truck climbing lane (EB)	$8,900	
58	Kern	9	R101.6	111.6	10.0	6 miles west of Mojave	Construct interchange & upgrade to Freeway	$6,710	
58	Kern	9	R108.7	117.0	8.3	Mojave Bypass	Construct 4 lane Freeway on new alignment	$30,185	
58	San Bernardino	8	0.0	5.4	5.4	Kern County to Route 395	Widen 2 lanes to 4 lane Expressway	$13,500	
58	San Bernardino	8	5.4	9.0	3.6	East of Route 395	Widen 2 lanes to 4 lane Expressway	$9,000	
58	San Bernardino	8	9.0	12.9	3.9	5 miles east of Route 395	Widen 2 lanes to 4 lane Expressway	$9,800	
58	San Bernardino	8	22.7	32.9	10.2	Hinkley	Widen 2 lanes to 4 lane Expressway	$25,500	
58	*Route Totals*				*61.3*			*$122,095*	*$0*
65	Tulare	6	0.0	R7.0	7.0	15 miles south of Porterville	Widen 2 lane Expressway to 4 lanes	$7,700	
65	Tulare	6	R7.0	17.7	10.7	5 miles south of Porterville	Widen 2 lane Expressway to 4 lanes	$11,800	
65	Tulare	6	29.3	R38.1	8.8	Lindsay to Exeter	Construct 2 lane Expressway on new alignment	$16,810	
65	*Route Totals*				*26.5*			*$36,310*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
68	Monterey	5	12.6	15.0	2.4	5 miles west of Salinas	Construct 4 lane Freeway on new alignment	$0	$33,550
68	*Route Totals*				*2.4*			*$0*	*$33,550*
70	Plumas	2	33.1	36.6	3.5	Keddie (West)	Widen to 32 feet & add truck climbing lane (EB)	$3,705	
70	Plumas	2	40.0	41.5	1.5	Snake Lake	Add passing lanes (EB & WB)	$1,910	
70	Plumas	2	46.2	47.0	0.8	La Porte Rd	Add passing lane (EB)	$692	
70	Plumas	2	48.1	48.8	0.7	Chandler Rd	Add passing lane (EB)	$595	
70	Plumas	2	51.3	52.0	0.7	West Slope Lee Summit	Add passing lane (EB)	$552	
70	Plumas	2	52.3	53.2	0.9	West Slope Lee Summit	Add passing lane (EB)	$626	
70	*Route Totals*				*8.1*			*$8,080*	*$0*
74	Orange	12	1.5	2.8	1.3	2 miles east of San Juan Capistrano	Widen 2 lanes to 4 lanes + replace bridge	$3,924	
74	Riverside	8	0.0	11.8	11.8	Ortega Highway	Widen 2 lanes to 4 lanes	$16,500	
74	Riverside	8	11.8	R14.2	2.4	Lake Elsinore	Widen 2 lanes to 4 lanes	$2,700	
74	Riverside	8	17.3	25.7	8.4	Lake Elsinore to Perris	Widen 2 lanes to 4 lanes	$11,000	$11,000
74	Riverside	8	25.7	27.5	1.8	Perris	Widen 2 lanes to 4 lanes	$3,400	$3,400
74	Riverside	8	34.3	37.4	3.1	5 miles west of Hemet	Widen 4 lanes to 6 lanes	$3,300	
74	*Route Totals*				*28.8*			*$40,824*	*$14,400*
80	Solano	10	31.2	40.6	9.4	Dixon	Widen 6 lane Freeway to 8 lanes	$17,470	
80	Yolo	3	0.0	9.1	9.1	Davis to West Sacramento	Widen 6 lane Freeway to 8 lanes	$33,000	
80	*Route Totals*				*18.5*			*$50,470*	*$0*
86	**Imperial**	**11**	**21.2**	**23.9**	**2.7**	**North of Brawley**	**Widen 2 lanes to 4 lane Expressway**	**$8,200**	
86	**Riverside**	**11**	**R2.4**	**R10.7**	**8.3**	**15 miles south of Coachella (Stage 2)**	**Construct 4 lane Expressway on new alignment**	**$15,800**	
86	**Riverside**	**11**	**R10.7**	**R12.8**	**2.1**	**10 miles south of Indio**	**Upgrade 4 lane Expressway to 4 lane Freeway**	**$4,500**	
86	**Riverside**	**11**	**R12.8**	**R22.5**	**9.7**	**10 miles south to Indio**	**Upgrade 4 lane Expressway to 4 lane Freeway**	**$6,000**	
86	*Route Totals*				*22.8*			*$34,500*	*$0*
88	Amador	10	27.1	43.6	16.5	Cooks Station	Widen, add passing lanes and left turn lane	$7,920	
88	*Route Totals*				*16.5*			*$7,920*	*$0*
97	Siskiyou	2	L0.4	4.4	4.0	Weed	Add 2 lanes for 4 lane Expressway	$6,131	
97	Siskiyou	2	27.6	28.6	1.0	Tennant Bray	Add passing lane (NB)	$501	
97	Siskiyou	2	33.0	34.4	1.4	North Slope Mt. Hebron	Add passing lane (SB)	$701	
97	Siskiyou	2	49.3	51.8	2.5	Dorris	Construct 4 lane Expressway on new alignment	$10,100	
97	*Route Totals*				*8.9*			*$17,433*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
99	Kern	6	R29.9	36.5	6.6	10 miles north of Bakersfield	Widen 6 lane Freeway to 8 lanes	$10,800	
99	Kern	6	36.5	44.7	8.2	20 miles north of Bakersfield	Widen 6 lane Freeway to 8 lanes	$10,800	
99	Kern	6	49.4	57.6	8.2	McFarland to Delano	Widen 4 lane Freeway to 6 lanes	$20,580	
99	Tulare	6	0.0	9.2	9.2	Delano to Earlimart	Widen 4 lane Freeway to 6 lanes	$11,400	
99	Tulare	6	9.2	18.4	9.2	Pixley to Tipton	Widen 4 lane Freeway to 6 lanes	$10,860	
99	Tulare	6	30.6	39.6	9.0	Tulare to Near Visalia	Widen 4 lane Freeway to 6 lanes	$12,050	
99	Tulare	6	39.6	R53.9	14.3	Visalia to Kingsburg	Widen 4 lane Freeway to 6 lanes	$18,550	
99	Fresno	6	0.0	6.4	6.4	Kingsburg to Selma	Widen 4 lane Freeway to 6 lanes	$12,750	
99	Fresno	6	6.4	9.0	2.6	Selma to Fowler	Widen 6 lane Freeway to 8 lanes	$3,200	
99	Fresno	6	9.0	12.3	3.3	Fowler	Widen 6 lane Freeway to 8 lanes	$4,990	
99	Madera	6	0.0	1.0	1.0	10 miles south of Madera	Widen 4 lane Freeway to 6 lanes	$5,000	
99	Madera	6	1.0	3.6	2.6	8 miles south of Madera	Widen 4 lane Freeway to 6 lanes	$2,900	
99	Madera	6	19.9	22.7	2.8	Fairmead	Convert 4 lane Expwy to 4 lane Fwy plus interchange	$8,000	
99	Merced	10	0.0	4.6	4.6	5 miles north of Chowchilla	Convert 4 lane Expressway to 4 lane Freeway	$20,319	
99	Merced	10	4.6	12.1	7.5	South of Merced	Convert 4 lane Expressway to 4 lane Freeway	$32,980	
99	Merced	10	23.8	26.8	3.0	North of Atwater	Convert 4 lane Expressway to 4 lane Freeway	$15,629	
99	Merced	10	26.8	R28.8	2.0	Livingston Freeway (South End)	Convert 4 lane Expressway to 4 lane Freeway	$15,446	
99	Merced	10	R31.7	R32.8	1.1	Livingston Freeway	Convert 4 lane Expressway to 4 lane Freeway	$4,869	
99	Merced	10	32.8	R36.3	3.5	Delhi Freeway (Stage 2) (portions)	Convert 4 lane Expressway to 4 lane Freeway	$14,120	
99	San Joaquin	10	1.9	5.8	3.9	Ripon to Manteca	Widen 4 lane Freeway to 6 lanes	$5,500	
99	San Joaquin	10	5.8	16.5	10.7	Manteca to Stockton	Widen 4 lane Freeway to 6 lanes	$15,500	
99/70	Butte/Sutter	3			66.0	Sacramento to Chico	To be determined (Pending 99/70 Study)	$35,000	
99/70	Butte/Sutter/Yuba	3				Sacramento to Chico	To be determined (Pending 99/70 Study)	$40,000	
99	Butte	3	21.7	21.9	0.2	Junction 99/149	Construct interchange	$7,000	
99	Butte	3	41.2	44.3	3.1	10 miles north of Chico	Add passing lane	$1,500	
99	Tehama	2	0.0	4.5	4.5	15 miles north of Chico	Widen 2 lane Expressway to 4 lanes	$5,200	
99	*Route Totals*				*193.5*			*$344,943*	*$0*
101	Ventura	7	R39.9	R43.2	3.3	15 miles west of Ventura	Upgrade to 6 lane Freeway	$25,000	
101	Santa Barbara	5	1.1	4.0	2.9	Carpinteria	Widen 4 lane Freeway to 6 lanes	$22,000	$10,000
101	Santa Barbara	5	4.0	7.1	3.1	Carpinteria	Widen 4 lane Freeway to 6 lanes	$13,000	
101	Santa Barbara	5	62.7	62.7	0.0	Los Alamos at North Junction 101/154	Construct interchange	$2,000	$5,000
101	Santa Barbara	5	82.8	87.2	4.4	5 miles south of Santa Maria	Widen 4 lane Freeway to 6 lanes	$20,000	
101	San Luis Obispo	5	0.0	0.8	0.8	2 miles north of Santa Maria	Widen 4 lane Freeway to 6 lanes	$24,000	

