The Federal Highway Administration
California Division
and
The California Department of Transportation
Division of Local Assistance

FINAL REPORT ON DELIVERY OF FEDERAL-AID LOCAL AGENCY ROADWAY SAFETY PROJECTS

(FHWA #S50869 and CALTRANS #07-05)

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11/13/07

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I. EXECUTIVE SUMMARY

Concerns regarding low delivery of traffic safety projects and low expenditure of federal safety program funds were identified in a recent Federal Highway Administration (FHWA) 2006 Annual Risk Analysis report and discussed at a County/State/Federal Cooperative Committee meeting on December 2006, respectively. The concept of this report is a collaborative effort between the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) to address those concerns through the formation of a review team with local agency participation. The team examined records of past and current safety projects, conducted stakeholder interviews, and performed a statewide survey. Through the collective results of each of these investigative activities, findings and recommendations are presented.

The goal of this report is to identify major factors that are the cause for local safety project delivery delays, specifically the Hazard Elimination Safety (HES) Program. To proceed with this task, the team broke down the project development process into twenty milestones with their process owners identified. The findings of the team's investigative efforts were then examined against the milestones to see if there were significant factors that would emerge.

In addition to the findings and recommendations that are presented later in the report along with the attachments, the three major issue areas the team determined are:

1. Data management practice,
2. Staffing, and the
3. Ambivalent attitude towards the HES program.

Good data management practices, such as timely input of completion and payment dates and fund amounts information, were found to be very important to monitor program health and project progress. Currently, project information is located in various databases and physical file sources. The recommendation is to standardize data management practice to achieve uniformity and a consistent level of quality.

Retaining and recruiting experienced staff at the local agency level was also found to be a concern. To address staffing is difficult, since each agency has

its own unique set of constraints and financial abilities to retain and recruit staff. The recommendation is to interview and survey additional personnel to find out what the actual staffing problems are and then to make additional recommendations that specifically target these problem areas.

A number of local agencies interviewed do not hold the HES Program in high regards because the chance of securing HES funds ranges from 15% to 25%, historically, and the maximum project amount is only $360,000. It is difficult for a local agency to make safety project commitments and to program resources when the success rate of obtaining HES funds is so low. Again, this is another opportunity for federal, state, and local agencies to work collectively towards a safety program that is more accessible, reliable, and realistically addresses needed safety projects. The recommendation is to promote open discussion, for example, by committees or forums held regularly to share issues and concerns.

The following specific recommendations are grouped by their degree of streamlining as high, medium, and low priority.

High Priority Recommendations:

- Investigate, identify and add needed key data fields to ensure better project tracking and delivery in the current LP2000 database used to track HES projects. Improved data quality would benefit the HES program and, in general, all local projects administered by Caltrans Division of Local Assistance by: 1) accurately monitoring real-time status of individual project advancement (proactive) and 2) determining where improvements are needed. Once problems are identified, prompt actions can be deployed to minimize delay and promote timely expenditure of safety funds (reactive).
- Examine the HES (State) project development process by identifying measures that have improved project delivery and incorporate these measures into the HES (local agency) project development process.
- Survey and hold yearly face-to-face meeting with local agencies to identify issues and improve communication.
- Solicit candidate projects well in advance of the Federal Fiscal Years for which they will be programmed in the FTIP. Schedule the release of a Program Plan to coincide with the bi-annual preparation of the FTIP. Exercise the "Expedited Project Selection Procedure" to advance funds for projects programmed in outer years.

Medium Priority Recommendations:

- Conduct follow-up interviews or surveys with Caltrans District Local Assistance Engineers and local agencies to determine whether or not the problem is actually a lack of staff or a lack of well-trained staff. Investigate the distribution of employee classifications and experience levels to determine if certain mixtures are more appropriate than others including whether using engineering consultants would be beneficial.
- Conduct follow-up interviews and/or surveys with experienced individuals in the delivery of HES projects on suggestions for improvement that could strengthen (or diminish) the concerns already identified by this study.
- Conduct a detailed survey to possibly identify specific environmental issues/constraints, in addition to reviewing the Local Assistance Procedures Manual, Chapter 6 and permitting process for improvements.

Low Priority Recommendations:

- Identify and provide training to those areas that need it most plus providing model applications with time lines for HES process (e.g., flow chart with time lines) to everyone involved.
- Investigate different ways to expedite the E-76 process for Preliminary Engineering and Construction as it relates to safety projects.
- Maintain the current Federal share at 90% (i.e., 10% local agency funding match).

The team recognizes current resources at all levels are insufficient to carry out the many recommendations in this report, and there are no expectations or mandates to find new resources or to redirect existing resources for these recommendations. This report has captured the issues in the safety program as a starting point to develop workable solutions, provided that there are adequate resources.

In brief, this report tackled many issues that are broad and the solutions are complex and long term. We believe the first step is direct communication. This was successfully achieved with live interviews and a Caltrans/local

agency accessible statewide survey from which a number of positive comments were received. Through this report, the responsibility is being shared with FHWA, Caltrans, and local agencies to consider the recommendations herein presented.

II. INTRODUCTION

This past year 2006, California safety stakeholders lead by Caltrans developed a data-driven Strategic Highway Safety Plan (SHSP). The data in this report, among other things, indicates that more fatalities occur on local roads (approx. 55%) than on the State Highway System (approx. 45%). Safety stakeholders in the 4E's (Engineering, Enforcement, Education and Emergency Medical Services) all agree that resources for local road safety needs are insufficient and will need to be increased substantially. Funding needs is an issue that is beyond the scope of this review. This review will examine and look for improvements to the existing safety program.

III. BACKGROUND

A FHWA internal risk assessment points to a number of areas within the safety program that have high risk scores. These high scores may be influenced by any one or a combination of factors consisting of local staffing levels and resources, local operational procedure/guidance, and the potential to adversely affect or improve public safety. This assessment prompted FHWA to conduct a joint review with Caltrans and local agencies to examine the risks and look for possible actions to reduce those high risk scores. The team was to seek improvement opportunities in program implementation, administration of Caltrans' Local Assistance Safety Programs, FHWA roles and practices, and local agency roles and practices.

Additionally, in discussions with Caltrans Division of Local Assistance, Caltrans is concerned that funds are not being expended in a timely fashion, whereas, FHWA is concerned with project delivery. These two concerns are not mutually exclusive; they are really interrelated or dependent events. A low expenditure activity indicates a low project output and thus, results in low project delivery. By examining one of the two concerns, both concerns are being addressed. With this in mind, FHWA and Caltrans agreed to go forward with a review to examine the local HES Program and seek improvement opportunities[1].

[1] When viewing the overall program, the team recognized that appropriate selection of safety projects is the top priority followed by the timely delivery of these projects. However, given the fact that the current process for selecting the priority of safety projects is likely to change through the efforts of the California SHSP, it was proposed to concentrate on ways to facilitate the delivery of HES projects. The timeline to review proper selection of safety projects will be determined by the progress of the California SHSP.

IV. THE REVIEW TEAM

A small inter-agency team comprised of FHWA California Division Office Engineering Services, Caltrans Local Assistance, and local agency representatives conducted this review. Team members and other subject resources with applicable expertise assisted on an "as needed" basis. Team members are listed in the table below.

Team Members	
Name	Agency
Ken Kochevar, Chair	FHWA
Matt Schmitz	FHWA
Wes Rutland-Brown	FHWA
Denny Fong	Caltrans
Randy Ronning	Caltrans
Gene Shy	Caltrans
Butch Britt	County of Ventura

V. SCOPE

The team began by developing a work plan to examine the project development process of Local HES projects.[2] To start this process the team developed, examined and discussed the major HES milestones of the project development process.[3] This entailed analyzing current data and processes,[4] interviewing personnel from the FHWA California Division, Caltrans Headquarters Local Assistance, Caltrans District Local Assistance Engineers, and local agencies[5] and finally, conducting a statewide survey[6] to gather information.

The measurement criteria used are:

1) Compare the number of local HES safety projects programmed in the Federal State Transportation Improvement Program (FSTIP) versus the number of those projects that have been delivered.

[2] See Attachment A for this work plan dated May 2, 2007.
[3] See Attachment B for project development milestones.
[4] See Attachment C for details of data analysis and summaries
[5] See Attachment D for interview minutes
[6] See Attachment E for details and results of survey

2) The time taken to deliver local HES safety projects after programming.

The review objectives covered are:

1) Determine the effectiveness of the current process for completing local HES projects by documenting the path of project development with critical timelines.
2) Present recommendations for improving project development timeliness of local HES projects after analyzing data and interviewing/surveying Federal, State and local agency personnel.
3) Identify potential methods to monitor the health of the program in coming years.

VI. RESULTS SUMMARY

The findings of this report came from a variety of sources including the LP2000 database, in-person interviews with Districts 3 and 4, a statewide survey distributed to all Caltrans District Local Assistance Engineers and local agencies through the League of California Cities and the California State Association of Counties, staff inputs from FHWA, Caltrans Local Assistance, local agencies, and the review team. More detailed results and analyses are available in the attachments of this report. This summary section will only focus on some of the more general and significant findings.

EXISTING PROJECT RECORDS RESULTS

According to the LP2000 database, since 2000 the average HES project has taken 1606 days (or about 4 years and 4 months) to deliver from notification of HES funding award to close out as shown on Figure 1. There was a large variation in this time, however, with some projects taking less than two years and some taking more than six. Furthermore, according to the database, 40% of projects funded in 2000 still are not complete. As this average only represents the completed projects, the true average time to complete a project may be much higher.

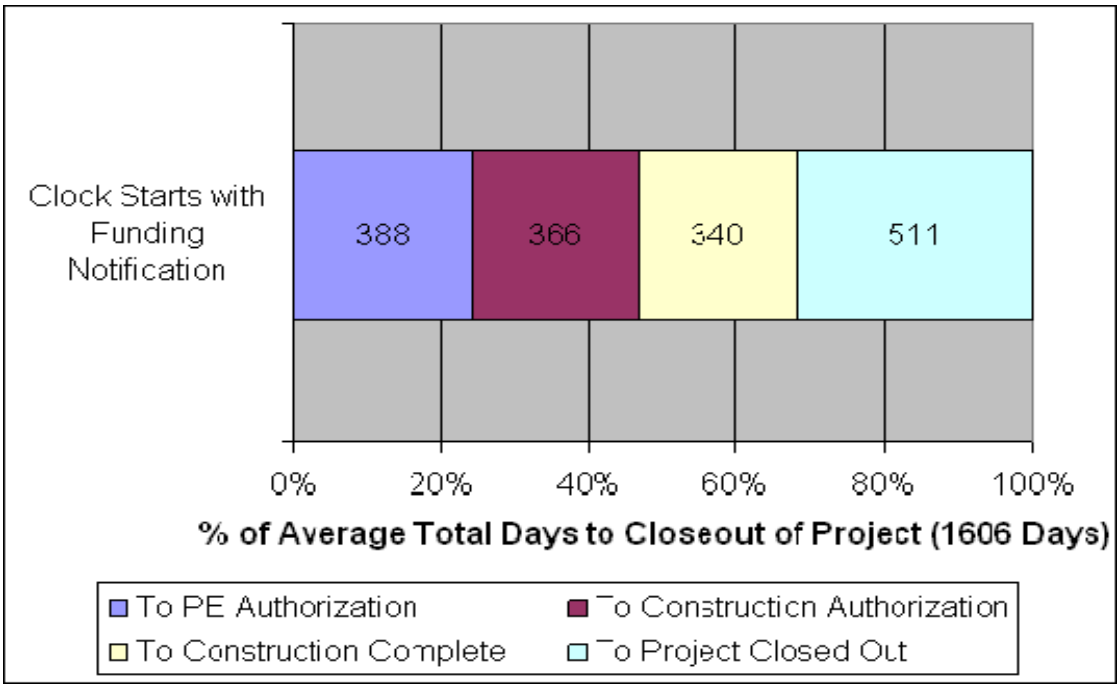
In addition, the average time for each project delivery phase is as follows:

- Start to preliminary engineering (PE) takes 388 days (1 year) (24%)
- PE to Construction authorization takes 366 days (1 year) (23%)
- Completing construction takes 340 days (1 year) (21%)
- Project close-out takes 511 days (1.4 years) (32%)

In the total time period of 4 years and 4 months, the project close-out phase is the longest and takes up 32% of the time. The next longest is obtaining authorization for preliminary engineering, which takes 24%. The construction phase is the shortest at 21%. Starting and closing out are the two most time consuming project delivery phases. However, true project completion could be interpreted as the end of construction, making the average delivery time three years rather than four plus years.

There are many complexities one needs to consider when interpreting results from the LP2000 database, chief among which is that most dates in the LP2000 database are blank, and it is not possible to know without further review if these are blank because that stage of the project has not yet occurred or if it is because this date was never entered/recorded in the database. There were only 36 HES projects (out of a universe of more than 500) since 2000 that have dates present for each stage of project design highlighted in Figure 1. The small population of records with these dates, along with the large variability among them, means this data is not conclusive in determining how long it takes HES projects to be delivered. More detailed analysis of the LP2000 results, including analyses by time, additional phases, type or project, etc. are in Attachment C.

Figure 1:
Days to Complete Phases of Project Delivery for HES Projects



LOCAL AGENCY INTERVIEWS

The following is a list of issues captured from the perspective of eight local agencies[7] interviewed in April and May of 2007. This is only a snapshot of eight agencies out of 536 local agencies[8] in the state. The views of these eight agencies are not necessarily in agreement as a group nor do they represent all local agencies in the state.

Issues:

1. The timeline from project application to amending the FTIP can take about one year. This is too long for a safety project.
2. Insufficient and inexperience local agency staff. Major impact when key personnel are no longer available. Also, local agencies are uncomfortable for processes that they cannot control. The process to secure federal funding is too bureaucratic and is not worth it if other funding sources are available. With local funds, a project takes six to

[7] Local agencies involved are: Yuba County, Colusa County, Pleasant Hill City, Town of Moraga, Santa Anna City, Los Angeles County; Contra Costa County, and Ventura County.
[8] This total is comprised of 58 counties and 478 cities.

nine months to complete; whereas, with federal funds, it would take two to three years.