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
101	San Luis Obispo	5	13.2	16.4	3.2	Arroyo Grande to Pismo Beach	Widen 4 lane Freeway to 6 lanes	$20,000	
101	San Luis Obispo	5	27.5	30.0	2.5	San Luis Obispo	Widen 4 lane Freeway to 6 lanes	$15,000	
101	San Luis Obispo	5	30.0	36.0	6.0	Cuesta Grade	Add truck climbing lane (NB)	$26,000	
101	Monterey	5	R91.5	98.7	7.2	Prunedale Bypass	Construct 4 lane Freeway on new alignment	$70,000	$70,000
101	Monterey	5	98.7	101.3	2.6	Prunedale Bypass Extension	Widen 4 lane Freeway to 6 lanes	$14,000	
101	San Benito	5	0.0	3.1	3.1	South of Route 156	Upgrade to 6 lanes	$22,000	
101	San Benito	5	3.1	7.6	4.5	North of Route 156	Upgrade to 6 lanes	$16,000	
101	Santa Clara	4	0.1	4.6	4.5	5 miles south of Gilroy	Convert 4 lane Expressway to 4 lane Freeway	$13,500	
101	Santa Clara	4	6.0	6.1	0.1	Gilroy at South Junction 101/152	Add collector road & loop ramp	$560	
101	Marin	4	23.1	27.6	4.5	5 miles north of Novato	Convert to 4 lane Freeway plus 2 new interchanges	$19,820	
101	Sonoma	4	0.0	1.3	1.3	5 miles south of Petaluma	Convert 4 lane Expressway to 4 lane Freeway	$20,940	
101	Sonoma	4	1.3	3.2	1.9	Petaluma	Convert 4 lane Expressway to 4 lane Freeway	$13,130	
101	Mendocino	1	9.2	13.0	3.8	Hopland Bypass	Construct 4 lane Freeway on new alignment	$31,100	
101	Mendocino	1	13.0	17.6	4.6	North Hopland Expressway	Widen 2 lanes to 4 lane Expressway	$15,000	
101	Mendocino	1	37.3	40.5	3.2	Ridgewood Grade	Realign 4 lane Expressway	$12,000	
101	Mendocino	1	T43.5	50.8	7.3	Willits Bypass	Construct 4 lane Freeway on new alignment	$60,000	
101	Mendocino	1	70.6	71.1	0.5	North Laytonville	Add passing lanes (Extend SB)	$280	
101	Mendocino	1	72.0	73.0	1.0	North Laytonville	Add passing lanes (NB)	$650	
101	Humboldt	1	57.0	58.8	1.8	Alton at Junction 101/36	Construct interchange	$4,700	
101	Humboldt	1	109.5	R112.9	3.4	Big Lagoon Expressway	Construct 4 lane Expressway on new alignment	$23,800	
101	Humboldt	1	T114.0	115.3	1.3	Dry Lagoon to Stone Lagoon	Construct 4 lane Expressway on new alignment	$3,000	
101	Humboldt	1	115.3	118.0	2.7	Stone Lagoon to Freshwater Lagoon	Construct 4 lane Expressway on new alignment	$15,000	
101	Humboldt	1	118.0	119.3	1.3	Freshwater Lagoon Expressway	Widen to 4 lane Expressway	$1,300	
101	Del Norte	1	12.5	16.3	3.8	Wilson Creek Bypass	Construct 4 lane Expressway on new alignment	$41,000	
101	Del Norte	1	23.5	25.8	2.3	Crescent City Flat	Widen 2 lanes to 4 lane Expressway	$5,700	
101	*Route Totals*				*92.9*			*$570,480*	*$85,000*
108	Tuolomne	10	R2.0	R6.9	4.9	East Sonora Bypass	Right of Way only for 4 lane Freeway	$10,300	
108	Tuolomne	10	R2.0	R4.5	2.5	East Sonora Bypass	Construct 2 lane Expressway on new alignment	$17,138	
108	Tuolomne	10	R4.5	R6.9	2.4	5 miles east of Sonora	Construct 2 lane Expressway on new alignment	$15,100	
108	*Route Totals*				*9.8*			*$42,538*	*$0*
111	Imperial	11	8.3	13.1	4.8	Route 8 to Worthington	Widen 2 lanes to 4 lane Expressway	$24,800	
111	Imperial	11	13.1	17.6	4.5	Worthington to Keystone	Widen 2 lanes to 4 lane Expressway	$17,300	
111	Imperial	11	17.6	22.0	4.4	Keystone to Route 78	Widen 2 lanes to 4 lane Expressway	$19,000	
111	*Route Totals*				*13.7*			*$61,000*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
120	San Joaquin	10	R1.4	T6.9	5.5	Manteca Bypass	Convert to 4 lane Freeway	$20,000	
120	San Joaquin	10	6.2	7.3	1.1	East Manteca	Widen to 4 lanes plus left turn lane	$1,545	
120	Stanislaus	10	3.5	R6.3	2.8	Oakdale Bypass (Phase 1)	Construct 2 lane Expressway on new alignment	$14,030	
120	Stanislaus	10	R6.2	R6.5	0.3	Oakdale Bypass (Phase 2)	Construct interchange	$4,000	
120	Stanislaus	10	7.3	10.3	3.0	5 miles east of Oakdale	Widen 2 lane Expressway to 4 lanes	$6,367	
120	Stanislaus	10	R11.2	R15.0	3.8	Lover's Leap Bypass	Construct 4 lane Expressway on new alignment	$36,128	
120	Stanislaus	10	R15.0	R17.3	2.3	10 miles east of Oakdale	Widen 2 lanes to 4 lane Expressway	$7,060	
120	*Route Totals*				*18.8*			*$89,130*	*$0*
126	Los Angeles	7	0.0	R5.2	5.2	Ventura County to Route 5	Widen 2 lanes to 4 lanes	$10,600	$3,000
126	*Route Totals*				*5.2*			*$10,600*	*$3,000*
138	Los Angeles	7	51.4	69.4	18.0	Palmdale to Route 18 (Stage 2)	Widen 2 lanes to 4 lanes	$18,000	
138	Los Angeles	7	60.2	65.5	5.3	Pearblossom (Stage 1)	Widen 2 lanes to 4 lanes & add bridge	$6,600	
138	Los Angeles	7	69.4	75.0	5.6	Route 18 to San Bernardino County	Widen 2 lanes to 4 lanes	$8,000	
138	*Route Totals*				*28.9*			*$32,600*	*$0*
152	Santa Clara	4	9.9	10.0	0.1	Gilroy at North Junction 101/152	Construct ultimate interchange	$8,000	
152	Santa Clara	4	11.1	22.1	11.0	Route 101 to Route 156 (Stage 1)	Construct 4 lane Expressway on new alignment	$36,000	
152	Santa Clara	4	11.1	22.1	11.0	Route 101 to Route 156 (Stage 2)	Construct 4 lane Expressway on new alignment	$40,000	
152	Santa Clara	4	14.9	16.3	1.4	7 miles west of Route 156	Add passing lane	$2,800	
152	Santa Clara	4	19.9	21.1	1.2	2 miles west of Route 156	Add passing lanes (EB)	$2,800	
152	Merced	10	17.3	23.7	6.4	Los Banos Bypass	Construct 2 lane Expressway on new alignment	$24,995	
152	*Route Totals*				*31.1*			*$114,595*	*$0*
156	Monterey	5	R1.3	T5.2	3.9	Castroville to Prunedale	Construct 4 lane Freeway	$25,000	
156	San Benito	5	3.3	7.3	4.0	San Juan Bautista	Widen 2 lanes to 4 lane Expressway	$11,000	
156	*Route Totals*				*7.9*			*$36,000*	*$0*
168	Fresno	6	8.5	T22.9	14.4	9 miles east of Clovis	4 lane Expressway to Shepherd; 2 lane Expressway to end	$10,750	$10,750
168	Fresno	6	T22.9	R27.4	4.5	16 miles east of Clovis	Construct 2 lane Expressway plus passing lane	$6,750	$6,750
168	*Route Totals*				*18.9*			*$17,500*	*$17,500*
180	Fresno	6	67.6	71.6	4.0	8 miles east of Fresno	Construct 4 lane Expressway on new alignment	$5,400	$5,400
180	Fresno	6	71.6	75.0	3.4	15 miles east of Fresno	Construct 4 lane Expressway on new alignment	$5,700	$5,700
180	Fresno	6	75.0	78.2	3.2	20 miles east of Fresno	Construct 4 lane Expressway on new alignment	$6,100	$6,100
180	*Route Totals*				*10.6*			*$17,200*	*$17,200*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
198	Kings	6	T21.5	28.3	6.8	East of Hanford	Widen 2 lanes to 4 lane Expressway	$9,730	
198	Tulare	6	0.0	R3.3	3.3	East of Hanford	Widen 2 lanes to 4 lane Expressway	$6,700	
198	Tulare	6	29.7	34.4	4.7	5 miles east of Lemon Cove	Extend passing lane (EB)	$1,200	
198	*Route Totals*				*14.8*			*$17,630*	*$0*
199	Del Norte	1	9.3	10.1	.8	Hardscrabble Creek	Add passing lanes	$480	
199	*Route Total*				*.8*			*$480*	*$0*
205	San Joaquin	10	L0.0	R12.8	12.8	Tracy	Widen 4 lane Freeway to 6 lanes	$29,969	
205	*Route Totals*				*12.8*			*$29,969*	*$0*
215	Riverside	8	R9.0	18.5	9.5	Rancho California	Widen 4 lane Freeway to 6 lanes	$28,600	
215	Riverside	8	18.5	23.2	4.7	Sun City	Widen 4 lane Freeway to 6 lanes	$15,500	
215	Riverside	8	23.2	27.6	4.4	South of Perris	Widen 4 lane Freeway to 6 lanes	$14,500	
215	*Route Totals*				*18.6*			*$58,600*	*$0*
267	Placer	3	4.0	6.5	2.5	North Star	Add passing lanes (SB)	$1,500	
267	Nevada	3	0.0	R2.8	2.8	Truckee Bypass	Construct 4 lane Expressway on new alignment	$20,000	$6,000
267	*Route Totals*				*5.3*			*$21,500*	*$6,000*
299	Humboldt	1	41.1	42.5	1.4	Humboldt/Trinity County Line	Add passing lanes	$860	
299	Trinity	2	29.4	30.2	0.8	Manzanita Creek	Add passing lanes (WB)	$831	
299	Trinity	2	37.1	37.9	0.8	Helena	Add passing lanes (EB)	$2,102	
299	Trinity	2	44.8	45.6	0.8	Junction City	Add passing lanes (EB & WB)	$904	
299	Trinity	2	45.5	46.9	1.4	Oregon Mountain	Add truck climbing lane (EB)	$2,100	
299	Trinity	2	49.2	54.4	5.2	Weaverville	Improve capacity	$20,200	
299	Trinity	2	56.7	57.1	0.4	Weaver Creek	Add passing lanes (WB)	$645	
299	Trinity	2	72.0	72.3	0.3	Buckhorn	Realign & widen 2 lanes to 4 lane Expressway	$1,500	
299	Shasta	2	0.0	8.5	8.5	Buckhorn	Realign & widen 2 lanes to 4 lane Expressway	$52,700	
299	Shasta	2	16.4	17.5	1.1	Shasta Divide	Add truck climbing lane (WB)	$760	
299	Shasta	2	17.7	19.0	1.3	Old Shasta	Construct 4 lane Expressway on new alignment	$3,750	
299	*Route Totals*				*22.0*			*$86,352*	*$0*
395	San Bernardino	8	R4.0	11.2	7.2	10 miles south of Adelanto	Widen 2 lanes to 4 lane Expressway	$10,100	
395	San Bernardino	8	11.2	18.9	7.7	Adelanto	Widen 2 lanes to 4 lane Expressway	$10,800	
395	San Bernardino	8	18.9	46.0	27.1	Adelanto to Route 58	Widen 2 lanes to 4 lane Expressway	$29,500	
395	San Bernardino	8	46.0	73.5	27.5	Route 58 to Red Mountain	Widen 2 lanes to 4 lane Expressway	$38,500	

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
395	Kern	9	0.0	7.0	7.0	Johannesburg	Widen 2 lanes to 4 lane Expressway	$8,750	
395	Kern	9	7.0	11.2	4.2	9 miles north of Johannesburg	Widen 2 lanes to 4 lane Expressway	$5,250	
395	Kern	9	11.2	R15.2	4.0	15 miles north of Johannesburg	Widen 2 lanes to 4 lane Expressway	$5,000	
395	Kern	9	R15.2	R23.0	7.8	5 miles south of Inyokern	Widen 2 lanes to 4 lane Expressway	$9,750	
395	Kern	9	R23.0	29.4	6.4	Inyokern	Widen 2 lanes to 4 lane Expressway	$8,060	
395	Inyo	9	30.8	36.4	5.6	3 miles south of Olancha	Widen 2 lanes to 4 lane Expressway	$7,110	
395	Inyo	9	36.4	41.3	4.9	5 miles north of Olancha	Widen 2 lanes to 4 lane Expressway	$6,325	
395	Inyo	9	41.3	45.3	4.0	14 miles south of Lone Pine	Widen 2 lanes to 4 lane Expressway	$5,100	
395	Inyo	9	66.3	73.2	6.9	5 miles south of Independence	Widen 2 lanes to 4 lane Expressway	$6,916	
395	Inyo	9	73.4	75.6	2.2	1 mile north of Independence	Widen 2 lanes to 4 lane Expressway	$2,755	
395	Inyo	9	77.3	84.3	7.0	8 miles north of Independence	Widen 2 lanes to 4 lane Expressway	$8,750	
395	Inyo	9	84.3	91.6	7.3	14 miles north of Independence	Widen 2 lanes to 4 lane Expressway	$9,125	
395	Inyo	9	92.3	99.3	7.0	5 miles south of Big Pine	Widen 2 lanes to 4 lane Expressway	$9,010	
395	Mono	9	45.0	51.3	6.3	Route 120E to Route 120W	Widen 2 lanes to 4 lane Expressway	$6,772	
395	Mono	9	52.9	56.5	3.6	5 miles north of Lee Vining	Widen to 40 feet	$2,920	
395	Mono	9	66.1	68.1	2.0	10 miles south of Bridgeport	Add passing lanes (NB & SB)	$4,110	
395	Mono	9	69.8	71.9	2.1	5 miles south of Bridgeport	Widen 2 lanes to 4 lanes	$4,100	
395	Mono	9	73.2	74.7	1.5	2 miles south of Bridgeport	Add passing lanes (NB & SB)	$2,290	
395	Mono	9	74.7	76.4	1.7	Bridgeport	Continuous left turn lane	$3,900	
395	Mono	9	76.8	84.6	7.8	4 miles north of Bridgeport	Widen 2 lanes to 4 lanes	$12,200	
395	Mono	9	84.6	86.9	2.3	10 miles north of Bridgeport	Add passing lanes (NB & SB)	$2,080	
395	Mono	9	88.4	90.7	2.3	15 miles north of Bridgeport	Add truck climbing lane (SB)	$3,450	
395	Mono	9	93.7	94.8	1.1	18 miles north of Bridgeport	Add passing lanes (NB & SB)	$1,700	
395	Mono	9	116.5	117.5	1.0	4 miles south of Nevada State Line	Add passing lanes (NB & SB)	$1,550	
395	Mono	9	117.0	120.5	3.5	2 miles south of Nevada State Line	Widen 2 lanes to 4 lanes	$7,600	
395	Lassen	2	5.8	R15.9	10.1	Reno Route (Red Rock)	Widen 2 lanes to 4 lane Expressway	$22,000	
395	Lassen	2	R24.4	31.2	6.8	Reno Route (South Herlong)	Widen 2 lanes to 4 lane Expressway	$22,000	
395	Lassen	2	40.0	43.7	3.7	Reno Route (Milford)	Widen 2 lanes to 4 lane Expressway	$8,000	
395	Lassen	2	43.7	48.5	4.8	Reno Route (Honey Lake)	Widen 2 lane Expressway to 4 lanes	$9,000	
395	Lassen	2	48.5	56.7	8.2	Reno Route (Janesville)	Widen 2 lanes to 4 lane Expressway	$16,000	
395	Lassen	2	56.7	61.1	4.4	Reno Route (Bass Hill)	Widen 2 lane Expressway to 4 lanes	$8,000	
395	*Route Totals*				*217.0*			*$318,473*	*$0*