3. Typically, federal funded safety projects are not locally planned or programmed until funds are secured. It is difficult to make commitments when the success rate of securing program funds is only 15%, more or less.
4. The FTIP process, controlled by the MPO, can add up to three months or more depending on their cycle for amendment or revision.
5. For small local agencies, if federal fund are not secured, their project is shelved.
6. Some local agencies are reluctant to apply and are frustrated after numerous unsuccessful attempts to secure federal funds for HES projects.
7. Poor project scoping and estimate performed prior to awarding of funds could result in delay after award.
8. Local projects that are already planned and budgeted have priority over later projects that are federally funded.
9. Many projects are on a "shoestring," with uncertain funding. There is already a funding shortage at the beginning with the hopes of securing additional funding from other sources prior to construction. When this is unsuccessful, projects get delayed or become inactive.
10. District office of Local Assistance does not have sufficient staff to provide greater support.

For more interview results, see Attachment D.

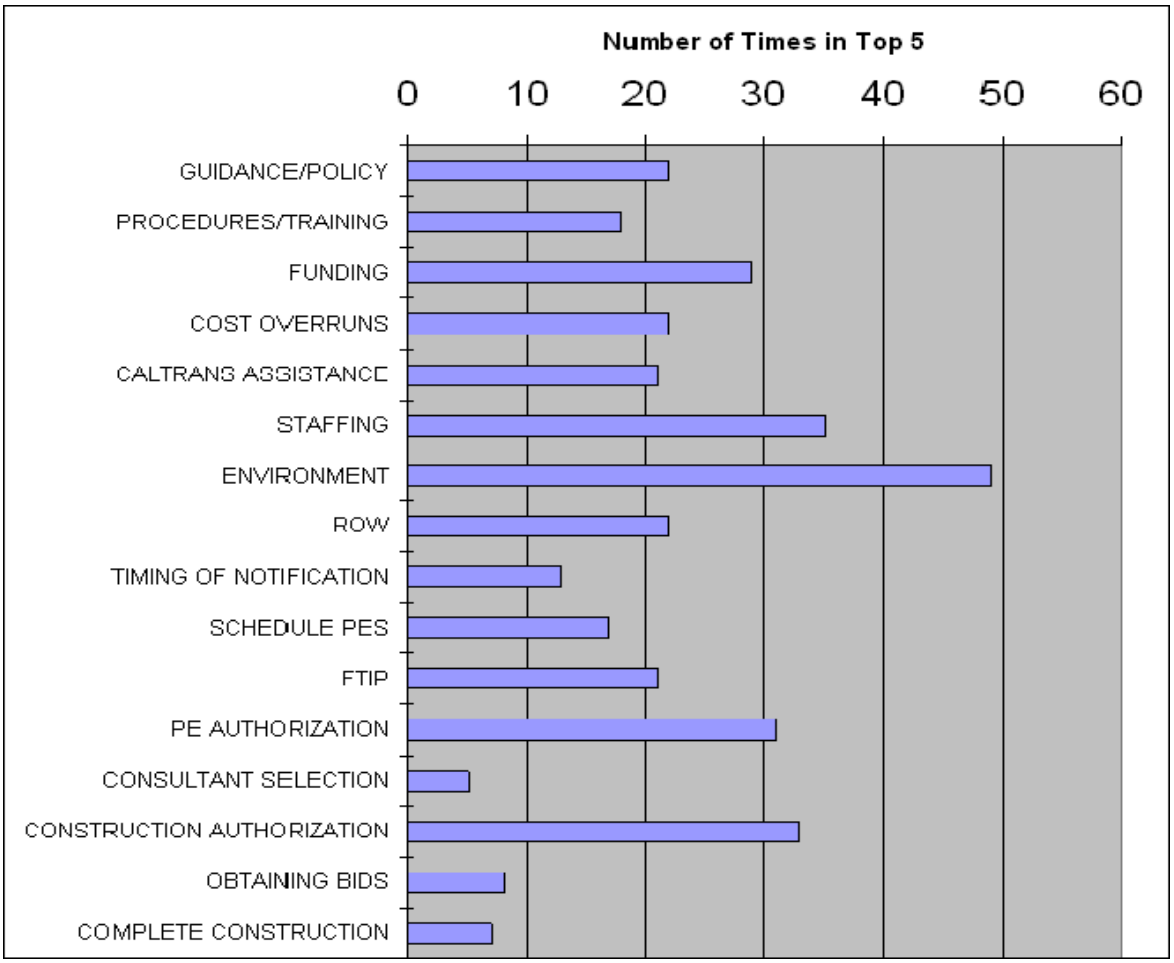
STATEWIDE SURVEY RESULTS

Responses to an online survey (see Attachment E) were received from 139 staff from local agencies and Caltrans. There were responses from every District and from people with a wide range of experience in transportation and with HES projects. When asked to rank from a list, the top 5 issues they felt contributed to the delay of HES projects, environmental issues were perceived as the biggest area of concern. The results are summarized in Figure 2. Lack of staffing, concerns associated with E-76 authorizations and funding issues were also more common in the top 5 than any other issue. The survey included specific rankings for these concerns as well as "strongly agree /disagree" questions on each of these topic areas. These results further confirmed that these areas were the greatest concerns as contributors to

delay and are presented in greater detail in Attachment E. From Figure 2, the perceived top five issues, from high to low, are:

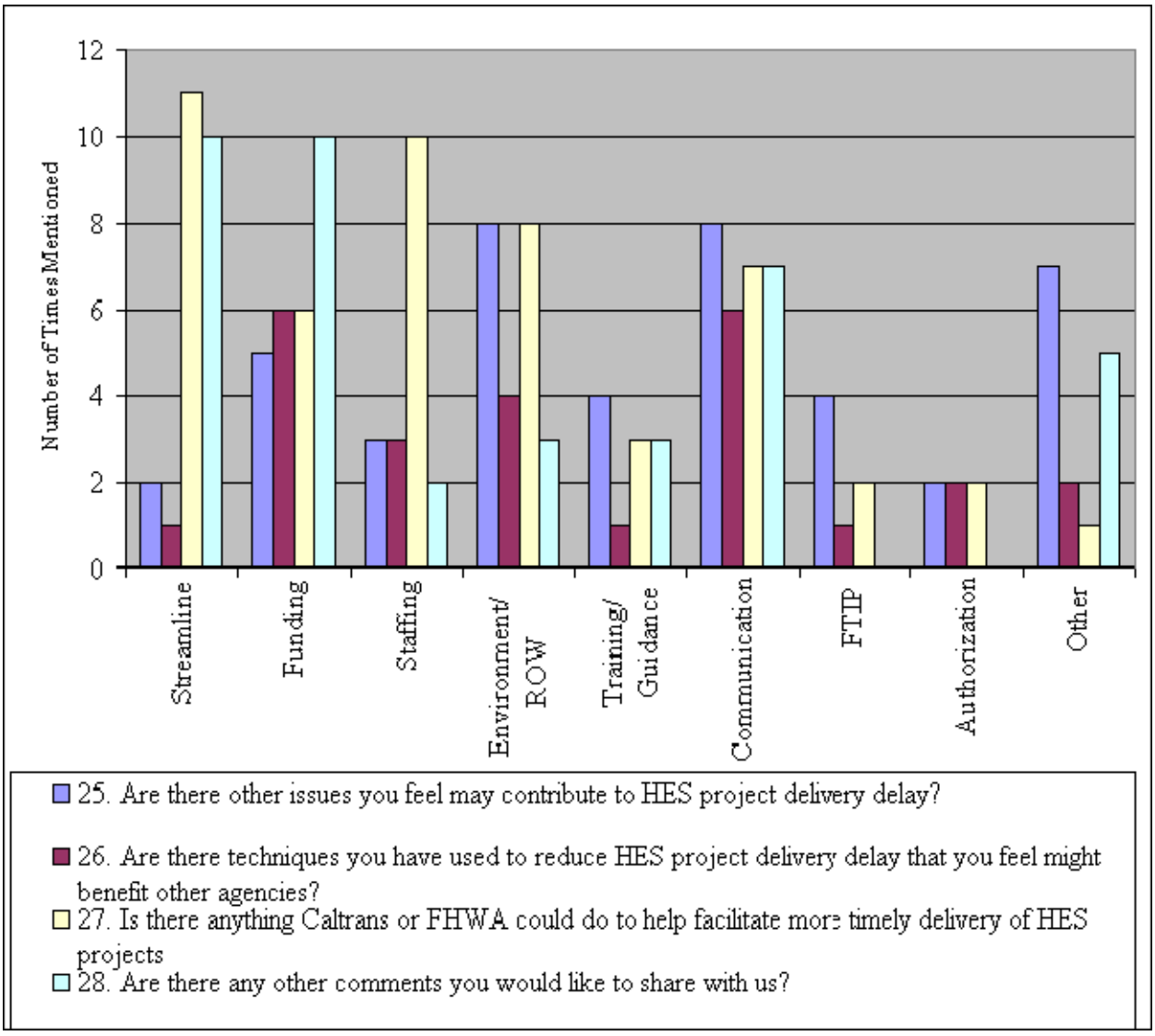
1. Environmental
2. Staffing
3. Construction authorization
4. PE authorization
5. Funding

Figure 2:
Number of Times Issue Ranked in the Top 5
as Contributor to Delay Among Survey Respondents



The survey also asked participants four open-ended questions regarding factors that contribute to the delay of or help facilitate the HES project development process. These qualitative results are summarized in Figure 3.

Figure 3:
Number of Qualitative Responses to Questions by Topic Area of Response (See Attachment E for responses)



On the whole, the results presented in this section provide some indication of contributors to delay in the HES process and served as a starting point for the recommendations and findings. Interviews in the two Caltrans Districts echoed many of these same concerns.

VII. FINDINGS AND RECOMMENDATIONS

The following findings and recommendations from this process review were developed and prioritized from review of an initial LP2000 data analysis

(i.e., Caltrans Headquarters Local Assistance data base for HES projects), interviews with Caltrans Districts 3 and 4 Local Assistance and their local agencies, and a statewide survey.

Finding 1: The existing data sources used for monitoring the status of an HES project's major milestones need significant improvement. Data are missing, inconsistent, and unreliable. Without better data, it will be difficult to monitor the effectiveness of any changes that are implemented to improve the delivery of HES projects.

In theory, LP2000 should provide the status of all major milestones involved in the delivery of all federally funded local projects, including HES. However, the data retrieved from LP2000 revealed that the completeness of data entry vary vastly among different offices in Caltrans. Key data fields for monitoring project delivery need to be identified and modified/clarified/added as needed to ensure better project tracking and delivery measures.

Recommendation 1: The data used to track and monitor the progress of an HES project needs to be improved. This can likely be accomplished with the current LP2000 database (the primary database used and maintained by the Caltrans Division of Local Assistance), but a more thorough investigation of this system and its limitations is strongly recommended. This database should be made more user friendly; both on the data entry side, and on running regular reports to monitor HES project status. Improved data quality would benefit the HES program and all local projects administered by Caltrans Division of Local Assistance by: 1) accurately monitoring real-time status of individual project advancement (proactive) and 2) determining where improvements are needed once problems are identified, prompt actions can be deployed to minimize delay and promote timely expenditure of safety funds (reactive).

Finding 2: The HES (local agency) project development process is not unique when it is compared to the "general" Federally funded local agency projects on local roads. The survey results showed a high correlation between HES (local agency) and general Federal-aid (local agency) projects.

Recommendation 2: Given that safety is a high priority for both FHWA and Caltrans, the team recommends accelerating the project development

process whenever possible and treating HES projects as unique because safety is a high priority.

The team recommends examining the HES (State) project development process, identifying measures that should improve project delivery and if so incorporating these measures into the HES (local agency) project development process. As an example, it is the team's understanding that HES (State) projects are given top priority where safety project documents have a fuchsia-colored cover to draw attention and expedite actions.

Finding 3: Communication seems to be a significant issue between local agencies and Caltrans from survey responses.

Recommendation 3: The Districts should survey the local agencies that they work with to see what is working well and what could be improved. Suggest also having a yearly face-to-face meeting with the local agencies they work with to discuss the HES processes and issues associated with each.

Finding 4: Recent process changes to incorporate HES projects into the Federal Transportation Improvement Plans (FTIPs) has added to the delay in the delivery of safety projects.

Recommendation 4: Solicit candidate projects well in advance of the Federal Fiscal Years for which they will be programmed in the FTIP. Schedule the release of a Program Plan to coincide with the bi-annual preparation of the FTIP. Exercise the "Expedited Project Selection Procedure" to deliver projects ahead of schedule. It is noted that Caltrans is currently soliciting projects for 2 fiscal years to advance the schedule and delivery of Highway Safety Improvement Program (HSIP) projects. (The HSIP program replaced the HES program.) Caltrans will continue the 2-fiscal year "call for projects" until the HSIP plan has caught up with FTIP programming goals. Consider also examining the practice of amending the FTIP from each Metropolitan Planning Organization (MPO) for streaming lining opportunities, since this process can take up to a year or more. Share successful practices with other MPOs.

Finding 5: Survey data revealed that the lack of staffing contributes to project delay equally for both HES projects and other federally funded projects. Lack of staffing was the highest ranked contributing factor of

delay according to Caltrans survey participants. The lack of staffing is oftentimes cited as a cause of a problem, regardless of the issue being investigated.

Recommendation 5: Review Caltrans District and local agency staffing levels. Interview or survey Caltrans District Local Assistance Engineers and local agency engineers to determine whether or not the problem is actually a lack of staff or a lack of well-trained staff. Investigate the distribution of employee classifications and experience levels in all District Local Assistance offices and local agencies to determine if certain mixtures are more appropriate than others. In addition to this, each agency should examine the use of engineering consultants, if a benefit can be clearly shown.

Finding 6: Those responding to the survey lacked HES experience. Over 2/3 of respondents had more than 10 years of transportation experience, but only 25% had worked on the delivery of 3 or more HES projects in the last 5 years. Therefore, the survey results were not representative of people who had a lot of experience with the delivery of HES projects.

Recommendation 6: Conduct a follow-up investigation to clarify some outstanding HES issues that were not captured in this study. The investigation would focus on interviewing and/or surveying individuals with extensive experience in the delivery of HES projects. These individuals would be in the best position to offer suggestions for improvement and they could strengthen (or diminish) the concerns already identified by this study. This investigation could also include a regional meeting bringing together those who most often receive HES funding. While the survey findings presented in this summary do not have enough information to provide conclusions about what definitively could be done to improve the delivery of HES projects, a more in-depth and focused investigation of those people with extensive HES experience would generate better results.

Finding 7: Local agencies ranked environmental study (along with isolated right of way issues) as the greatest concern contributing to project delivery delay. Due to the lack of specific questions and responses, the team could not come to a conclusion as to what specific environmental issues, if any,

may be contributing to project delivery delay.[9] The environmental process, by nature, does take time. The team found no unique factors associated with the HES programs that are causing undue delays. In addition to this, the examined data of past safety projects shows that closing out a project takes the longest, then follow by starting a project, and then completing the environmental.