APPENDIX "D":
IRRS PROJECT RECOMMENDATIONS BY ROUTE (cont'd)

State Route	County	Caltrans District	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	1989* State Cost	1989* Local Cost
580	Alameda	4	0.4	8.9	8.5	Altamont Pass (Stage 1)	Add truck climbing lanes on seperate roadway (WB)	$30,170	
580	Alameda	4	0.4	8.9	8.5	Altamont Pass (Stage 2)	Add truck climbing lanes on seperate roadway (WB)	$39,830	
580	*Route Totals*				*8.5*			*$70,000*	*$0*
905	San Diego	11	8.8	12.0	3.2	Urban Limit to Mexican Border (Stage 1)	Construct 4 lane Expressway on new alignment	$15,000	
905	San Diego	11	8.8	12.0	3.2	Urban Limit to Mexican Border (Stage 2)	Construct 4 lane Expressway on new alignment	$20,000	
905	San Diego	11	8.8	12.0	3.2	Urban Limit to Mexican Border (Stage 3)	Convert 4 lane Expressway to 4 lane Freeway	$11,000	
905	*Route Totals*				*9.6*			*$46,000*	*$0*
Statewide Totals								**$3,013,569**	**$230,225**

High Emphasis Route

* In $1000's

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Alameda	580	0.4	8.9	8.5	Altamont Pass (Stage 1)	Add truck climbing lanes on seperate roadway (WB)	4	$30,170	
Alameda	580	0.4	8.9	8.5	Altamont Pass (Stage 2)	Add truck climbing lanes on seperate roadway (WB)	4	$39,830	
Alameda County Totals				*8.5*				*$70,000*	*$0*
Amador	49	3.1	3.9	0.8	Jackson	Widen to 4 lanes plus left turn lane	10	$700	
Amador	49	6.5	R13.7	7.2	Sutter Creek/Amador City Bypass	Construct 2 lane Expressway on new alignment	10	$27,700	
Amador	88	27.1	43.6	16.5	Cooks Station	Widen, add passing lanes and left turn lane	10	$7,920	
Amador County Totals				*24.5*				*$36,320*	*$0*
Butte	99	21.7	21.9	0.2	Junction 99/149	Construct interchange	3	$7,000	
Butte	99	41.2	44.3	3.1	10 miles north of Chico	Add passing lane	3	$1,500	
ButteCounty Totals				*3.3*				*$8,500*	*$0*
Butte/Sutter	99/70				Sacramento to Chico	To be determined (Pending 99/70 Study)	3	$35,000	
Butte/Sutter/Yuba	99/70			66.0	Sacramento to Chico	To be determined (Pending 99/70 Study)	3	$40,000	
Butte/Sutter/Yuba County Totals				*66.0*				*$75,000*	*$0*
Calaveras	4	R13.7	R16.4	2.7	5 miles west of Altaville	Construct 2 lane Expressway on new alignment	10	$9,931	
Calaveras	4	R10.3	R13.7	3.4	10 miles west of Altaville	Construct 2 lane Expressway on new alignment	10	$8,080	
Calaveras	4	R21.1	R23.4	2.3	Angels Bypass	Construct 2 lane Expressway on new alignment	10	$8,300	
Calaveras	49	2.2	3.9	1.7	5 miles south of Angels Camp	Widen & realign	10	$4,120	
Calaveras County Totals				*10.1*				*$30,431*	*$0*
Colusa	20	3.4	13.0	9.6	Route 16 to Walnut Dr	Add passing lane	3	$2,000	
Colusa County Totals				*9.6*				*$2,000*	*$0*
Del Norte	101	12.5	16.3	3.8	Wilson Creek Bypass	Construct 4 lane Expressway on new alignment	1	$41,000	
Del Norte	101	23.5	25.8	2.3	Crescent City Flat	Widen 2 lanes to 4 lane Expressway	1	$5,700	
Del Norte	199	9.3	10.1	0.8	Hardscrabble Creek	Add passing lanes	1	480	
Del Norte County Totals				*6.9*				*$47,180*	*$0*
El Dorado	50	R2.0	R3.2	1.2	Bass Lake Grade	Add truck climbing lane (EB)	3	$1,000	
El Dorado	50	17.3	18.1	0.8	Placerville Freeway	Convert 4 lane Expressway to 4 lane Freeway	3	$50,000	
El Dorado	50	20.8	R25.8	5.0	Camino	Construct Freeway plus interchange	3	$17,000	
El Dorado	50	54.7	56.0	1.3	3 miles west of Strawberry	Extend passing lanes (WB & EB)	3	$3,000	
El Dorado County Totals				*8.3*				*$71,000*	*$0*

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Fresno	41	R0.0	R6.1	6.1	20 miles south of Fresno	Widen 2 lane Expressway to 4 lanes	6	$7,200	
Fresno	41	R6.1	R20.1	14.0	10 miles south of Fresno	Construct 4 lane Expressway on new alignment	6	$20,025	$20,025
Fresno	41	R32.6	R33.5	0.9	North of Fresno	Construct 4 lane Freeway on new alignment	6	$4,500	$4,500
Fresno	99	0.0	6.4	6.4	Kingsburg to Selma	Widen 4 lane Freeway to 6 lanes	6	$12,750	
Fresno	99	6.4	9.0	2.6	Selma to Fowler	Widen 6 lane Freeway to 8 lanes	6	$3,200	
Fresno	99	9.0	12.3	3.3	Fowler	Widen 6 lane Freeway to 8 lanes	6	$4,990	
Fresno	168	8.5	T22.9	14.4	9 miles east of Clovis	4 lane Expressway to Shepherd; 2 lane Expressway to end	6	$10,750	$10,750
Fresno	168	T22.9	R27.4	4.5	16 miles east of Clovis	Construct 2 lane Expressway plus passing lane	6	$6,750	$6,750
Fresno	180	67.6	71.6	4.0	8 miles east of Fresno	Construct 4 lane Expressway on new alignment	6	$5,400	$5,400
Fresno	180	71.6	75.0	3.4	15 miles east of Fresno	Construct 4 lane Expressway on new alignment	6	$5,700	$5,700
Fresno	180	75.0	78.2	3.2	20 miles east of Fresno	Construct 4 lane Expressway on new alignment	6	$6,100	$6,100
Fresno County Totals				*62.8*				*$87,365*	*$59,225*
Humboldt	101	57.0	58.8	1.8	Alton at Junction 101/36	Construct interchange	1	$4,700	
Humboldt	101	109.5	R112.9	3.4	Big Lagoon Expressway	Construct 4 lane Expressway on new alignment	1	$23,800	
Humboldt	101	115.3	118.0	2.7	Stone Lagoon to Freshwater Lagoon	Construct 4 lane Expressway on new alignment	1	$15,000	
Humboldt	101	118.0	119.3	1.3	Freshwater Lagoon Expressway	Widen to 4 lane Expressway	1	$1,300	
Humboldt	101	T114.0	115.3	1.3	Dry Lagoon to Stone Lagoon	Construct 4 lane Expressway on new alignment	1	$3,000	
Humboldt	299	41.1	42.5	1.4	Humboldt/Trinity County Line	Add passing lanes	1	$860	
Humboldt County Totals				*11.9*				*$48,660*	*$0*
Imperial	86	21.2	23.9	2.7	North of Brawley	Widen 2 lanes to 4 lane Expressway	11	$8,200	
Imperial	111	8.3	13.1	4.8	Route 8 to Worthington	Widen 2 lanes to 4 lane Expressway	11	$24,800	
Imperial	111	13.1	17.6	4.5	Worthington to Keystone	Widen 2 lanes to 4 lane Expressway	11	$17,300	
Imperial	111	17.6	22.0	4.4	Keystone to Route 78	Widen 2 lanes to 4 lane Expressway	11	$19,000	
Imperial County Totals				*16.4*				*$69,300*	*$0*
Inyo	395	30.8	36.4	5.6	3 miles south of Olancha	Widen 2 lanes to 4 lane Expressway	9	$7,110	
Inyo	395	36.4	41.3	4.9	5 miles north of Olancha	Widen 2 lanes to 4 lane Expressway	9	$6,325	
Inyo	395	41.3	45.3	4.0	14 miles south of Lone Pine	Widen 2 lanes to 4 lane Expressway	9	$5,100	
Inyo	395	66.3	73.2	6.9	5 miles south of Independence	Widen 2 lanes to 4 lane Expressway	9	$6,916	
Inyo	395	73.4	75.6	2.2	1 mile north of Independence	Widen 2 lanes to 4 lane Expressway	9	$2,755	
Inyo	395	77.3	84.3	7.0	8 miles north of Independence	Widen 2 lanes to 4 lane Expressway	9	$8,750	
Inyo	395	84.3	91.6	7.3	14 miles north of Independence	Widen 2 lanes to 4 lane Expressway	9	$9,125	