Recommendation 7: The team recommends a more detailed survey to gather specifics on environmental concerns/issues in this area. Since the majority of environmental approvals were Programmatic Categorical Exclusions (PCE), the team feels that streamlining is already in place. However, given that the data sample is small and incomplete, the findings may not be accurate. One area the new study should examine is the permitting process that involves resource/regulatory agencies to determine if there are contributing factors causing project delivery delay.

In addition, the team feels that the Local Assistant Procedures Manual, Chapter 6, which includes the Preliminary Environment Studies (PES) form, should be reviewed. It should be noted that Caltrans has recently been assigned the authority, by FHWA, to approve environmental studies. This should reduce the HES project development timeline. District Local Assistance Engineers are aware of this new process and improvements are anticipated.

Finding 8: Not many people responded that training was the biggest factor in delay, but those who did include training in the top five of importance thought it was a very important factor in causing delay. Results did not vary by District, but those with less experience reported this concern more often.

Recommendation 8: Training that covers the basic Federal-aid process on how to begin and complete a project is essential for new employees or those that are not familiar with the current process. Identifying the areas that need this training in each Caltrans District would help improve project delivery of the HES process. Also**,** frustrations and complaints will be reduced by being more proactive and providing model applications with time lines for the HES process (e.g., flow chart with time lines).

[9] Environmental issues were more commonly reported as an issue by people working for "counties." This may be due to the fact that there is a greater chance for environmental issues in rural areas versus environmental issues in urban areas or "cities."

Finding 9: The normal Federal-aid process for processing the E-76 (Preliminary Engineering – PE and Construction - Con) is extremely lengthy compared to other parts of the HES project delivery process based on initial data[10] and was ranked high for contributing to project delivery delay among those surveyed.

Recommendation 9: Investigate different ways to expedite the E-76 process for safety projects. One example where the E-76 process is shortened is during Emergency Opening work of the Emergency Relief program. The possibility of expediting the E-76 process for safety projects in a similar way should be examined.

Finding 10: Many local agencies that responded to the survey ranked local funding as a concern for project delivery. Interview responses also indicate that a local agency's future revenues may not meet what was anticipated at the time HES funds were applied for and the project may be delayed or may not be developed at all.

In addition, locals in the size range of "greater than 500,000" ranked funding as the second highest issue.

Recommendation 10: Maintain the current Federal share at 90% (i.e., 10% local agency funding match). The team discussed the merits and consequences of changing the Federal share to 100%. The following consequences lead the team to recommend no change in the Federal share:

1) Limited HES (local agency) funds would not finance as many safety projects.
2) Requiring no match may result in local agencies being less committed to manage project costs prudently.

VIII. CONCLUSIONS AND DISCUSSION

Given the inconsistency of the records examined and the variety of comments from the survey and interviews, it is not possible to accurately determine the status of the existing HES project development process. The HES project development process does not appear to vary that much in comparison to the regular Federal-aid project development process.

[10] See Attachment C for details of data analysis and summaries

Implementing any of the recommendations presented would be a step towards improving and shortening the current local agency safety project development process. Caltrans in conjunction with FHWA and local agencies should determine how best to implement these recommendations.

In the course of developing this report, the team's effort was very well received. All the people contacted were truly interested to see improvements to the safety program and were generous with their comments. Although some comments were strong and lengthy, this is not necessarily bad. This report has provided an opportunity for them to participate in an improvement process. The key element is really collaboration. This report has provided an impetus for improvement. With open communication, commitment, and a shared goal, future success is imminent.

ATTACHMENT A:

Approved Work Plan

FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
AND
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DIVISION OF LOCAL ASSISTANCE

PROPOSED WORK PLAN TO EXAMINE PROJECT DEVELOPMENT OF LOCAL AGENCY SAFETY PROGRAMS

(PROGRAM AND PROCESS REVIEW WORK PLAN
FHWA #849893 AND CALTRANS #07-05)

Approved by:

5/3/07

Dennis A. Scovill
FHWA California Division
Chief Operating Officer

Terry Abbott
Caltrans
Chief, Division of Local Assistance

ATTACHMENT A:

Approved Work Plan

PURPOSE OF REVIEW

The California Division of the Federal Highway Administration (FHWA) Engineering Services Team, from a recent Annual Risk Analysis, has identified "Focused Safety Programs" to be one of its highest risk for project delivery. Under the current Stewardship Agreement, FHWA and Caltrans are committed to ensuring safety on local agency federal-aid transportation projects.

This review will target the local Hazard Elimination Safety (HES) program and will examine current practices regarding project development to determine efficiencies and actions for improvement if needed. Any recommendations will assure as much as possible prioritized measures taken under the current process or in the future Strategic Highway Safety Implementation Plan (SHSIP) process are funded in a timely manner.

BACKGROUND INFORMATION

This past year California developed a data-driven Strategic Highway Safety Plan (SHSP). Among other things, the data indicates that more fatalities occur on local roads (approx. 55%) than on the State Highway System (approx. 45%). Safety stakeholders in the 4Es (Engineering, Enforcement, Education and Emergency Medical Services) have all stated and agreed that resources for local road safety needs are not adequate and will need to be increased and be more accessible.

This past year's risk assessment conducted by FHWA points to a number of areas that have a higher risk score and can be influenced by the impacts, both positive and negative, of any given safety program, e.g., local staffing levels, local operational procedure/guidance, and the potential to adversely affect or improve public safety. This assessment was another reason prompting FHWA to conduct a joint review with Caltrans and local agencies to look at possible actions to improve the implementation, effectiveness, and efficiency of the Caltrans' Local Assistance Safety Programs, FHWA's practices, and the local agency program applicants' practices as well.

Finally, in discussions with Caltrans Division of Local Assistance, there is a concern that HES projects are not being delivered in a timely manner beyond programming in the FTIP (i.e., delivery of a project is defined as the obligation of construction funds). The most recent Federal Fiscal Year (FFY) 05/06 results show 38 out of 72 projects (approx. 53%) were not delivered in FFY 05/06. FHWA and Caltrans share this concern and agreed that it would be mutually beneficial to participate in this review.

When viewing the overall program, the team recognizes that appropriate selection of safety projects is the top priority followed by the timely delivery of those projects. However, given the fact that the current process for selecting the priority of safety projects is likely to change through the efforts of the California SHSP, it is proposed to postpone that portion of the findings and recommendations until a new process for selecting projects is in-place. The timeline to review proper selection of safety projects will be determined by the progress of

ATTACHMENT A:

Approved Work Plan

the California SHSP. To this end, the team will develop an understanding of the current process for selecting safety projects to use as a baseline for comparison purposes.

REVIEW OBJECTIVES

The review objectives will cover three main areas as follows:

1) Determine the effectiveness of the current process for completing local HES projects by documenting the path of project development with critical timelines.
2) Present recommendations for improving project development timeliness of local HES projects after analyzing data and interviewing/surveying Federal, State and local personnel.
3) Identify potential methods to monitor the health of the program in coming years.

SCOPE

The team will examine the project development process of local assistance HES projects. This will entail analyzing current data and sending surveys to and/or interviewing personnel from the FHWA California Division, Caltrans Headquarters Local Assistance, Caltrans District Local Assistance Engineers, and local agencies. Availability of adequate staffing resources and knowledgeable staff will undoubtedly be significant factors in the outcome of this review. Other factors that may impact the design phase are the type of safety project, environmental factors and right-of-way issues. Personnel from planning and fiscal units as well as program development disciplines will also be interviewed as needed.

APPROACH

The team will begin by getting an understanding of the project development process through discussions amongst themselves and by interviewing District 3 Caltrans and local agency personnel. At the same time, the team will gather data from current data bases to analyze different factors that may affect the project development process timeline. This analysis coupled with observations from District 3 personnel will be used to develop a survey to be sent throughout the state to gather more information on what factors may be adversely affecting the project development process timeline. From here the team will determine if more in-depth reviews will be needed with other Districts or not. The team will identify potential methods to monitor the health of the program (i.e., compare data from one year to the next) in coming years. Once this is done, one will be able to determine whether the recommendations made were appropriate or different recommendations are needed to make a positive change.

The data captured will be analyzed and presented in a draft report that will be circulated for review and comments. The final draft report will be revised appropriately according to those comments and will be submitted to FHWA and Caltrans Local Assistance for approval.

MEASUREMENT CRITERIA

Included below are two preliminary measurement criteria; however, additional criteria may be determined by the review team:

ATTACHMENT A:

Approved Work Plan

- The primary measurement criteria will be the number of local HES safety projects programmed in the Federal State Transportation Improvement Program (FSTIP) verses the number of these projects that have been delivered.
- A second measurement criterion will be the amount of time taken to deliver local HES safety projects after they are programmed.

REVIEW AND RESPONSIBILITY

A small multi-discipline team comprised of FHWA California Division Office Engineering Services, Caltrans Local Assistance and local agency representatives will conduct this review. Team members and other subject resources with applicable expertise will assist on an "as needed" basis. Team members are listed below:

FHWA:
Ken Kochevar, Chair
Matt Schmitz
Wes Rutland-Brown

Caltrans:
Denny Fong
Randy Romine
Gene Sily

Local Agencies:
Butch Britt – Ventura County

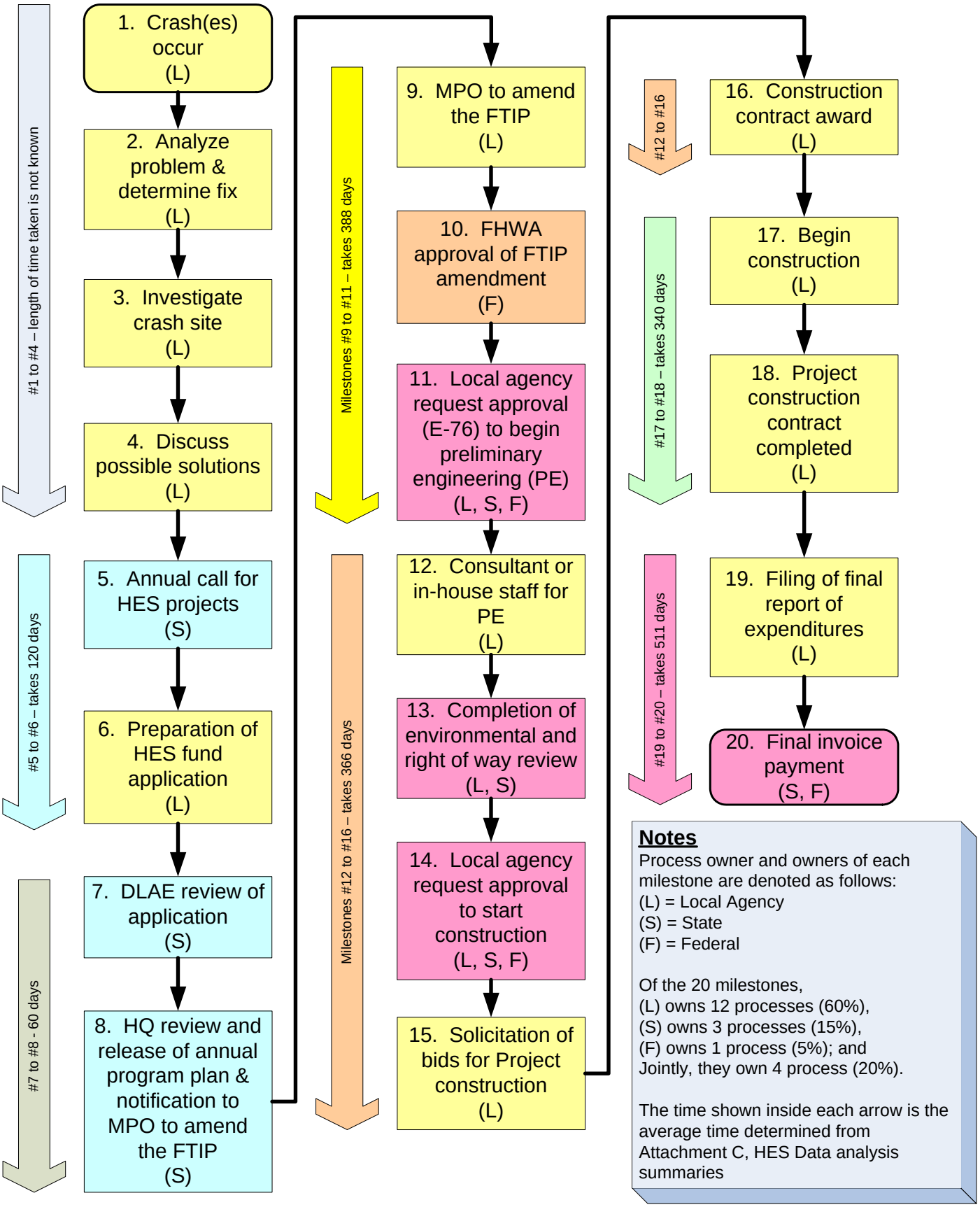
TIMELINE/MILESTONES

Timeline	Milestone
12/4/06	Draft review plan
1/31/06	Confirm members and scope
4/20/07	Finalize review plan
4/24/07	Hold first in-person site visit – Dist. 3
5/11/07	Develop survey
May - June 2007	Conduct surveys, site visits with interviews and random project sampling
6/29/07	Review/analyze data. Prepare draft report.
7/27/07	Circulate draft report for comments
8/10/07	Prepare final report
8/30/07	Distribute final report

*Resources needed: 2 people x 2 trips x $700/trip = $2,800 (FHWA)
2 people x 2 trips x $700/trip = $2,800 (Caltrans Local Assistance)

ATTACHMENT B

Major HES Milestones: Project Development Process



ATTACHMENT C

HES Data Analysis Summaries

This document represents a series of three analysis reports conducted on available data related to HES project delivery. The first analysis was conducted without a clear knowledge of what the database(s) would contain, and the review team's discussion of the data evolved through and with these analyses. This attachment is not a detailed data analysis, but rather a recounting of the process that led to the review team's understanding of the data, and should be interpreted as such.

First Report: **4/9/07**

LPAMS

The Local Project Accounting Management System (LPAMS) was used as the primary data source. It contained 1,564 HES records going back to program year 1999. An HES Program Plan year is the year it is expected that the program will be delivered, meaning the project was notified of funding in approximately 1997 for the program year 1999 projects. This "year" is set at two years after the date that the notification of project funding is announced.