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Inyo	395	92.3	99.3	7.0	5 miles south of Big Pine	Widen 2 lanes to 4 lane Expressway	9	$9,010	
Inyo County Totals				*44.9*				*$55,091*	*$0*
Kern	5	4.5	15.0	10.5	Lebec to Wheeler Ridge	Widen 8 lane Freeway to 10 lanes	6	$17,130	
Kern	14	16.4	25.7	9.3	5 miles north of Mojave	Widen 2 lanes to 4 lane Expressway	9	$7,983	
Kern	14	20.1	20.5	0.4	4 miles north of Mojave	Construct California City Blvd interchange	9	$5,000	
Kern	14	42.2	46.2	4.0	28 miles north of Mojave	Widen 2 lanes to 4 lane Expressway	9	$5,997	
Kern	14	46.0	51.8	5.8	8 miles south of Freeman Junction	Widen 2 lanes to 4 lane Expressway	9	$7,360	
Kern	14	51.8	57.0	5.2	3 miles south of Freeman Junction	Widen 2 lanes to 4 lane Expressway	9	$6,600	
Kern	14	57.0	62.1	5.1	5 miles north of Freeman Junction	Widen 2 lanes to 4 lane Expressway	9	$6,646	
Kern	46	7.3	20.5	13.2	Kecks Corner to Route 33	Widen to 40 feet	6	$6,100	
Kern	46	20.5	32.5	12.0	Route 33 to Route 5	Widen to 40 feet	6	$8,770	
Kern	58	35.4	R46.1	10.7	10 miles west of Bakersfield	Construct 4 lane Expressway on new alignment	6	$18,500	
Kern	58	80.3	89.5	9.2	5 miles west of Tehachapi	Add truck climbing lane (EB)	9	$8,900	
Kern	58	R101.6	111.6	10.0	6 miles west of Mojave	Construct interchange & upgrade to Freeway	9	$6,710	
Kern	58	R108.7	117.0	8.3	Mojave Bypass	Construct 4 lane Freeway on new alignment	9	$30,185	
Kern	99	R29.9	36.5	6.6	10 miles north of Bakersfield	Widen 6 lane Freeway to 8 lanes	6	$10,800	
Kern	99	36.5	44.7	8.2	20 miles north of Bakersfield	Widen 6 lane Freeway to 8 lanes	6	$10,800	
Kern	99	49.4	57.6	8.2	McFarland to Delano	Widen 4 lane Freeway to 6 lanes	6	$20,580	
Kern	395	0.0	7.0	7.0	Johannesburg	Widen 2 lanes to 4 lane Expressway	9	$8,750	
Kern	395	7.0	11.2	4.2	9 miles north of Johannesburg	Widen 2 lanes to 4 lane Expressway	9	$5,250	
Kern	395	11.2	R15.2	4.0	15 miles north of Johannesburg	Widen 2 lanes to 4 lane Expressway	9	$5,000	
Kern	395	R15.2	R23.0	7.8	5 miles south of Inyokern	Widen 2 lanes to 4 lane Expressway	9	$9,750	
Kern	395	R23.0	29.4	6.4	Inyokern	Widen 2 lanes to 4 lane Expressway	9	$8,060	
Kern County Totals				*156.1*				*$214,871*	*$0*
Kings	41	4.4	5.4	1.0	13 miles south of Kettleman City	Add passing lanes	6	$1,150	
Kings	41	12.2	13.2	1.0	5 miles south of Kettleman City	Add passing lane (NB)	6	$1,040	
Kings	41	13.5	15.4	1.9	4 miles south of Kettleman City	Add passing lane (SB)	6	$1,500	
Kings	41	0.9	1.9	1.0	17 miles south of Kettleman City	Add passing lanes	6	$570	
Kings	41	7.0	8.0	1.0	10 miles south of Kettleman City	Add passing lanes (SB)	6	$580	
Kings	41	39.4	R42.0	2.6	Near Lemoore	Widen 2 lanes to 4 lane Expressway	6	$9,070	
Kings	198	T21.5	28.3	6.8	Hanford to Visalia	Widen 2 lanes to 4 lane Expressway	6	$9,730	
Kings County Totals				*15.3*				*$23,640*	*$0*

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Lake	20	0.0	0.6	0.6	Mendocino/Lake County Line	Add passing lanes	1	$1,000	
Lake	29	19.6	21.5	1.9	Lower Lake Bypass	Construct 4 lane Expressway on new alignment	1	$7,700	
Lake	29	27.9	31.1	3.2	Rte 281 to Rte 175 south of Kelseyville	Widen to 4 lane Expressway	1	$5,400	
Lake	29	31.2	32.4	1.2	South Kelseyville	Add passing lanes	1	$630	
Lake	29	R34.6	R40.9	6.3	Kelseyville to South Lakeport	Widen 2 lane Expressway to 4 lanes	1	$14,900	
Lake	29	35.1	36.1	1.0	Kelseyville	Add passing lanes	1	$950	
Lake	53	0.0	1.1	1.1	Lower Lake Bypass	Construct 4 lane Expressway on new alignment	1	$5,000	
Lake	53	1.4	3.5	2.1	Clearlake Expressway	Convert to Freeway	1	$7,000	
Lake County Totals				*17.4*				*$42,580*	*$0*
Lassen	36	19.2	23.6	4.4	Eagle Lake Rd	Add passing lanes	2	$2,000	
Lassen	36	23.6	R27.5	3.9	Susanville Bypass	Construct 4 lane Expressway on new alignment	2	$29,000	
Lassen	36	R27.5	R29.4	1.9	Susanville Bypass Extension	Widen 2 lane Expressway to 4 lanes	2	$6,000	
Lassen	44	27.0	37.3	10.3	Worley Ranch	Add passing lanes	2	$1,500	
Lassen	395	5.8	R15.9	10.1	Reno Route (Red Rock)	Widen 2 lanes to 4 lane Expressway	2	$22,000	
Lassen	395	R24.4	31.2	6.8	Reno Route (South Herlong)	Widen 2 lanes to 4 lane Expressway	2	$22,000	
Lassen	395	40.0	43.7	3.7	Reno Route (Milford)	Widen 2 lanes to 4 lane Expressway	2	$8,000	
Lassen	395	43.7	48.5	4.8	Reno Route (Honey Lake)	Widen 2 lane Expressway to 4 lanes	2	$9,000	
Lassen	395	48.5	56.7	8.2	Reno Route (Janesville)	Widen 2 lanes to 4 lane Expressway	2	$16,000	
Lassen	395	56.7	61.1	4.4	Reno Route (Bass Hill)	Widen 2 lane Expressway to 4 lanes	2	$8,000	
Lassen County Totals				*58.5*				*$123,500*	*$0*
Los Angeles	14	R33.4	43.3	9.9	Santa Clarita to Escondido Summit	Widen 4 lane Freeway to 6 lanes	7	$20,000	
Los Angeles	14	43.3	R58.2	14.9	Escondido Summit to Palmdale	Widen 4 lane Freeway to 6 lanes	7	$23,000	
Los Angeles	126	0.0	R5.2	5.2	Ventura County to Route 5	Widen 2 lanes to 4 lanes	7	$10,600	$3,000
Los Angeles	138	51.4	69.4	18.0	Palmdale to Route 18 (Stage 2)	Widen 2 lanes to 4 lanes	7	$18,000	
Los Angeles	138	60.2	65.5	5.3	Pearblossom (Stage 1)	Widen 2 lanes to 4 lanes & add bridge	7	$6,600	
Los Angeles	138	69.4	75.0	5.6	Route 18 to San Bernardino County	Widen 2 lanes to 4 lanes	7	$8,000	
Los Angeles County Totals				*58.9*				*$86,200*	*$3,000*
Madera	41	0.0	2.2	2.2	North of Fresno	Construct 4 lane Freeway on new alignment	6	$20,800	
Madera	41	2.2	3.6	1.4	2 miles north of Fresno	Construct 4 lane Freeway on new alignment	6	$8,800	
Madera	41	12.6	13.6	1.0	15 miles south of Coarsegold	Add passing lane (SB)	6	$1,700	
Madera	41	14.5	15.5	1.0	13 miles south of Coarsegold	Add passing lane (SB)	6	$1,690	
Madera	41	20.9	22.0	1.1	6 miles south of Coarsegold	Add passing lane (SB)	6	$1,120	
Madera	41	22.0	23.1	1.1	4 miles south of Coarsegold	Add passing lane (SB)	6	$1,140	