Of the records in the database, 561 (36%) were funded under HES and could proceed with project implementation. Of these, 316 were from the HES Program Plan years of 2002/2003 or later (started in 2000). This subset of 316 projects was used as the universe for this analysis.

The focus of this analysis was dates, which were recorded for the five (5) major milestones targeted for a timeline analysis:

- Authorization to Proceed with Preliminary Engineering (PE)
- Authorization to Proceed with Right of Way (ROW)
- Authorization to Proceed with Construction (CON)
- LPAMS Completion
- Final Invoice Received

The following table (Table 1) indicates how often these dates were present for all 316 records. No projects in Program Year 2004 or later had ANY of the dates available.

Table 1: Dates Available in Database

	Date Present	% of Records
PE	13	4%
ROW	1	>1%
CON	21	7%
LPAMS Completion	19	6%
Final Invoice Received	23	7%

HES Data Analysis Summaries

Ignoring ROW, this leaves us with 12 projects with all "key" dates included. Using these 12 projects, the average, minimum, and maximum for three blocks of time were examined: Notification (Program Release) date to PE date, PE date to Con date, and Con date to Final Received date (Table 2).

Table 2: Average, Minimum, and Maximum Days for Key Dates in Project Delivery

Avg to PE	Min to PE	Max to PE	Avg to CON	Min to Con	Max to Con	Avg to Final	Min to Final	Max to Final
225	-403	787	321	0	810	777	342	1187

It took about 2/3 of a year to get to PE from the program release date, almost a year to get from PE to construction, and almost two years to get from Construction to submittal of the final invoice. Given these parameters, expecting HES projects to be delivered within two years is unrealistic.

In total, it took the average HES project 1323 days to be "complete" or a little more than 3.5 years (Table 3). It is unknown how this compares to non-HES projects. This may also explain why there are few dates for projects programmed after 2002 as the average project from that time period may still not be complete.

Table 3: Average, Minimum, and Maximum Days for Total Project Delivery

Avg Of Total	Min Of Total	Max Of Total
1323	818	1974

FMIS

In order to try to populate more data fields for these records, it was attempted to match the LPAMS projects up with projects in the Financial Management Information System (FMIS). For the 316 records in HES, a match in FMIS was only found for 73 of them.

Table 4: Comparing Dates in FMIS and LPAMS

	Date Present in FMIS	Corresponding Date in LPAMS	Dates Match	Dates Within 1 month
PE	54	7	5	1
ROW	0	0	--	--
CON	65	12	6	6
Last Invoice	38	11	0	0

ATTACHMENT C

HES Data Analysis Summaries

Ignoring ROW again, there are 28 projects with all 4 key dates from FMIS. Using these 28 projects identified in FMIS, the same three blocks of time were compared: Release date to PE date, PE date to Con date, and Con date to Project Complete. The table below shows the average time, minimum time, and maximum time for each of these three periods (Table 5).

Table 5: Average, Minimum, and Maximum Days for Key Dates in Project Delivery

Avg Of To PE	Min Of To PE	Max Of To PE	Avg Of To Con	Min Of To Con	Max Of To Con	Avg Of To Final	Min Of To Final	Max Of To Final
428	33	973	392	26	741	787	372	1439

These day ranges are fairly similar to those we found using the LPAMS database (if one removes the negative PE time periods from the analysis). Both report a little more than a year to get to PE and to get to CON and then about two years for CON to be completed, in total more than a four and half year time span.

Table 6: Average, Minimum, and Maximum Days for Total Project Delivery

Avg Of Total	Min Of Total	Max Of Total
1607	1032	2042

Looking in more detail at the FMIS data, there are some other interesting findings. Breaking down completion time by cost, it is interesting to note that time to PE and time from CON to completion were nearly identical for projects more than 100,000 compared to those for less than 100,000 (Table 7). Only the time between PE and CON varied, taking about 4 months longer for the more expensive projects.

Table 7: Average, Minimum, and Maximum Days by Project Cost

Projects Costing 100,000 or more								
Avg Of To PE	Min Of To PE	Max Of To PE	Avg Of To Con	Min Of To Con	Max Of To Con	Avg Of To Comp	Min Of To Comp	Max Of To Comp
429	33	973	426	26	741	788	372	1439

Projects Costing less than 100,000								
Avg Of To PE	Min Of To PE	Max Of To PE	Avg Of To Con	Min Of To Con	Max Of To Con	Avg Of To Comp	Min Of To Comp	Max Of To Comp
427	138	695	331	56	709	786	510	1156

Looking at Project Category Codes, the average times for these categories did yield some differences, though the numbers are very small in some categories, making this data unreliable (Table 8). It is also unknown what the project categories are, making this data hard to interpret.

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HES Data Analysis Summaries

Table 8: Average Days by Project Category

By Project Category					
Category Code	Number of Projects	Avg Of To PE	Avg Of To Con	Avg Of To Comp	Avg Of Total
01	1	376	56	1156	1588
03	6	324	383	862	1568
06	5	417	485	760	1661
08	6	392	400	721	1513
10	8	468	377	793	1638
15	2	748	387	623	1758

The table below breaks down average times by District (Table 9). Again the numbers are so small that it is difficult to draw any conclusions for a District from these dates.

Table 9: Average Days by District

By District					
District Code	Number of Projects	Avg Of To PE	Avg Of To Con	Avg Of To Comp	Avg Of Total
01	3	743	449	533	1725
02	2	190	692	766	1648
03	4	455	265	862	1581
04	5	535	346	878	1759
05	1	153	596	603	1352
07	4	276	310	926	1513
08	1	138	386	713	1237
10	2	536	500	734	1770
11	4	288	427	817	1532
12	2	637	257	658	1552

For a final analysis, any projects with date spans were included, not just those in which the four key dates were present. The results were fairly similar to those when just looking at the 28 where all dates are present (Tables 10, 11, 12, 13). Construction is the only phase where these dates show a noticeably larger average.

Table 10: Average Days and Number of Dates in Database for Key Time Periods

For All dates present in FMIS			
Avg Of To PE	Avg Of To Con	Avg Of To Comp	Avg Of Total
440	467	796	1680
55 dates	48 dates	36 dates	39 dates

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HES Data Analysis Summaries

Table 11: Average Days by Project Category

By Project Category				
Category Code	**Avg Of To PE**	**Avg Of To Con**	**Avg Of To Comp**	**Avg Of Total**
01	349	442	1156	1588
03	327	499	824	1528
06	449	594	842	1746
08	437	487	721	1513
10	470	409	799	1826
12			705	1460
13	162	69		
14			931	2142
15	633	372	623	1758
20			660	1587
21	541	342		

Table 12: Average Days by District

By District				
District Code	**Avg Of To PE**	**Avg Of To Con**	**Avg Of To Comp**	**Avg Of Total**
01	743	449	533	1725
02	190	692	766	1648
03	454	265	896	1630
04	392	299	887	1924
05	153	596	576	1326
06	559	1311	741	1471
07	298	350	882	1502
08	757	474	935	1946
09	205	827		
10	633	333	734	1770
11	252	679	817	1532
12	721	257	658	1552

In conclusion, there is some useful information here. The average project takes more than 4 years to deliver, and there may be some variation by type, district, and cost. Overall, however, data quality and completeness is very poor. It would be difficult to stratify the data and reach any meaningful conclusions. Better data is needed if possible.

ATTACHMENT C

HES Data Analysis Summaries

Second Report **5/1/07**

LP2000

After realizing the shortcomings of the data in the first analysis, additional sources of information were discussed. The end result was an analysis of the LP2000 database, the Caltrans Local Assistance Oracle database for recording information and data pertaining the programming, delivery and implementation of local agency projects.

Using this source there were 521 unique records with a Federal Project Number (FPN) spanning years 1999 to 2006. Table 1 below indicates how many fields have data for these 521 records. Overall about 50% of records have data, a significant improvement over the last data sources (LPAMS and FMIS), and probably enough to draw some useable conclusions.

Table 1: Number and Percent of Variables Present in HES Database

Field Name	Number Present	Percent Present
Project Category	501	96%
Obligated Trans Amt Sum	482	93%
Program Release Date	253	49%
Field Review Date	281	54%
RW Cert Type	230	44%
RW Cert Date	181	35%
ENV Doc Signed Date	216	41%
ENV Doc Type	289	55%
Project Advertisement Date	145	28%
Bid Opening Date	254	49%
Award Date	319	61%
PE Date	161	31%
RW Date	12	2%
Construction Date	273	52%
Construct Complete Date	271	52%
Final Voucher Date	220	42%
Final Invoice Date	281	54%
Project Complete Date	293	56%

Using the same date spans as in the previous analysis (Program Release to PE, PE to Construction, Construction to Project Completion, and Total [Program Release to Project Completion]), Table 2 illustrates the average, minimum, and maximum number of days.

Table 2: Average, Minimum, and Maximum Days for Stages of HES Project Delivery

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HES Data Analysis Summaries

Program Release to PE			
# Records	Avg	Min	Max
121	403	-403	1443

PE to Construction			
# Records	Avg	Min	Max
137	520	-660	1933

Construction to Completion			
# Records	Avg	Min	Max
149	1070	152	2773

Total [Release to Completion]			
# Records	Avg	Min	Max
68	1564	524	2442

Of the 288 with Environmental Document Type data, 251 were CE projects, 2 had a FONSI, and the other 35 were labeled XNOTECH, XTSFEDA, or XTSNOFED. Looking just at the CE projects, their average total days (1620), release to PE (401), PE to construction (469), and construction to completion (1083) are not that different or even a bit longer than the days found for all projects. This may indicate that Environment is not a major issue in project delivery timing in general or that CE's themselves take too long.

For ROW, 78 Projects are listed as needing Cert1 or Cert2 ROW. These projects needed total days (1768), release to PE (425), PE to construction (658), and construction to completion (1166).

Looking at the total days to deliver by District, there was clearly some variation (Table 3). Overall, District 4 had the longest delivery timeframe and District 5 had the shortest. Interestingly though, District 4 had among the shortest PE to Construction times and District 5 and among the longest PE to Construction times. One would have expected these to be more closely correlated. Note that some of the districts did have a small number of total projects so these results should be interpreted with caution.

Table 3: Average Days to Delivery by District

District Code	Total	Release to PE	PE to Con	Con to Complete
01	1607	505	471	997
02	1507	398	510	959
03	1474	470	389	959
04	1832	597	351	1062

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HES Data Analysis Summaries

District Code	Total	Release to PE	PE to Con	Con to Complete
05	1397	370	809	760
06	1557	312	622	1216
07	1500	363	428	1327
08	1765	601	639	1148
09		322	827	
10	1673	375	576	1201
11	1396	195	567	1037
12	1601	588	247	692

Using $250,000 as a break point (50% of projects) to determine if more costly projects took longer to deliver, one finds that more expensive projects are shorter to PE, but take longer for PE to Construction (Table 4). Overall, the more expensive projects take slightly longer.

Table 4: Average Days to Delivery by Cost

Greater than $250,000			
Total	Release to PE	PE to Con	Con to Complete
1623	369	631	1124

Less than $250,000			
Total	Release to PE	PE to Con	Con to Complete
1550	417	466	1056

There is also variation by project category. Some projects, such as category 18, were short, where as others, such as 4 and 7, were long. Again, the amount of data in some of these categories is limited, so the results should be interpreted with caution.

Table 5: Average Days to Delivery by Category

Category Code	Total	Release to PE	PE to Con	Con to Complete
01	1633	468	461	1330
02			827	
03	1512	328	350	1168
04	1144	-403	610	1187
05	1553	437	723	1039
06	1548	340	560	1146
07	1890		304	1174
08	1551	456	365	748
09				
10	1620	400	534	1115

HES Data Analysis Summaries

Category Code	Total	Release to PE	PE to Con	Con to Complete
12	1649	351	516	938
13				
14	1686	471	970	998
15	1767	494	384	972
16	1288	266	368	630
18	830	574	733	461
19		381	881	
20	1859	161	439	932
21	1701	633	350	939
22				
23				
25	1205	290	600	916

SR2S

In attempt to compare the HES findings to something comparable, data on Safe Routes to School projects was provided. The average number of days from "program release date" to "complete construction date" on an SR2S Delivery Report was compared to those found in the LP2000 database. The average number of days for this span for these projects was 849 days. The average days from award to completion for HES projects was 1564 days, or nearly twice as long!

Third Report **5/8/07**

Following a discussion of the data provided in the Second Report, the group had several additional questions and analyses to address. This is a reporting of those additional questions and how they were addressed.

Just how good is the data quality?

One topic discussed was data quality. There are definitely some bad dates in the database that skew the data. One date, for example, is listed as 2025 (it should have been 2005). Simply making that one change changed the average completion time by over 100 days! Improved data quality (assuming the data will be used for tracking purposes) would be a clear recommendation based on these findings.

What does "Project Completion" mean?

The group discussed at length what one should classify as project completion and what one should set as the endpoint for project delivery. Looking at the data, there were clearly differences between the Construction Complete Date, Final Voucher Date, Final

HES Data Analysis Summaries

Invoice Date, and Project Complete Date (there had not been much difference in FMIS or LPAMS, but there are in the LP2000). The average total days and standard deviation in days for the ranges are indicated below (Table 1). Using "Construction Complete" as the end date rather than "Project Complete Date" changes our average total days need per project from the 1564 days (reported previously) to 1117 days, shaving about a year of the project time (it only takes 3 years to deliver not 4!). This may be a more accurate time to consider that an HES project has been "delivered."

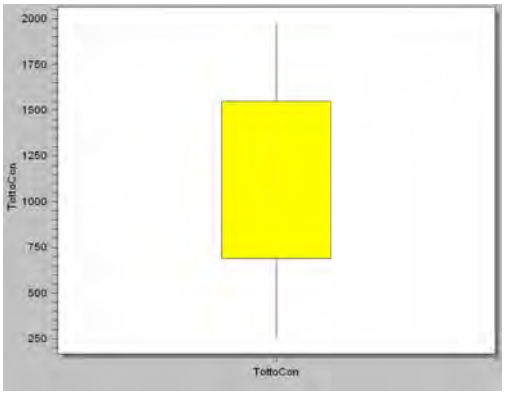
Table 1: Average Days for End of Project Phases

Time Span	Average Days	Standard Deviation
Program Release to Construction Complete	1117	432
Construction Complete to Final Invoice	336	363
Final Invoice to Final Voucher	18	395
Final Voucher to Project Complete Date	490	427

How confident/consistent are the findings?