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Madera	41	25.4	27.3	1.9	2 miles south of Coarsegold	Add passing lane (SB)	6	$2,400	
Madera	41	35.3	36.3	1.0	Oakhurst	Widen 2 lanes to 4 lanes	6	$3,050	$3,050
Madera	99	0.0	1.0	1.0	10 miles south of Madera	Widen 4 lane Freeway to 6 lanes	6	$5,000	
Madera	99	1.0	3.6	2.6	8 miles south of Madera	Widen 4 lane Freeway to 6 lanes	6	$2,900	
Madera	99	19.9	22.7	2.8	Fairmead	Convert 4 lane Expwy to 4 lane Fwy plus interchange	6	$8,000	
Madera County Totals				*17.1*				*$56,600*	*$3,050*
Marin	101	23.1	27.6	4.5	5 miles north of Novato	Convert to 4 lane Freeway plus 2 new interchanges	4	$19,820	
Marin County Totals				*4.5*				*$19,820*	*$0*
Mendocino	20	43.0	44.1	1.1	Mendocino/Lake County Line	Add passing lanes	1	$2,500	
Mendocino	101	9.2	13.0	3.8	Hopland Bypass	Construct 4 lane Freeway on new alignment	1	$31,100	
Mendocino	101	13.0	17.6	4.6	North Hopland Expressway	Widen 2 lanes to 4 lane Expressway	1	$15,000	
Mendocino	101	37.3	40.5	3.2	Ridgewood Grade	Realign 4 lane Expressway	1	$12,000	
Mendocino	101	T43.5	50.8	7.3	Willits Bypass	Construct 4 lane Freeway on new alignment	1	$60,000	
Mendocino	101	70.6	71.1	0.5	North Laytonville	Add passing lanes (Extend SB)	1	$280	
Mendocino	101	72.0	73.0	1.0	North Laytonville	Add passing lanes (NB)	1	$650	
Mendocino County Totals				*21.5*				*$121,530*	*$0*
Merced	99	0.0	4.6	4.6	5 miles north of Chowchilla	Convert 4 lane Expressway to 4 lane Freeway	10	$20,319	
Merced	99	4.6	12.1	7.5	South of Merced	Convert 4 lane Expressway to 4 lane Freeway	10	$32,980	
Merced	99	23.8	26.8	3.0	North of Atwater	Convert 4 lane Expressway to 4 lane Freeway	10	$15,629	
Merced	99	26.8	R28.8	2.0	Livingston Freeway (South End)	Convert 4 lane Expressway to 4 lane Freeway	10	$15,446	
Merced	99	R31.7	R32.8	1.1	Livingston Freeway	Convert 4 lane Expressway to 4 lane Freeway	10	$4,869	
Merced	99	32.8	R36.3	3.5	Delhi Freeway (Stage 2) (portions)	Convert 4 lane Expressway to 4 lane Freeway	10	$14,120	
Merced	152	17.3	23.7	6.4	Los Banos Bypass	Construct 2 lane Expressway on new alignment	10	$24,995	
Merced County Totals				*28.1*				*$128,358*	*$0*
Mono	395	45.0	51.3	6.3	Route 120E to Route 120W	Widen 2 lanes to 4 lane Expressway	9	$6,772	
Mono	395	52.9	56.5	3.6	5 miles north of Lee Vining	Widen to 40 feet	9	$2,920	
Mono	395	66.1	68.1	2.0	10 miles south of Bridgeport	Add passing lanes (NB & SB)	9	$4,110	
Mono	395	69.8	71.9	2.1	5 miles south of Bridgeport	Widen 2 lanes to 4 lanes	9	$4,100	
Mono	395	73.2	74.7	1.5	2 miles south of Bridgeport	Add passing lanes (NB & SB)	9	$2,290	
Mono	395	74.7	76.4	1.7	Bridgeport	Continuous left turn lane	9	$3,900	
Mono	395	76.8	84.6	7.8	4 miles north of Bridgeport	Widen 2 lanes to 4 lanes	9	$12,200	
Mono	395	84.6	86.9	2.3	10 miles north of Bridgeport	Add passing lanes (NB & SB)	9	$2,080	

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Mono	395	88.4	90.7	2.3	15 miles north of Bridgeport	Add truck climbing lane (SB)	9	$3,450	
Mono	395	93.7	94.8	1.1	18 miles north of Bridgeport	Add passing lanes (NB & SB)	9	$1,700	
Mono	395	116.5	117.5	1.0	4 miles south of Nevada State Line	Add passing lanes (NB & SB)	9	$1,550	
Mono	395	117.0	120.5	3.5	2 miles south of Nevada State Line	Widen 2 lanes to 4 lanes	9	$7,600	
Mono County Totals				*35.2*				*$52,672*	*$0*
Monterey	1	91.4	95.2	3.8	Castroville to Watsonville	Widen 2 lanes to 4 lane Expressway	5	$8,000	
Monterey	1	95.2	98.4	3.2	Castroville to Watsonville	Widen 2 lanes to 4 lane Expressway	5	$15,000	
Monterey	1	98.4	100.5	2.1	Castroville to Watsonville	Widen 2 lanes to 4 lane Expressway	5	$7,000	
Monterey	1	100.5	101.5	1.0	Castroville to Watsonville	Construct 4 lane Freeway plus interchange	5	$0	$14,000
Monterey	68	12.6	15.0	2.4	5 miles west of Salinas	Construct 4 lane Freeway on new alignment	5	$0	$33,550
Monterey	101	R91.5	98.7	7.2	Prunedale Bypass	Construct 4 lane Freeway on new alignment	5	$70,000	$70,000
Monterey	101	98.7	101.3	2.6	Prunedale Bypass Extension	Widen 4 lane Freeway to 6 lanes	5	$14,000	
Monterey	156	R1.3	T5.2	3.9	Castroville to Prunedale	Construct 4 lane Freeway	5	$25,000	
Monterey County Totals				*26.2*				*$139,000*	*$117,550*
Napa	12	0.0	3.3	3.3	Route 29 to Route 80 (Napa)	Widen 2 lanes to 4 lanes	4	$15,000	
Napa County Totals				*3.3*				*$15,000*	*$0*
Nevada	49	0.0	2.0	2.0	Auburn to Grass Valley	Construct 4 lane Expressway	3	$10,000	
Nevada	49	2.0	7.3	5.3	Auburn to Grass Valley	Construct 4 lane Expressway	3	$11,000	$11,000
Nevada	49	7.2	13.3	6.1	Auburn to Grass Valley	Right of Way only for 4 lane Expressway	3	$15,000	
Nevada	49	8.8	10.1	1.3	Auburn to Grass Valley	Add signals & passing lanes (NB)	3	$1,500	
Nevada	267	0.0	R2.8	2.8	Truckee Bypass	Construct 4 lane Expressway on new alignment	3	$20,000	$6,000
Nevada County Totals				*17.5*				*$57,500*	*$17,000*
Orange	1	11.5	12.4	0.9	North of Laguna Beach	Widen 4 lanes to 6 lanes	12	$2,076	
Orange	74	1.5	2.8	1.3	2 miles east of San Juan Capistrano	Widen 2 lanes to 4 lanes plus replace bridge	12	$3,924	
Orange County Totals				*2.2*				*$6,000*	*$0*
Placer	49	11.2	11.4	0.2	Auburn to Grass Valley	Construct 4 lane Expressway	3	$1,000	
Placer	267	4.0	6.5	2.5	North Star	Add passing lanes (SB)	3	$1,500	
Placer County Totals				*2.7*				*$2,500*	*$0*
Plumas	70	33.1	36.6	3.5	Keddie (West)	Widen to 32 feet & add truck climbing lane (EB)	2	$3,705	
Plumas	70	40.0	41.5	1.5	Snake Lake	Add passing lanes (EB & WB)	2	$1,910	
Plumas	70	46.2	47.0	0.8	La Porte Rd	Add passing lane (EB)	2	$692	