It would be very difficult to find any statistically significant difference anywhere given these standard deviations. The graph below depicts the standard deviation for the time span from program release to construction completion (Figure 1). The line represents where all values fall and the box the values that would be within one standard deviation. In other words, any time span falling on the line outside of the box could be considered an outlier. This would indicate that around the average (1117 days), any project between about 700 days and 1600 days would also be "average." Because of this large variability, standard deviation was not included in other analyses because they are similarly poor.

Figure 1: Standard Deviation in Average Days from Program Release to Construction Completion



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HES Data Analysis Summaries

Why don't the numbers always add up?

In most cases if one focuses on a specific time frame (for example, project PE authorization to Construction authorization) any projects with both those dates present was used in the analysis. So the projects with dates for each span vary from the next span, meaning the resulting totals vary from the average of those projects with a true start and end date. Limiting the included projects to just those with the key dates available, however, reveals similar time spans (Table 2).

Table 2: Average Days for Key Project Phases on 36 Projects with All Key Dates Present

Time Span	Average Days	Cumulative Days
Program Release to PE	388	388
PE to Construction	366	754
Construction to Construction Complete	340	**1094**
Construction Complete to Final Invoice	193	1287
Final Invoice to Final Voucher	7	1294
Final Voucher to Project Complete Date	311	**1606**

How long did it take to bid and award a project?

The average number of days between Award Date and Construction Date was -120 days, meaning the project was awarded on average 120 days after the project was given authorization to proceed with construction. Looking at the Advertise Date, Bid Opening date, and Award Date, it was an average of 26 days from Bid Opening to Award and 56 days from Advertise to Award, though there was again quite a bit of variability.

Has there been any improvement over time?

Table 4 below contains the average days from program release to completion and the percent of those released that have been completed. Even of those started in 2000, only 60% are now complete (this is about 7 years since release). In other words, the "estimate" average days to reach project construction completion of 1117 days, is too low. Once all projects are completed this average will go up significantly

Table 4: Average Days to Complete by Program Year

Program Release Year	Programmed Year	Avg Days from Program Release to	Number of Projects Funded	Number (%) to Construction Complete

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		Construction Complete		
2000	2002	1303	50	30(60%)
2001	2003	1136	46	21(46%)
2002	2004	901	63	18(29%)
2003	2005	813	47	7(15%)
2005	2006	--	47	0(0%)

Another way to measure improvement over time is to look at the percentage of projects that have made it to PE as a fixed point in time from the release date. The tables below compare the average days to PE by program year and the % of projects with PE completed both in total, at one year post release, and at two years post release. (Tables 5, 6 and 7). These results indicate that progress has gotten worse, not better, over time.

Table 5: Average Days to PE and % to PE by Program year

Program Release Date By Year	Avg Of PEDays	# with a PE Date	# of Funded Projects	% to PE
2000	396	29	50	58%
2001	519	28	46	61%
2002	306	31	63	49%
2003	383	17	47	36%
2005	246	5	47	11%

Table 6: Average Days to PE and % to PE at One Year Post Program Notification Date

Program Release Date By Year	Avg Of PEDays	# with a PE Date	# of Funded Projects	% to PE
2000	213	16	50	32%
2001	174	6	46	13%
2002	160	21	63	33%
2003	161	9	47	19%
2005	246	5	47	11%

Table 7: Average Days to PE and % to PE at Two Years Post Program Notification Date

Program Release Date By Year	Avg Of PEDays	# with a PE Date	# of Funded Projects	% to PE
2000	360	27	50	54%
2001	490	21	46	46%
2002	268	29	63	46%
2003	296	15	47	32%

ATTACHMENT D

Meeting Minutes of Interviews with Districts and Local Agencies

I. Minutes of HES review meeting conducted at the Sacramento International Airport, Sacramento, on April 19, 2007.

- For projects with a long development period, local priority is subject to change and may impact delivery.
- Many projects are on a "shoestring," with uncertain funding. There is not enough money from the start. Missing financial puzzle pieces could be a delay.
- Project should not be programmed to construction till the preliminary engineering phase is completed. Environmental, right of way, and utility relocations all add uncertainty to construction start date.
- Lack of coordination between grant application writing folks, intra-departmental communication, and engineering department are possible delay factors but the degree of delay is not known.
- To ensure that the proper person or party is notified of program fund award, it was suggested to institute a response requirement, say 30-day period, to acknowledge receipt of notice. Otherwise, a no-response will result in the lost of the award. Funds would then go to another applicant. This is to direct the money where it will be used.
- Another suggestion is to have a completed Environmental Document with a preliminary (60%) design at the time of program fund application. This will filter out "shoestring" projects and permit the serious projects a greater chance of being funded. If an agency is willing to front these costs, then they are serious in completing the project. Preliminary engineering or planning grants may be available through their MPO or RTPA for advance engineering work. Local agencies should see if this is available.
- Local agencies to invite Caltrans for early consultation and for project field visits to identify potential major issues, such as environmental, for example, for better planning. However, Caltrans does not have the resources to provide such service.

Note:

The meeting minutes of Attachment D are records of discussion. There are no priorities assigned to any bullets nor are any conclusions formulated.

II. Minutes of HES review meeting conducted at District 3 with local agencies on April 24, 2007.

- The timing of the release of the annual call for HES projects and announcement of the list of funded projects should be examined
  - Ideally would synch up with building season (January notification)
  - Normally it is six months from announcement to notification
  - Should figure out date by working backward from desired notification date
  - This issue only pertains to Northern California agencies where certain 'work type' improvements that can be quickly implemented
- The FTIP process should be examined. Why can there not be one statewide list as opposed to every project being listed separately. Delays on getting onto a new, approved FTIP can significantly delay a project
  - Consider how often regions update their FTIP
  - Identify a region that does it well as a model for quickly getting the project on the list and through approval
  - This committee may want to investigate and quantify the question: How has the amendment process negatively affected the delivery of safety projects?
- There was concern that the new Stewardship Agreement, as well as other new Federal government requirements (audits, process reviews, etc.) are taking staff away from actually getting the work done and delaying projects
  - National Performance Review was a major source of staff time being required in other ways
- Staffing issues are a concern when it comes to getting a project through PE and to construction. Many times it takes so long from the idea to getting it in the approved FTIP that there are no longer resources available to work on the project.
  - **When PE can start with local funds and not have to wait, the project gets done a lot quicker; this is only possible if there are to be no matching funds for PE or if region is going to do project regardless of funding; this typically will not happen in rural regions.**
  - PE may be started sooner than data indicate as it is typically not submitted until construction starts as this is a requirement for getting reimbursed.
- Environmental and R-O-W issues can cause significant project delay. There was little acceptance by the local agencies at this meeting to require significant completion of PE and Environmental work prior to an application being submitted. However, it was acknowledged that knowing what type of environmental problems could be expected from a project is beneficial prior to selecting projects to move forward for HES funding.
  - Look into CE for some safety projects as exist for other categories of projects (such as bridges)

  - The "start date" for delivery of an HES project needs to be considered. A region really cannot do anything until it is in an approved FTIP, so this should be starting date
  - Process of getting to FTIP can take a varied amount of time and is after HQ currently acknowledge the project has "started" (when notification occurs)
  - Much of the groundwork done prior to the project appearing in an approved FTIP will determine the timeliness of project completion; however, this work would have to be done without reimbursement as funds would not be available until after construction begins.
  - **After getting the FTIP, the time to delivery of an HES project is similar to those of non-HES projects, making examining the time before this start date critical to understanding delays in the process**
- Staff turnover makes completing projects challenging. Local agency staffing is very critical. DLAE is very approachable which helps the locals tremendously.
- The HES Application Form needs to allow applicants to better indicate their funding sources for various phases. i.e. The Application Form requires cost estimates for all phases of the project but does not allow the applicant to indicate whether or not federal funds will be requested for all phases.
- Training should not be required (only as good as how much and how often you use it), but provided to State and local personnel. Dist. 3 is very proactive in this area. Training should be considered specific to the HES process.
- Consider moving 100% to on-line guidance manuals. Hard copy manuals are ok if you get the updates, but typically unreliable. For on-line manuals, have to establish a way in which everyone that needs the manual can get access and knows about it.

Note:

The meeting minutes of Attachment D are records of discussion. There are no priorities assigned to any bullets nor are any conclusions formulated.

III. Minutes of HES review meeting conducted at District 4 with local agencies on May 23, 2007.

- Insufficient staffing at local and District level. For local agencies, local planned and budgeted projects receive priority over federal projects. Difficult to plan and budget when funding is uncertain. For District, insufficient staff to support, review, and approve local agency paper works in a untimely manner. Its takes 2 to 9 month just to schedule a field visit.
- A more detailed timeline would be helpful illustrating "who" is responsible for completing the next step in the timeline and the average time we can expect to complete that step; we are looking at local agencies to address delivery timeliness while many of the delays (FTIP amendment, E-76 review, ROW or Environmental review, etc.) are areas where the local agency has little to no control, e.g., MPO schedules to amend their FTIP are inconsistence. Up to six months may take place from submitting a project application to amending the FTIP. Agencies prefer a predictable, routine schedule for solicitation and release of program plans.
- The FTIP amendment process happens automatically with the local agency and Caltrans scheduling field/PES reviews as soon as they are notified of funding; they do not even need to bother with the FTIP as it is handled automatically by the district.
- Local agencies interviewed mentioned that it takes 4 months to close out a project after construction completion. They need to go to their council for closing approval. This action adds more time to the process.
- Locals would like examples of successful project applications for use as templates and lessons learned to improve their chance of obtaining federal grants. Judging criteria for projects should be considered because there is no penalty for "lying" on an application when it comes to estimates of delivery time or even underestimating the scope
- For the local agencies interviewed, the success rate is approximately 15% for obtaining federal safety dollars. From local agencies' point of view, the effort to produce a detailed project scope in the fund application is not worth it. After funding, project scope is subject to change if not enough effort was put forth in the application. More time delay could result when this happens. Those applications that aren't accepted are shelved.
- Regions may not have any formal database for tracking "hot spots" or for tracking accident/injury trends; information on where they should look came from talking with local police, who may or may not be using data to support their answers. (Need to include a question in survey about this).
- Some agencies pre-screen projects and look for 'easy to implement' safety projects without significant ROW or Environmental issues possibly missing the real safety issue and benefit of the HES program.
- Locals asked about using part of HES monies to improve data system. Is this possible?

ATTACHMENT D

Meeting Minutes of Interviews with Districts and Local Agencies

- Federal process significantly increases the project development time line, e.g., E-76 for PE to Construction completion, local funds: 6-9 months, Federal funds: 2-3 years. Some of the major processes that hold up the project development process are consultant and contractor selection, environmental and ROW processes.
- Some Caltrans personnel don't feel like they have to make a local project high priority or should have to do a local agency review.
- There was general agreement that the HES project development process time line starts with Caltrans Headquarters review and release of annual program plan and ends at the project completion (ribbon cutting of project).

Note:

The meeting minutes of Attachment D are records of discussion. There are no priorities assigned to any bullets nor are any conclusions formulated.

ATTACHMENT E

HES Program Survey Summary and Results

On July 11, 2007, an on-line statewide survey, developed by the review team, was widely distributed by the California League of Cities, the County State Association of Counties, and Caltrans District Local Assistance Engineers for responses to the questions indicated hereinafter. A 12-day period was given for responses. The survey ended on July 23, 2007.

Hazard Elimination Safety (HES) Program Survey (7/23/07)

This survey is designed for city, county, and Caltrans employees that work on federally funded transportation projects. The purpose of the survey is to help improve the delivery of safety projects. Please complete the following ten minute survey.

1. What type of organization do you work for?
City 65.5% (91)
County 22.3% (31)
Caltrans 12.2% (17)
TOTAL 100.0% 139

2. What is the population of the city/county that you work for?
Less than 25,000 18.0% (25)
25,000 to 100,000 30.9% (43)
100,000 to 500,000 30.9% (43)
Greater than 500,000 9.4% (13)
N/A -- Caltrans Employee 9.4% (13)
Unknown 0.7% (1)
TOTAL 99.3% 139

3. To which Caltrans district do you report?
1 2.2% (3)
2 3.6% (5)
3 8.6% (12)
4 22.3% (31)
5 10.1% (14)
6 2.2% (3)
7 12.9% (18)
8 12.2% (17)
9 0.7% (1)
10 5.8% (8)
11 7.9% (11)
12 10.8% (15)
TOTAL 99.3% 139

4. To which Metropolitan Planning Organization (MPO) do you report?
AMBAG 5.8% (8)

BCAG 0.7% (1)
COFCG 1.4% (2)
KCAG (0)
KCOG (0)
MCAG (0)
MCTC (0)
MTC 20.1% (28)
SACOG 5.0% (7)
SANDAG 7.2% (10)
SJCOG 2.2% (3)
SLOCOG 2.9% (4)
SBCAG 2.2% (3)
SCRTPA (0)
SCAG 33.8% (47)
STANCOG 1.4% (2)
TCAG (0)
TMPO (0)
Other (Caltrans acts as MPO) 5.0% (7)
N/A -- Caltrans Employee 2.9% (4)
Unknown 5.8% (8)
TOTAL 96.4% 139

5. How many years of experience do you have working in transportation?
Less than 1 year 1.4% (2)
1 to 3 years 6.5% (9)
4 to 6 years 12.2% (17)
7 to 10 years 12.9% (18)
Greater than 10 years 66.2% (92)
TOTAL 99.3% 139

6. How many "funded" HES projects have you worked on in the last five years?
0 38.8% (54)
1 to 2 33.1% (46)
3 to 5 12.2% (17)
5 to 10 7.9% (11)
10 or more 6.5% (9)
TOTAL 98.6% 139

7. How many non-HES Federally-funded projects have you worked on in the last five years?
0 12.9% (18)
1 to 2 14.4% (20)
3 to 5 24.5% (34)
5 to 10 15.8% (22)
10 or more 31.7% (44)

TOTAL 99.3% 139

8. In the last five years lack of current and comprehensive guidance and policy manuals contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.8)
Other Federally funded projects (2.9)

9. In the last five years lack of Federal project development procedures training contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.8)
Other Federally funded projects (2.9)

10. In the last five years lack of local funding contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (3.0)
Other Federally funded projects (3.0)

11. In the last five years cost overruns contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.8)
Other Federally funded projects (2.9)

12. In the last five years lack of Caltrans assistance contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.6)
Other Federally funded projects (2.9)

13. In the last five years lack of staffing contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (3.2)
Other Federally funded projects (3.2)

14. In the last five years Environmental issues contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (3.4)
Other Federally funded projects (3.8)

15. In the last five years Right-Of-Way issues contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.8)
Other Federally funded projects (3.0)

16. In the last five years the date (i.e., time of year) for project selection notification contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.9)
Other Federally funded projects (2.8)

17. In the last five years the time to schedule and complete field/preliminary engineering survey(PES) reviews contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.6)
Other Federally funded projects (2.7)

18. In the last five years revising/amending the FTIP contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.8)
Other Federally funded projects (3.1)

19. In the last five years obtaining PE authorization (E-76) contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.9)
Other Federally funded projects (3.2)

20. In the last five years Consultant selection contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.3)
Other Federally funded projects (2.5)

21. In the last five years obtaining Construction authorization (E-76) contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.9)
Other Federally funded projects (3.2)

22. In the last five years obtaining bids for construction contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.3)
Other Federally funded projects (2.3)

23. In the last five years project construction contributed to project delivery delay (1 = strongly disagree and 5 = strongly agree)
Average rank
1 2 3 4 5
HES projects (2.3)
Other Federally funded projects (2.4)

24. Rank the top 5 contributors causing delay for HES-funded projects by noting the rank (1 through 5) next to your top 5 choices. If you have not worked on any HES-funded projects, go to question 25.