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Plumas	70	48.1	48.8	0.7	Chandler Rd	Add passing lane (EB)	2	$595	
Plumas	70	51.3	52.0	0.7	West Slope Lee Summit	Add passing lane (EB)	2	$552	
Plumas	70	52.3	53.2	0.9	West Slope Lee Summit	Add passing lane (EB)	2	$626	
Plumas County Totals				*8.1*				*$8,080*	*$0*
Riverside	15	35.6	37.6	2.0	Corona	Widen 6 lane Freeway to 8 lanes	8	$6,600	
Riverside	74	0.0	11.8	11.8	Ortega Highway	Widen 2 lanes to 4 lanes	8	$16,500	
Riverside	74	11.8	R14.2	2.4	Lake Elsinore	Widen 2 lanes to 4 lanes	8	$2,700	
Riverside	74	17.3	25.7	8.4	Lake Elsinore to Perris	Widen 2 lanes to 4 lanes	8	$11,000	$11,000
Riverside	74	25.7	27.5	1.8	Perris	Widen 2 lanes to 4 lanes	8	$3,400	$3,400
Riverside	74	34.3	37.4	3.1	5 miles west of Hemet	Widen 4 lanes to 6 lanes	8	$3,300	
Riverside	86	R2.4	R10.7	8.3	15 miles south of Coachella (Stage 2)	Construct 4 lane Expressway on new alignment	11	$15,800	
Riverside	86	R10.7	R12.8	2.1	10 miles south of Indio	Upgrade 4 lane Expressway to 4 lane Freeway	11	$4,500	
Riverside	86	R12.8	R22.5	9.7	10 miles south to Indio	Upgrade 4 lane Expressway to 4 lane Freeway	11	$6,000	
Riverside	215	R9.0	18.5	9.5	Rancho California	Widen 4 lane Freeway to 6 lanes	8	$28,600	
Riverside	215	18.5	23.2	4.7	Sun City	Widen 4 lane Freeway to 6 lanes	8	$15,500	
Riverside	215	23.2	27.6	4.4	South of Perris	Widen 4 lane Freeway to 6 lanes	8	$14,500	
Riverside County Totals				*68.2*				*$128,400*	*$14,400*
Sacramento	5	27.2	33.5	6.3	Sacramento to Metro Airport	Widen 4 lane Freeway to 6 lanes	3	$12,000	
Sacramento	16	4.0	12.0	8.0	South of Mather AFB	Widen 2 lanes to 4 lanes plus left turn lane	3	$10,000	$1,000
Sacramento County Totals				*14.3*				*$22,000*	*$1,000*
San Benito	101	0.0	3.1	3.1	South of Route 156	Upgrade to 6 lanes	5	$22,000	
San Benito	101	3.1	7.6	4.5	North of Route 156	Upgrade to 6 lanes	5	$16,000	
San Benito	156	3.3	7.3	4.0	San Juan Bautista	Widen 2 lanes to 4 lane Expressway	5	$11,000	
San Benito County Totals				*11.6*				*$49,000*	*$0*
San Bernardino	15	43.1	53.3	10.2	North of Victorville	Widen 4 lane Freeway to 6 lanes	8	$36,800	
San Bernardino	15	70.0	74.4	4.4	Barstow	Widen 4 lane Freeway to 6 lanes	8	$14,500	
San Bernardino	18	31.7	34.5	2.8	Running Springs	Widen 2 lanes to 4 lanes	8	$3,900	
San Bernardino	18	46.6	49.1	2.5	Big Bear	Widen 2 lanes to 4 lanes	8	$10,200	
San Bernardino	18	51.6	53.9	2.3	Big Bear City (W)	Widen 2 lanes to 4 lanes	8	$5,500	
San Bernardino	18	94.4	96.6	2.2	Victorville	Widen 4 lanes to 6 lanes	8	$2,400	
San Bernardino	38	45.7	49.5	3.8	Big Bear City (E)	Widen 2 lanes to 4 lanes	8	$2,500	
San Bernardino	58	0.0	5.4	5.4	Kern County to Route 395	Widen 2 lanes to 4 lane Expressway	8	$13,500	

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
San Bernardino	58	5.4	9.0	3.6	East of Route 395	Widen 2 lanes to 4 lane Expressway	8	$9,000	
San Bernardino	58	9.0	12.9	3.9	5 miles east of Route 395	Widen 2 lanes to 4 lane Expressway	8	$9,800	
San Bernardino	58	22.7	32.9	10.2	Hinkley	Widen 2 lanes to 4 lane Expressway	8	$25,500	
San Bernardino	395	R4.0	11.2	7.2	10 miles south of Adelanto	Widen 2 lanes to 4 lane Expressway	8	$10,100	
San Bernardino	395	11.2	18.9	7.7	Adelanto	Widen 2 lanes to 4 lane Expressway	8	$10,800	
San Bernardino	395	18.9	46.0	27.1	Adelanto to Route 58	Widen 2 lanes to 4 lane Expressway	8	$29,500	
San Bernardino	395	46.0	73.5	27.5	Route 58 to Red Mountain	Widen 2 lanes to 4 lane Expressway	8	$38,500	
San Bernardino County Totals				*120.8*				*$222,500*	*$0*
San Diego	905	8.8	12.0	3.2	Urban Limit to Mexican Border (Stage 1)	Construct 4 lane Expressway on new alignment	11	$15,000	
San Diego	905	8.8	12.0	3.2	Urban Limit to Mexican Border (Stage 2)	Construct 4 lane Expressway on new alignment	11	$20,000	
San Diego	905	8.8	12.0	3.2	Urban Limit to Mexican Border (Stage 3)	Convert 4 lane Expressway to 4 lane Freeway	11	$11,000	
San Diego County Totals				*3.2*				*$46,000*	*$0*
San Joaquin	99	1.9	5.8	3.9	Ripon to Manteca	Widen 4 lane Freeway to 6 lanes	10	$5,500	
San Joaquin	99	5.8	16.5	10.7	Manteca to Stockton	Widen 4 lane Freeway to 6 lanes	10	$15,500	
San Joaquin	120	R1.4	T6.9	5.5	Manteca Bypass	Convert to 4 lane Freeway	10	$20,000	
San Joaquin	120	6.2	7.3	1.1	East Manteca	Widen to 4 lanes plus left turn lane	10	$1,545	
San Joaquin	205	L0.0	R12.8	12.8	Tracy	Widen 4 lane Freeway to 6 lanes	10	$29,969	
San Joaquin County Totals				*34.0*				*$72,514*	*$0*
San Luis Obispo	46	32.2	36.4	4.2	5 miles east of Paso Robles	Widen 2 lane Expressway to 4 lanes	5	$9,000	
San Luis Obispo	46	36.4	40.6	4.2	8 miles east of Paso Robles	Widen 2 lane Expressway to 4 lanes	5	$13,400	
San Luis Obispo	46	40.6	43.5	2.9	12 miles east of Paso Robles	Widen 2 lane Expressway to 4 lanes	5	$6,600	
San Luis Obispo	101	0.0	0.8	0.8	2 miles north of Santa Maria	Widen 4 lane Freeway to 6 lanes	5	$24,000	
San Luis Obispo	101	13.2	16.4	3.2	Arroyo Grande to Pismo Beach	Widen 4 lane Freeway to 6 lanes	5	$20,000	
San Luis Obispo	101	27.5	30.0	2.5	San Luis Obispo	Widen 4 lane Freeway to 6 lanes	5	$15,000	
San Luis Obispo	101	30.0	36.0	6.0	Cuesta Grade	Add truck climbing lane (NB)	5	$26,000	
San Luis Obispo County Totals				*23.8*				*$114,000*	*$0*
Santa Barbara	101	1.1	4.0	2.9	Carpinteria	Widen 4 lane Freeway to 6 lanes	5	$22,000	$10,000
Santa Barbara	101	4.0	7.1	3.1	Carpinteria	Widen 4 lane Freeway to 6 lanes	5	$13,000	
Santa Barbara	101	62.7	62.7	0.0	Los Alamos at North Junction 101/154	Construct interchange	5	$2,000	$5,000
Santa Barbara	101	82.8	87.2	4.4	5 miles south of Santa Maria	Widen 4 lane Freeway to 6 lanes	5	$20,000	
Santa Barbara County Totals				*10.4*				*$57,000*	*$15,000*