Inadequate current and comprehensive guidance and policy manuals (2.9)
Inadequate Federal project development procedures training (2.8)
Inadequate local funding (3.1)
Cost overruns (3.2)
Inadequate Caltrans assistance (2.9)
Inadequate staffing (3.1)
Environmental issues (2.8)
Right-Of-Way issues (3.0)
Date for project selection notification (3.3)
Time to schedule and complete field/preliminary engineering survey (PES) reviews (3.0)
Revising/amending the FTIP (3.4)
Obtaining PE authorization (E-76) (2.9)

Consultant selection (2.8)
Obtaining Construction authorization (E-76) (3.1)
Obtaining bids for construction (3.1)
Project construction (3.1)

25. Are there other issues you feel may contribute to HES project delivery delay?

Streamline
- HES projects are delayed by the process that FHWA and Caltrans invoke and sponsor. It costs too much to bother with in many instances. You've got to fix the process. Get money to the local agency and get out of their way. What you don't realize is that your process, like this survey, doesn't even hit the wall, the target hangs on. Once you approve a project, get money to the agency. Guidelines should emphasize project delivery, not process and procedure. Let them proceed per their municipal guidelines, do their own CEQA. Limit oversight to onsite plan review and site visit, verify r/w limits, and let them construct. Eliminate all Federal & MBE/DBE red tape and get out of the way. You'll then get projects done on time and have more money to distribute to other needed projects.
- Thank you for your efforts in improving the process to deliver Federal and HES funded project. I would recommend that you also evaluate new processes that minimize administration and bureaucracy and focus more on the expeditious implementation of public improvement projects funded with Federal monies.

Funding
- At the present time no, but I could see concerns with local funds if an application for a project was successful.
- Better distribute Funding among agencies.
- Federal money is very, very difficult for small, under-staffed agencies to be able to successfully spend.
- Limitation to maximum funding per HES project.
- Need a higher threshold limit for total participating costs.

Staffing
- Delays are sometimes due to staffing changes at both the local and state level so it always seems as though it is a learning process for those involved.
- For our County staffing and local funds are probably most critical.
- Staffing turn over impacts projects since new assigned staff has to come up to speed on the status of the project

Environment/ROW
- The main frustration and delays appear to be focused on delays in obtaining NEPA clearance from the local district office. It is difficult to plan for project delivery when there are not set turn-around times for documents that Caltrans Local Assistance must approve. Sometimes months go by without getting authorization for a particular phase of the project which impacts project delivery. Delays of up to 3 months to get authorization make it difficult for local agencies to meet the funding requirements,

especially when many funding programs have two-year time windows to expend the funds.
- Actual design and environmental costs exceeding budget put us in an awkward situation, and engineering estimates of significant cost increases forced us to review the project scope to reduce unnecessary.
- Change Caltrans Environmental approval procedure.
- Completing environmental documents/requirements is the primarily delay for smaller projects with construction cost less than $500,000.
- Early recognition of added costs due to environmental mitigation costs and unanticipated delays due to environmental permitting.
- The environmental, cultural, and other studies frequently required are huge burdens.
- Environmental requirements. Agencies compete for programmed funding and it is very difficult when very little funding is given.
- The bulk of the delays are from attempting to get environmental approvals. The procedures and required documentation are onerous overall. We are expected to deliver projects on timelines yet we have no control over delays resulting from the time it takes to get the proper agency approvals.

Training/Guidance
- We are concerned regarding instances where the Local Assistance Office seems to deviate from what is required in the Local Procedures Manual. The local agencies use this manual to plan for project implementation. If additional requirements are necessary, then the Local Procedures Manual should be revised to reflect the new requirements. We have encountered issues when Local Assistance requested additional information that was not required in the Local Procedures Manual during the Right-of-Way Acquisition phase of a project that led to additional work and time delays for our project.
- Inconsistent project scoring and guidance on what kind of projects are the most competitive.
- Lack of knowledge.
- Many agencies do not work on HES projects very frequently and need t rely on the manuals for instruction. The manuals are hard to follow and do not explain how to fill in the entire blank on the forms. It is left up to the applicant to figure it out.

Communication
- Consultants slow to act on required tasks per agreements or slow to respond to agency's inquiries.
- Lack of coherent paperwork from HES manager causes confusion as what to do next.
- I worked with a number of HES projects but I don't remember having the items in No. 24 to cause any delay or further delay. Inadequate LOCAL AGENCY staff! Inability to comply on simple procedures! Delay on the local agencies response to comments and redlines to complete the form/submittal. Items in No. 24 do not and should not affect any delivery delays for HES funding. THOSE ARE PROCEDURES/PROCESS and GUIDELINES - NOT roadblocks! We all live by the rules, policies and procedures. Prompt replies/responses, diligent in filing up the forms and following procedures - these contribute in ANY project delivery delay.

- Inadequate application notice to local agencies on the HES funding opportunities.
- Late notification by State that HES project was selected.
- Caltran Local Assistance is often difficult to get hold of or does not provide adequate responses to questions.
- Notification of approved projects receiving HES funds should be timely.
- We never get selected for an HES project and we never receive feedback on why this happens.

FTIP

- A number of times local agency do not realize their project is no longer is in the FTIP when they request authorization because the project was not deliver within the programmed year.
- For other programs, if project is on project eligible list, posted in Local Assistance webpage, project is considered programmed in the FTIP. For HES, that does not seem to be the case and causes confusion.
- FTIP amendments through SCAG take an unreasonable time period.
- FTIP amendments should be automatic when STIP is updated by CTC. FTIP amendments and E76 processing have caused significant delays in the last year.

Authorization

- Obtaining Construction authorization (E-76)& Obtaining PE authorization (E-76).
- The lead time for Federal authorization is a huge issue. Then there's the budget shut-down period. It used to be from the first week in September to the end of October. How it's from July to November!

Other

- Changing of project scope and/or schedule after PE and into construction – this only seems to happen on state highway projects.
- Improper invoice submission procedure by local agencies.
- Not being able to establish and keep realistic time lines.
- Our current HES project involves construction on/near railroad. CPUC, SCRRA and SP requirements have significantly contributed to project delay. They change their collective minds.
- The review process that Caltrans has. It has taken over two years for the Caltrans review on the current Federal project. Turnaround reviews were always over one month with more information required after each review. There was never any consistency in the comments and most could have been required on the first or second review.
- The whole process of re-engineering
- Working with SCRRA/ Metro and C-PUC for at grade level railroad crossing safety enhancements.

26. Are there techniques you have used to reduce HES project delivery delay that you feel might benefit other agencies?

Streamline
- Expedite the timing of issuance of E 76 -Minimize the number of forms need to be turned in -Set date of approval at timing to where project can be constructed

Funding
- Advancing with local money and doing the design ourselves.
- Do not use federal funds for PE and EV - use Fed funds for construction and construction only so as to shorten the project timeline, and reduce the amount of paper work. Certain PE and EV activities may be more conducted concurrently.
- Exchanging federal monies for non-federal monies.
- Staff has used a request to the state to convert Federal funding to state funding when the have safety funds available.
- Use own funds for Design.
- We try to have projects shelf ready by investing in the PS&E development using our local funds. We would like to see credit towards the local match for this investment since the delivery is accelerated and construction cost escalations are minimized.

Staffing
- Caltrans and FHWA both need to make a commitment to increase staffing levels to adequately process federal and state project paperwork
- Training local agency staff doesn't work. How about changing or better yet adding BETTER staff? Seriously, this will be a never ending battle but to live with the fact, that staff changes, and not all do HES projects, but if they do, all we can do is be patient, be helpful, document, and stress in them that their late in response delays their project not us. Garbage in = garbage out.
- Yes, typically we try to use the same staff on HES projects even though they may have transferred another design group but then they help train new staff on the procedures. We also make many telephone calls and e-mails to our Local Assistance office.

Environment/ROW
- Bid contracts with alternative items to come within budget if the base bid comes in high. Streamline right of way process by eliminating potential condemnation proceedings. This reduces the time it takes to obtain certification.
- Minimize the Environmental studies (Most projects are Traffic Signal Intersections)
- Pick simple projects that do not require right of way, and have a very simple environmental review.
- Reduce the project limits so that no right of way is necessary. Simplify the scope so that there are no environmental studies. This significantly reduces the effectiveness of the project, but it allows you to get something done.

ATTACHMENT E

HES Program Survey Summary and Results

Training/Guidance
- Take CalTrans' course on Federally Funded Projects (5 Days) and solicit help from local assistance personnel.

Communication
- We have tried to work with local assistance in the past to improve coordination between Local Assistance and local agencies, and both agencies seem to be committed to improving the project delivery process. However, it seems that the number of staff assigned to Local Assistance is a major issue in the timely delivery of project documentation. Inadequate staffing level issues are going to continue to get worse since there is an influx of transportation funding and will increase the workload on Caltrans.
- Be proactive with Caltrans DLAE with regard to project reviews and if necessary contact Caltrans Sacramento HQ in order to obtain E-76's in a timely manner.
- By working closely with RTPA/MPO on FTIP programming and the local agencies, many of the shortcomings in #25 are partially mitigated.
- Constant Communication with District 10 staff and HQ. Include Caltrans Staff as a part of the design team on the project and in all PDT meetings.
- Constant contact with Caltrans to make sure that they are pushing the project forward and not letting it seat on someone’s desk.
- We have established a good working relationship with Caltrans Local Assistance that this has helped us through the "process" hurdles.

FTIP
- Remind the Local Agencies how important it is to get their projects programmed correctly in the FTIP.

Authorization
- We proceed with preliminary design prior to receiving authorization knowing reimbursement will not be received.
- Working very closely with Caltrans Local Programs to get E-76.

Other
- Local agency's need to know what their cost, scope, and schedule is to effectively deliver a HES project.
- We will conduct Field Reviews and Preliminary Environmental Studies before the project is programmed.

27. Is there anything Caltrans or FHWA could do to help facilitate more timely delivery of HES projects?

Streamline
- Expedite the processing of RFA's and responding E-76's for ALL federally funded projects.
- Expedite the turn around time.

- Get rid of the paper works and filling numerous forms with repeated information every time there is an application. Create a web-page for each project where all the information to be stored for once and all.
- Not HES, but our current Federal (CMAQ) traffic signal project, not yet out to construction, has a total of 14 three inch binders, stuffed to the top with paperwork required to get us to the point of ADVERTISING. There has to be a better way to put to 2 million dollar project together.
- PLEASE WORK TO STREAMLINE SAFETY AND ER PROJECTS. IT'S EASY TO REJECT PROJECT PAPERWORK BECAUSE AN i ISN'T DOTTED.
- Reduce the number of steps and forms required. If need be negotiate these changes with FHWA.
- Reduce paperwork.
- Reduce the duplication of work; such as it should not be required to fill out several different forms when the end product is the E-76, which will contain all required information.
- Simplify the paperwork.
- Streamline the process. Be more efficient.
- The state needs to streamline their review process.

Funding

- Allow allocations to be granted prior to the award of the project, and prioritize additional cycles of funds for projects that are in progress and under funded.
- Eliminate pre-award audits for consultant design contracts under a reasonable ceiling, eliminate DBE monitoring & reporting, eliminate Federal-level environment process (FONSI) where State requirements (CEQA) are met, simplify construction certification process, simplify reimbursement billing process.
- Make sure the Funding is available at the state level.
- Make the process less cumbersome. Allow money up front for Engineering to design the project so it can be ready for any round of funding. Timelines are very tight. Try giving money out to agencies for the PE one year so agencies can design projects and then you won't have any problems getting rid of the money in the following years.
- Since rural road improvement funds are almost non-existent, would like to see HES follow process of the HBP where County just nominates and advance projects for development and then funding instead of competition process were we might get one project every five years. It allows us to plan our budgets and staff better to deliver the work. Consider a funding cap for the agencies. Promote local agencies to submit their safety plan and pick the top one or two projects for development/funding.
- Yes. Never pull out the funding of a programmed project or bump the funding to different years without notifying the Local Agency that a change in programming is going to take place and justifications for why. Do not limit project time extensions.

Staffing

- We request that Caltrans and FHWA provide appropriate staffing levels to adequately process the request for authorizations and NEPA clearance. Local agencies have for years indicated that staffing levels are an issue with processing paperwork, and only recently

has there been staff added to the Environmental Section of District 4. It will now take some time for the staff to be trained on the Local Procedures Manual to efficiently process paperwork.
- Have staff available to assist with process and review documents in timely manner.
- Help the Local Agencies prioritize their projects and look into how many projects the Local Agency is juggling at any one time and if they have more projects than staff can handle do not progress with awarding the funding.
- Provide more assistance rather than oversight.
- Provide more qualified and knowledgeable environmental staff.
- Rules and staffing continue to change, and that makes approvals more time consuming.
- Reduce the review time. Reduce the bureaucracy.
- Streamline process if possible. Require review staff to be available and accessible to cities when questions or issues come up. Too often it takes days or weeks to get an answer out of Caltrans staff.
- Timely field reviews.
- Timely reviews along the way.

Environment/ROW
- Expedite NEPA Reviews and E 76 issuance.
- Expedite the environmental review by using the exceptions provided in SAFETEALU. Eliminate unnecessary environmental studies.
- Improve authorization to precede procedures and streamline NEPA environmental approval and allow a certain amount of flexibility when it comes to right-of-way certification.
- Reduce environmental requirements on minor road improvements for roadside safety issues. It makes little sense to spend anywhere from $10,000 to $20,000 on environmental studies when the proposed work is less than $50,000.
- Reduce the environmental requirements.
- Reduce the required environmental requirements - funding for some HES projects is small in comparison to other transportation projects, but must still follow NEPA requirements. Some HES projects are minor in nature and the cost ratio of clearing NEPA is inequitable. Safety should take priority over NEPA requirements.
- There is too much subjectivity and a lack of oversight in the environmental review process which results in delays and costly project overruns.
- Yes, reduce the requirements and needs for Environmental Clearance for smaller HES projects!!

Training/Guidance
- Disseminate more information about the program/procedures.
- Although I didn’t list trainings and more proactive DLAE coordination, these training efforts and local agency contact on a regular basis are key to providing the technical support to the local agency to succeed.
- More training/more Local Assistance Staff available to answer questions and provide guidance.

ATTACHMENT E

HES Program Survey Summary and Results

Communication
-A project schedule for each application is based on being notified by a certain date. However, the applicants are often notified very late.
- Increased communication/monitoring and assistance would be welcome as well.
- ASSISTANCE RATHER THAN RESISTANCE WOULD BE HELPFUL. WE HAVE OUR OWN BUREAUCRACY AT THE LOCAL LEVEL THAT WE HAVE TO WADE THROUGH.
- Quicker response.
- Unfortunately, not withstanding this survey, Caltrans and FHWA's "help" is the problem. Can you develop guidelines that allow you to get out of the way and let cities and counties administer the programs.
- To continue to give: Information. Information. Information. These serves as warning, and guidance to be able to schedule the delivery on time.
- Yes, a schedule that has rough timelines at the beginning of each fiscal year would help the local agencies have more time to prepare for project submittals.

FTIP
- By timing the project eligible list to that of the next FTIP amendment would help. This would reduce the wait time.
- Early identification of projects, all PE to start in year prior to FTIP element, ensure all Caltrans forms are updated and available.

Authorization
- After notification that we are awarded a grant, it takes months for authorization to precede to either design or construction, with the "use it or lose it" criteria; we are in fear of losing the funding if we don't start invoicing for the project within 6 months. This is very stressful. We can't go out to bid without authorization to proceed to construction, it takes about 6 months just to bid the project and select a contractor. It is very difficult to submit an invoice this soon after authorization.
- Eliminate phase authorizations, i.e., issue one e-76 for the entire project.

Other
- The Regional Water Quality Control Board has greatly contributed to the waste of local, state, and federal money by causing delays based on unfounded, arbitrary, and ignorant requirements leading to very long review times and loss of grant money.

28. Are there any other comments you would like to share with us?

Streamline
- Streamline the Section 106 environmental process!!!
- Caltrans staff is very helpful but the amount of paperwork required to get authorizations is just overwhelming.
- Focus less on process and more on project delivery. The whole federal, Caltrans, and Local Assistance structure is more concerned with dotting i's and crossing t’s. If a project results from the process, so much the better. But if funds are lost because of delays

associated with the process, it's irrelevant. The process is considered infinitely more important that the project.
- HES Program and other Federal programs are great asset to the public and Citizens of the State of California. Look forward to a more simplified system that can save tax payers money and can save Local Agencies cost and time. HES program should not just be limited to Traffic Signal Improvements. It should look into paying towards Pedestrian Safety (Installation of lighted crosswalks, installation of Pedestrian head counts and installation of wheel chair ramps where none exist). It pays to be safe.
- I helped or did the administration of 4 or more projects in the 1990's. The first one is a learning curve, the rest were OK. Local Assistance Dist 5 was great. Individuals need to rely on Local Assistance staff. If there was a way to minimize paperwork it would make things easier.
- It is all about streamlining the process rather than training up to a more difficult process.
- PLEASE TRY TO STREAMLINE THE ER PROCESS. STOP PLACING MORE STRAW ON THE CAMEL'S BACK. WE ARE CONSTRAINED AT THE FEDERAL, STATE AND LOCAL LEVELS. INDIVIDUAL BUREAUCRATS DON'T UNDERSTAND THAT. THEY FEEL THAT THEIR ISSUE IS MOST IMPORTANT. dbe, ada, nepa...THE LIST GOES ON ANDBECOMES MORE BURDENSOME DAILY.
- Reduce the paperwork and red tape.
- The Caltrans and Federal rules are so time-consuming and difficult to comply with that my municipality will not take on any more Federal-aid projects under $1 million, which is going to exclude most HES-eligible projects.
- The difficulty in delivering federally funded projects and HES projects is due to the timeframes necessary to process paperwork through local assistance. Timelines dictated by various funding sources do not always coordinate well with timelines to process the paperwork. It seems that the training and authority for approving the paperwork should be delegated to the District Local Assistance Engineer rather than having to go up to Sacramento Headquarters and then through FHWA. This just adds time to the processing of the paperwork. Local agencies would like to be involved in helping revise any part of the process to make the system work more efficiently and reduce the turnaround time. At least Local Assistance should be able to commit to providing the local agency with a time window for when the paperwork will be processed. Often times, the paperwork is submitted and when we call to check the status, we hear that it is sitting up in Sacramento and they don’t know the timeframe for it being approved. It makes it very difficult to move a project forward with such unknowns and to schedule staffing and other resources at the local agency level.

<u>Funding</u>
- A higher amount of funding needs to be part of the HRR and HSIP programs as the demand outstrips funds for safety.
- FHWA and Caltrans should provide more funding.
- Our biggest cause for delay of project delivery is the inconsistency of funding through the STIP for our local match.
- Provide more funding opportunities and awards.

ATTACHMENT E

HES Program Survey Summary and Results

- Quit waiting until a location has people injured or killed before it qualifies for funding...rely on the local agency opinion and determination.
- The exchange $ program was and is the best system you have. Give locals state money and let them proceed consistent with their municipal regulations.
- The HES is not geared for projects on rural roads, which I typically deal with.
As a result, we have not competed successfully for HES projects in the past.
Also, the difficulty obtaining the funds relative to the small amount of funding available make the program not useful to my County as currently configured.
- The HES program, as well as other federal programs do require substantial paperwork. Due to overhead costs, it is becoming more difficult to ask for small amounts of money which makes it more difficult to compete with the larger projects. Maybe the paperwork requirements could be determined based on dollars received so that the larger the fund request, the more comprehensive the documentation should be.
- We have submitted numerous grants for the HES program and I can't remember the last time we actually got one. Perhaps more funding should be set aside for this program.

Staffing

- All federally funded projects are getting more and more difficult to administer, which contributes to more staffing hours, which are precious with the number of projects and needs within our county. Many of our neediest projects are in environmentally sensitive areas, which require lengthier surveys and more extensive and expensive mitigation. In addition, we find our review periods with the environmental oversight agencies and permitting agencies taking longer and longer. Most often, we are unable to communicate with those assigned to our region and months are spent just trying to make contact and enter into a dialogue regarding our projects.
- Provide more staffing at Caltrans that can guide local agencies through the process; more importantly, provide timely response to reviews of local-agency submitted documentations.

Environment/ROW

- An enormous amount of time and money is spent on required environmental studies and permitting. Projects within existing transportation corridors should be exempt from the in-depth environmental analysis currently required. Regional standards regarding how a contractor shall conduct his operation, during construction of routine projects, such as bridge replacements, should be established. The money saved could be spent on additional projects, and give the tax payers infrastructure they can use, rather than just environmental reports. The time saved by forgoing the detailed environmental reports would lead to faster project delivery at a lower cost.
- Caltrans' Project Manager's need to be inform of their responsibilities for delivering local HES projects when such projects make improvements (e.g., signalization of an intersection: for a local road and State Highway) to the State Highway under subvention reimbursement. Many Caltrans' PMs do not know what their responsibilities are when a local agency conveys their HES funds to Caltrans by way of a coop. Also, the HES program should provide a longer window of opportunity to deliver HES projects since environmental and RW issues can cause significant delays.

- I like the HES or HSIP program. Funding allotments could always be higher or better yet make some sort of slush fund available to agencies for those projects that run into delays and extra expenses due to delays etc. I have a project now that because of corporate attorneys causing delays in acquiring ROW the original cost estimate has now almost doubled.

Training/Guidance

- Ask Caltrans to be more hands-on helpful with the Procedures Manual. An annual day workshop on the expectations of the process, since agencies have staff turnover.
- Local Agencies and Caltrans alike need clear guidelines regarding SAFETEA-LU funding and how to access available dollars designated for local projects. We are into the fourth year of the bill and the City of San Bernardino still does not know how to access funding appropriated for the University Parkway/I-215 project.
- Train environmental staff on construction practices. Caltrans District Local Assistance doesn't have the level of expertise required to administer federal or state programs.

Communication

- Customer Service between Local Assistance & our City Staff has been inconsistent & has unfortunately led to an adversarial climate in regard to communications. This has not been helpful for our City Engineering Administrative Staff who have been made to feel deficient in their dealings with CALTRANS. This has resulted in City Staff not saying anything due to a fear of retaliation (in the form of delays to processing to over-scrutiny of submitted forms, etc.) from CALTRANS Local Assistance personnel.
- I have never had a problem with a project that was properly PLANNED and PROGRAMMED.
- MPO's, RTPA's or supervisors need to inform the project managers how important the programming of their projects are in the FTIP. The date and funding amounts should be current and correct.
- Of all the program managers in HQ, the HES is least effective, not from lack of knowledge but apathy. Many of the information requested are either (1) obtained elsewhere from lack of response, (2) incoherent and obtained elsewhere since other source is more user friendly, (3) requires a lot of time to comprehend. If HES was my only program, I would not be complaining since I can devote all my time on one program like the HES manager. But since I have many programs to oversee, I rely on the HES manager to give me a turnkey product which has been rarely the case. Instead, I rely on others with more knowledge to help me, and in return, I help them in other areas of project delivery.
- On major federally funded transportation projects (i.e. freeway interchanges) there is much confusion among Caltrans staff on how to proceed with project development. Whether to use a PSR or PSR-PDS is not consistent and often changes after work begins.
- There are times that when applying for preliminary engineering or construction authorization that some of the forms are revised and we would be required to resubmit using the newly revised forms. This causes delay and increasing our frustration towards the process. Is there a way this can be avoided?

- To continue the good rapport with the CT Local Assistance staff.

Other
- I have not been involved in HES program in prior years, however I would think it would run similar to FTIP/STIP projects except a bit accelerated. These projects would seem to me as being difficult in nature do to the "theme" of the project. A hazardous environment for traffic is a hazardous environment for construction.
- Please expand the criteria for application of HES projects to local roads, not just state routes.
- Randy Ronning is a wonderful Caltrans' program coordinator and doesn't get the credit he deserves because his programs run so smoothly. SRTS was NOT run smoothly during this first cycle.
- Thank you for providing the survey. Even though our City has not participated in the HES program in the past five years we do understand how important project delivery is. It takes a commitment from the Cities to meet the delivery deadlines.
- There are many projects requested, each agency feels that their's is the most critical. It appears however that at some of the locations that are selected and then not funded which may cost very little money, a body count is needed and that has been my experience. I have informed the City Council that until we have a body count and people die we won't be funded for a particular intersection. That is the bureaucratic way of doing business.

Hazard Elimination Safety (HES) Program Survey Results

Respondent Demographics

The findings below are tabulated from the final results of the survey found in Appendix X. There were 139 surveys completed. Of these, 122 (88%) were done by local agencies and 17 (12%) by Caltrans employees (Table 1). Not all respondents answered every question, so the denominator is not always 139 for the results in the other tables that follow.

Table 1: Number/Percent of Respondent Organization Type [Survey Question 1]

Caltrans	17	12.2%	12.2%	
City	91	65.5%	77.7%	
County	31	22.3%	100.0%	
Total	139	100.0%	100.0%	

The number of residents in the population represented by the organization the respondent worked for was distributed along a bell shaped curve (Table 2).

ATTACHMENT E

HES Program Survey Summary and Results

Table 2: Number/Present of Respondents from Size Groups of the Populations Their Organization Represents [Survey Question 2]

SIZE	Frequency	Percent
Less than 25,000	25	18.1%
25,000 to 100,000	43	31.2%
100,000 to 500,000	43	31.2%
Greater than 500,000	13	9.4%
N/A -- Caltrans Employee	13	9.4%
Unknown	1	0.7%
Total	138	100.0%

There was at least one respondent from every District in California (Table 3). The greatest number of respondents was in District 4 (31). Four Districts had less than five respondents. Some of the larger districts also had comparatively small numbers of respondents. Due to the small sample size, any results viewed by District should be interpreted with caution.

Table 3: Number/Percent of Respondents by District in Which They Work [Survey Question 3]

DISTRICT	Frequency	Percent	
1	3	2.2%	
2	5	3.6%	
3	12	8.7%	
4	31	22.5%	
5	14	10.1%	
6	3	2.2%	
7	18	13.0%	
8	17	12.3%	
9	1	0.7%	
10	8	5.8%	
11	11	8.0%	
12	15	10.9%	
Total	138	100.0%	

ATTACHMENT E

HES Program Survey Summary and Results

The respondents to the survey report to 11 different MPOs (Table 4). Seven MPOs had no respondents. Two MPOs had a majority of the respondents: MTC and SCAG, with 28 and 47 respondents respectively. As with District, and results by MPO should be interpreted with caution due to small sample size.

Table 4: Number/Percent of Respondents by MPO in Which They Work [Survey Question 4]

MPO	Frequency	Percent	Cum Percent	
AMBAG	8	6.0%	6.0%	
BCAG	1	0.7%	6.7%	
COFCG	2	1.5%	8.2%	
MTC	28	20.9%	29.1%	
N/A -- Caltrans Employee	4	3.0%	32.1%	
Other (Caltrans acts as MPO)	7	5.2%	37.3%	
SACOG	7	5.2%	42.5%	
SANDAG	10	7.5%	50.0%	
SBCAG	3	2.2%	52.2%	
SCAG	47	35.1%	87.3%	
SJCOG	3	2.2%	89.6%	
SLOCOG	4	3.0%	92.5%	
STANCOG	2	1.5%	94.0%	
Unknown	8	6.0%	100.0%	
Total	134	100.0%	100.0%	

Experience

Two-thirds of respondents had more than 10 years working in transportation (Table 5) and all but 18 had worked on a federally-funded project in the last 5 years; about 1/3 had worked on 10 or more (Table 6). However, in contrast, 45% of respondents had done zero HES projects in the last five years (Table 7) and only 26% had done 3 or more HES-funded projects.