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Santa Clara	101	0.1	4.6	4.5	5 miles south of Gilroy	Convert 4 lane Expressway to 4 lane Freeway	4	$13,500	
Santa Clara	101	6.0	6.1	0.1	Gilroy at South Junction 101/152	Add collector road & loop ramp	4	$560	
Santa Clara	152	9.9	10.0	0.1	Gilroy at North Junction 101/152	Construct ultimate interchange	4	$8,000	
Santa Clara	152	11.1	22.1	11.0	Route 101 to Route 156 (Stage 1)	Construct 4 lane Expressway on new alignment	4	$36,000	
Santa Clara	152	11.1	22.1	11.0	Route 101 to Route 156 (Stage 2)	Construct 4 lane Expressway on new alignment	4	$40,000	
Santa Clara	152	14.9	16.3	1.4	7 miles west of Route 156	Add passing lane	4	$2,800	
Santa Clara	152	19.9	21.1	1.2	2 miles west of Route 156	Add passing lanes (EB)	4	$2,800	
Santa Clara County Totals				*18.3*				*$103,660*	*$0*
Santa Cruz	17	10.8	11.9	1.1	11 miles north of Santa Cruz	Add truck climbing lane (NB)	4	$3,500	
Santa Cruz County Totals				*1.1*				*$3,500*	*$0*
Shasta	5	0.0	3.7	3.7	Cottonwood Hills	Add lane plus widen bridges to 40 feet	2	$8,570	
Shasta	5	22.1	26.0	3.9	Fawndale	Widen 4 lane Freeway to 6 lanes	2	$700	
Shasta	5	28.1	R42.3	14.2	Shasta Lake	Add lane	2	$5,000	
Shasta	44	R3.8	R7.7	3.9	Palo Cedro Fwy	Add lane (EB), modify interchange	2	$13,500	
Shasta	44	R11.4	R12.4	1.0	The Dips	Construct 4 lane Expressway on new alignment	2	$3,125	
Shasta	44	R14.8	R15.9	1.1	Bear Creek	Add passing lanes (EB & WB)	2	$920	
Shasta	44	R21.4	32.1	10.7	Shingletown	Add passing lanes	2	$4,000	
Shasta	44	R25.3	R26.1	0.8	Shasta Forest	Add passing lanes (EB) & improve curve	2	$576	
Shasta	44	36.4	37.2	0.8	Starlight Pines	Add passing lanes (EB)	2	$400	
Shasta	44	52.7	53.3	0.6	Eskimo Hill	Add passing lanes (WB)	2	$360	
Shasta	44	65.2	66.2	1.0	Hat Creek Rim	Add passing lanes (EB)	2	$457	
Shasta	299	0.0	8.5	8.5	Buckhorn	Realign & widen 2 lanes to 4 lane Expressway	2	$52,700	
Shasta	299	16.4	17.5	1.1	Shasta Divide	Add truck climbing lane (WB)	2	$760	
Shasta	299	17.7	19.0	1.3	Old Shasta	Construct 4 lane Expressway on new alignment	2	$3,750	
Shasta County Totals				*52.6*				*$94,818*	*$0*
Siskiyou	5	R51.2	R58.2	7.0	Anderson Grade	Add truck climbing lanes	2	$5,000	
Siskiyou	97	L0.4	4.4	4.0	Weed	Add 2 lanes for 4 lane Expressway	2	$6,131	
Siskiyou	97	27.6	28.6	1.0	Tennant Bray	Add passing lane (NB)	2	$501	
Siskiyou	97	33.0	34.4	1.4	North Slope Mt. Hebron	Add passing lane (SB)	2	$701	
Siskiyou	97	49.3	51.8	2.5	Dorris	Construct 4 lane Expressway on new alignment	2	$10,100	
Siskiyou County Totals				*15.9*				*$22,433*	*$0*

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Solano	12	0.0	R2.6	2.6	Route 29 to Route 80 (Solano)	Widen 2 lanes to 4 lane Expressway	10	$11,191	
Solano	12	22.7	25.6	2.9	Rio Vista	Widen & realign	10	$3,740	
Solano	80	31.2	40.6	9.4	Dixon	Widen 6 lane Freeway to 8 lanes	10	$17,470	
Solano County Totals				*14.9*				*$32,401*	*$0*
Sonoma	101	0.0	1.3	1.3	5 miles south of Petaluma	Convert 4 lane Expressway to 4 lane Freeway	4	$20,940	
Sonoma	101	1.3	3.2	1.9	Petaluma	Convert 4 lane Expressway to 4 lane Freeway	4	$13,130	
Sonoma County Totals				*3.2*				*$34,070*	*$0*
Stanislaus	120	3.5	R6.3	2.8	Oakdale Bypass (Phase 1)	Construct 2 lane Expressway on new alignment	10	$14,030	
Stanislaus	120	R6.2	R6.5	0.3	Oakdale Bypass (Phase 2)	Construct interchange	10	$4,000	
Stanislaus	120	7.3	10.3	3.0	5 miles east of Oakdale	Widen 2 lane Expressway to 4 lanes	10	$6,367	
Stanislaus	120	R11.2	R15.0	3.8	Lover's Leap Bypass	Construct 4 lane Expressway on new alignment	10	$36,128	
Stanislaus	120	R15.0	R17.3	2.3	10 miles east of Oakdale	Widen 2 lanes to 4 lane Expressway	10	$7,060	
Stanislaus County Totals				*12.2*				*$67,585*	*$0*
Tehama	5	28.2	42.1	13.9	Hooker Creek Hills	Widen 4 lane Freeway to 6 lanes	2	$6,000	
Tehama	99	0.0	4.5	4.5	15 miles north of Chico	Widen 2 lane Expressway to 4 lanes	2	$5,200	
Tehama County Totals				*18.4*				*$11,200*	*$0*
Trinity	299	29.4	30.2	0.8	Manzanita Creek	Add passing lanes (WB)	2	$831	
Trinity	299	37.1	37.9	0.8	Helena	Add passing lanes (EB)	2	$2,102	
Trinity	299	44.8	45.6	0.8	Junction City	Add passing lanes (EB & WB)	2	$904	
Trinity	299	45.5	46.9	1.4	Oregon Mountain	Add truck climbing lane (EB)	2	$2,100	
Trinity	299	49.2	54.4	5.2	Weaverville	Improve capacity	2	$20,200	
Trinity	299	56.7	57.1	0.4	Weaver Creek	Add passing lanes (WB)	2	$645	
Trinity	299	72.0	72.3	0.3	Buckhorn	Realign & widen 2 lanes to 4 lane Expressway	2	$1,500	
Trinity County Totals				*9.7*				*$28,282*	*$0*
Tulare	65	0.0	R7.0	7.0	15 miles south of Porterville	Widen 2 lane Expressway to 4 lanes	6	$7,700	
Tulare	65	R7.0	17.7	10.7	5 miles south of Porterville	Widen 2 lane Expressway to 4 lanes	6	$11,800	
Tulare	65	29.3	R38.1	8.8	Lindsay to Exeter	Construct 2 lane Expressway on new alignment	6	$16,810	
Tulare	99	0.0	9.2	9.2	Delano to Earlimart	Widen 4 lane Freeway to 6 lanes	6	$11,400	
Tulare	99	9.2	18.4	9.2	Pixley to Tipton	Widen 4 lane Freeway to 6 lanes	6	$10,860	
Tulare	99	30.6	39.6	9.0	Tulare to Near Visalia	Widen 4 lane Freeway to 6 lanes	6	$12,050	
Tulare	99	39.6	R53.9	14.3	Visalia to Kingsburg	Widen 4 lane Freeway to 6 lanes	6	$18,550	
Tulare	198	0.0	R3.3	3.3	Hanford to Visalia	Widen 2 lanes to 4 lane Expressway	6	$6,700	

APPENDIX "E":
IRRS PROJECT RECOMMENDATIONS BY COUNTY (cont'd)

County	State Route	Beginning Post Mile	Ending Post Mile	Project Length	PROJECT DESCRIPTION Location/Name	Improvement	Caltrans District	1989* State Cost	1989* Local Cost
Tulare	198	29.7	34.4	4.7	5 miles east of Lemon Cove	Extend passing lane (EB)	6	$1,200	
Tulare County Totals				*76.2*				*$97,070*	*$0*
Tuolomne	108	R2.0	R6.9	4.9	East Sonora Bypass	Right of Way only for 4 lane Freeway	10	$10,300	
Tuolomne	108	R2.0	R4.5	2.5	East Sonora Bypass	Construct 2 lane Expressway on new alignment	10	$17,138	
Tuolomne	108	R4.5	R6.9	2.4	5 miles east of Sonora	Construct 2 lane Expressway on new alignment	10	$15,100	
Tuolomne County Totals				*9.8*				*$42,538*	*$0*
Ventura	1	0.0	9.9	9.9	Southern Ventura County	Spot widen to 4 lanes	7	$4,900	
Ventura	**101**	**R39.9**	**R43.2**	**3.3**	**15 miles west of Ventura**	**Upgrade to 6 lane Freeway**	**7**	**$25,000**	
Ventura County Totals				*13.2*				*$29,900*	*$0*
Yolo	80	0.0	9.1	9.1	Davis to West Sacramento	Widen 6 lane Freeway to 8 lanes	3	$33,000	
Yolo County Totals				*9.1*				*$33,000*	*$0*
Yuba	20	8.2	10.1	1.9	10 miles east of Marysville	Widen, realign & add passing lane	3	$3,000	
Yuba County Totals				*1.9*				*$3,000*	*$0*
Statewide Totals								**$3,013,569**	**$230,225**

High Emphasis Route

* In $1000's

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