Table 5: Number/Percent of Respondents with Various Years of Experience in Transportation [Survey Question 5]

EXP	Frequency	Percent
Less than 1 year	2	1.4%
1 to 3 years	9	6.5%
4 to 6 years	17	12.3%
7 to 10 years	18	13.0%
Greater than 10 years	92	66.7%
Total	138	100.0%

Table 6: Number/Percent of Federally-Funded Projects worked on by Respondents in the Last Five Years [Survey Question 7]

PREV_FED	Frequency	Percent
0	18	13.1%
1 to 2	20	14.5%
3 to 5	34	24.6%
5 to 10	22	15.9%
10 or more	44	31.9%
Total	138	100.0%

Table 7: Number/Percent of HES-Funded Projects Worked on by Respondents in the Last Five years [Survey Question 6]

PREV_HES	Frequency	Percent
0	54	38.8%
1 to 2	46	33.1%
3 to 5	17	12.2%
5 to 10	11	7.9%
10 or more	9	6.5%
Total	139	100.0%

In one additional analysis, organization type was compared with years of HES experience to determine if Caltrans employees were more experienced in dealing with HES projects (Table8). While Caltrans employees did span all categories of experience, most had more experience with HES projects compared with employees from cities and counties.

Table 8: Number of Years of HES Experience by Organization Type

Organization Type and HES Experience							
ORG	Total Of ID	Blank	0	1 to 2	3 to 5	5 to 10	Greater than 10
Caltrans	17	1	1	2	5	3	5
City	91		45	28	10	5	3
County	31	1	8	16	2	3	1

Contributors to Delay -- Ranking

Survey question 24 asks respondents to rank their top 5 contributors to delay for HES and other Federally-funded projects. In theory, only those with HES experience would answer the HES question, and among those who do respond, they would each have only 5 options selected, ranked one through five. Because of these limitations, only about half the respondents completed the HES question and completed it correctly.

When including all responses to the HES question, there was remarkably little variation in the ranking of issues effecting HES delivery. The items with the highest rank averaged a 2.8 and the item with the lowest rank averaged a 3.4 (respondents could choose 1 through 5). The highest ranking items were: inadequate training, environmental issues, and consultant selection. The lowest ranking item was: amending the FTIP. However, because of the very small variation, none of the results are very useful.

The analysis was redone eliminating the respondents who did not appear to complete the question correct. These results, as anticipated, were more spread out. Both the average rank and the number of respondents ranking this item in the top 5 (i.e. giving it any rank) were considered. Of these, the latter is the perhaps most telling because it show how many respondents would have put this in the "Top 5" for causing delay. For each of these ways of assessing the data, relative ranks are provided in order to more easily compare the options. Results from this analysis are shown in Table 9.

Based on the results, there was one item that stood out as being the biggest concern: environmental issues. Briefly scanning the qualitative comments at the end of the survey (Appendix X), many seem to echo this concern over environmental issues (of note, however, this does not seem to be HES specific but related to all Federal projects). It was also more commonly reported as an issue by people working for "counties" (The survey does not tell us why, but perhaps because there are more environmental issues in rural areas).

Another observation: Very few people reported problems near the end of the project lifecycle: consultant selection, obtaining bids, and project construction.

One of the more interesting results (interesting because fewer respondents thought it was an issue, but those that did, thought it was a big issue) was inadequate federal procedure training (18 picked it, but it had an average rank of 2.9). People ranking this issue were spread across many District, organization sizes, and even included Caltrans employees, disproving the theory that this was because of inadequate training in certain Districts. Clearly though some people do not feel training was provided while others (the majority) do.

Based on these results the top 4 contributors to delay might be environmental issues, inadequate staffing, inadequate funds, and E-76 related issues.

Results for question 24 for all federally-funded projects were very similar to those for HES-funded projects. More on the comparison between these two categories is found in the next section.

Table 9: Number of Respondents, The Average Assigned Score, and the Relative Rank of these Responses for Categories Which May Cause Delay [Survey Question 24]

Category	Respondents	Relative Rank	Average Score	Relative Rank
RANKING_INADEQUATE_CURRENT_AND_COMPREHENSIVE_GUIDANCE_AND_POLICY_MANUALS	22	6	3.27	10
RANKING_INADEQUATE_FEDERAL_PROJECT_DEVELOPMENT_PROCEDURES_TRAINING	18	11	2.94	2
RANKING_INADEQUATE_LOCAL_FUNDING	29	5	3.07	4
RANKING_COST_OVERRUNS	22	6	3.18	7
RANKING_INADEQUATE_CALTRANS_ASSISTANCE	21	9	3.10	5
RANKING_INADEQUATE_STAFFING	35	2	3.14	6
RANKING_ENVIRONMENTAL_ISSUES	49	1	2.51	1
RANKING_RIGHT_OF_WAY_ISSUES	22	6	3.23	8
RANKING_DATE_FOR_PROJECT_SELECTION_NOTIFICATION	13	13	3.31	12
RANKING_TIME_TO_SCHEDULE_AND_COMPLETE_FIELD_PRELIMINARY_ENGINEERING_SURVEY_PES_REVIEWS	17	12	3.29	11
RANKING_REVISING_AMENDING_FTIP	21	9	3.57	15
RANKING_OBTAINING_PE_AUTHORIZATION_E_76	31	4	3.00	3
RANKING_CONSULTANT_SELECTION	5	16	3.40	13
RANKING_OBTAINING_CONSTRUCTION_AUTHORIZATION_E_76	33	3	3.24	9

RANKING_OBTAINING_BIDS_FOR_CONSTRUCTION	8	14	3.50	14
RANKING_PROJECT_CONSTRUCTION	7	15	3.86	16

Comparing HES and other Federally Funded Projects [Survey Questions 8 to 23]

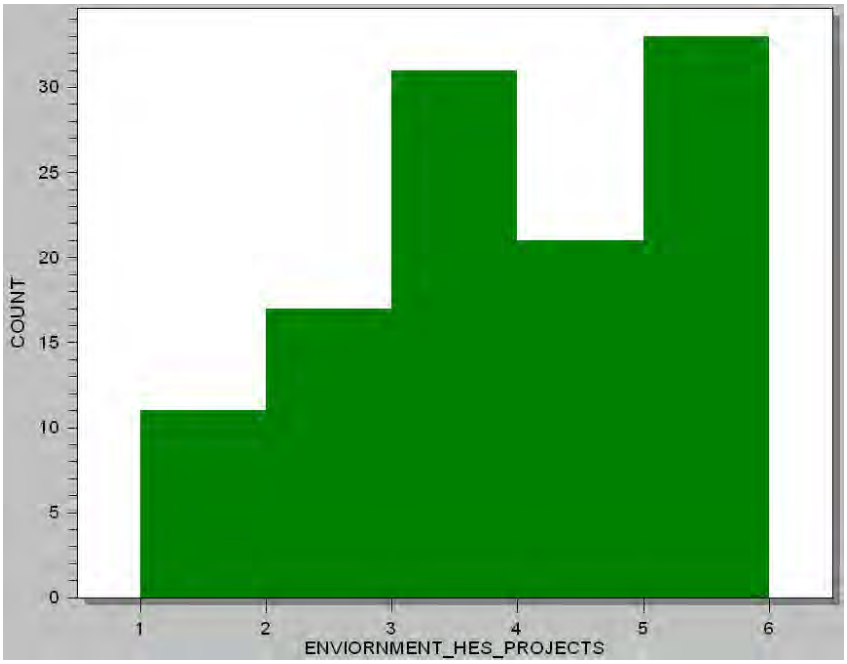
For these questions, if you are reviewing the actual results, keep in mind that a higher number means it is a cause of delay ("strongly agree") whereas when we ranked items (survey question 24) the lower number would be the greater cause of delay.

In viewing these results, there was generally agreement in scoring between HES and other Federally-funded projects. When there was a difference, it tended to be small and with HES projects having less contribution to delay among the items than other Federal projects. The categories where there was some discrepancy (arbitrarily defined as .3 or more difference in rankings -- a statistically insignificant amount) were lack of staffing (survey question 13), ROW issues (survey question 15), E-76 PE authorization (survey question 19), and obtaining bids for construction (survey question 22).

For both HES and Federally-Funded projects, respondents most "strongly agreed" that the most significant factors in delay were ROW issues and environmental issues. Most "strongly disagreed" that the following were issues: consultant selection, obtaining bids, and project construction. These findings support the hypothesis that the issues with HES projects are not unique to HES, but common among all Federally-funded projects.

HES score were also examined to ensure that distribution was not abnormal. In other words, that most responses were concentrated around the average rather than at the extreme. This was more or less the case for all issues. With some issues, such as Environmental Issues, this even more strongly reinforced that this is a top concern because more than any other category, respondents chose "strongly agree" when asked if they felt environmental issues cause delay (Figure 1).

Figure 1: Distribution of Responses to Environmental Issues Causing Delay on HES Projects (1=Strongly Disagree, 5=Strongly Agree) [Survey Question 14]



Caltrans Employees

Sixteen Caltrans Employees completed the survey. Among these, inadequate staffing was one of the most highly ranked issues effecting project delivery. Inadequate local funding was also very common. Issues amending the FTIP were also reported in the top 5 by most (though almost always at 5). Cost overruns and environmental issues would round out their most mention/highest ranked/highest scored issues for concerns.

HES Experience

There were some noteworthy trends regarding HES experience (Table 10). As experience working with HES projects increased, more "strongly agreed" that inadequate funding and the FTIP caused delay. The opposite was seen, though to a lesser extent, for policy, training, and for environmental issues.

Table 10: Average Score (Strongly Disagree = 1, Strongly Agree = 5) for Each Category by Respondents HES Experience in Last Five Years [Survey Questions 8 to 23]

	0 to 2 HES Projects	3 or More HES Projects
Avg Of POLICY_HES_PROJECTS	2.83	2.59
Avg Of TRAINING_HES_PROJECTS	2.83	2.67

Avg Of FUNDING_HES_PROJECTS	2.77	3.32
Avg Of OVERRUN_HES_PROJECTS	2.78	2.78
Avg Of DLAE_HES_PROJECTS	2.67	2.59
Avg Of STAFF_HES_PROJECTS	3.14	3.14
Avg Of ENVIORNMENT_HES_PROJECTS	3.50	3.27
Avg Of ROW_HES_PROJECTS	2.78	2.78
Avg Of TIMING_HES_PROJECTS	2.91	3.08
Avg Of SCHEDULE_HES_PROJECTS	2.54	2.62
Avg Of FTIP_HES_PROJECTS	2.60	3.33
Avg Of PE_HES_PROJECTS	2.93	2.92
Avg Of CONSULTANT_HES_PROJECTS	2.24	2.43
Avg Of CONSTRUCTION_HES_PROJECTS	2.88	3.08
Avg Of BIDS_HES_PROJECTS	2.23	2.36
Avg Of COMPLETE_HES_PROJECTS	2.26	2.19

Federal Experience

There were some noteworthy trends regarding Federal project experience. As experience working with Federal projects increased, more "strongly agreed" that environmental issues and FTIP approval caused delay. Those with less experience more "strongly agreed" that lack of policies and guidance contributed to delay.

District

The results presented in this section, while at times compelling, should be interpreted with caution due the small sample size in many of the districts. Table 11 below has the "strongly agree/strongly disagree" score for each section grouped by District. It's a quick way to look and see what were some of the most significant issues for delay in a district (reading down) and some of the districts which had an issue dissimilarly associated compare to other districts (reading across). So for example, District 1 "strongly agreed" that inadequate funding, inadequate staffing, and FTIP were their main contributors to delay. For another example, considering comprehensive guidance and policy, District 9 seems pretty concerned with this where almost no one else was (that said, they only had one respondent, so use caution).

Table 11: Issue Score by District

DISTRICT	1	2	3	4	5	6	7	8	9	10	11	12
POLICY	2.00	2.33	2.55	2.75	2.55	3.00	2.93	3.14	4.00	2.38	2.90	2.91
TRAINING	2.00	2.33	3.00	2.75	2.09	3.33	2.94	2.85	3.00	3.13	2.90	2.92
FUNDING	4.00	2.33	3.36	3.08	2.82	4.33	3.13	2.85	3.00	2.25	2.70	2.82
OVERRUN	2.67	1.67	2.55	2.74	3.09	3.67	2.81	2.77	3.00	3.38	2.80	2.36
DLAE	2.00	2.33	2.45	2.74	1.91	2.67	2.88	2.85	2.00	2.75	2.50	3.27
STAFF	4.50	4.00	3.64	2.95	2.82	4.00	2.75	2.92	3.00	3.25	3.20	3.36

ENVIORNMENT	3.67	4.67	3.27	3.35	3.55	4.33	2.93	3.23	2.00	4.13	3.80	3.27
ROW	2.67	3.33	2.55	2.48	2.82	4.33	3.13	2.69	3.00	3.50	2.70	2.27
TIMING	3.00	3.00	3.55	2.78	3.00	2.00	2.81	2.92	4.00	3.63	2.60	3.00
SCHEDULE	3.00	2.67	1.73	2.70	1.64	2.00	2.53	3.15	3.00	2.88	2.30	3.36
FTIP	4.33	3.33	2.45	2.48	3.30	3.67	2.38	3.15	3.00	3.13	3.00	2.82
PE	3.67	3.00	2.36	2.86	2.20	2.67	3.14	3.08	4.00	3.00	3.20	3.27
CONSULTANT	2.00	2.33	1.91	2.35	2.22	2.33	2.40	2.92	3.00	1.88	2.30	2.18
CONSTRUCTION	3.00	2.67	2.36	2.74	2.30	2.33	3.13	3.08	4.00	3.00	3.60	3.64
BIDS	3.33	2.00	1.91	2.26	2.10	1.67	2.53	2.77	2.00	2.50	2.30	1.82
COMPLETE	2.00	2.00	1.82	2.09	2.00	1.67	2.73	2.69	2.00	2.38	2.30	2.18

Some observations of interest:

- District 2 has some serious concerns with environmental issues.
- District 4 (which had the most respondents) also seems to have the least number of issues with delay; environment and funding were the only ones where they even "agreed" there was an issue
- District 1 has trouble getting bids, but no one else (except maybe district 8) does; District 1 also has the most trouble with their FTIP.
- ROW is a big issue for District 6

Size

The results in this section compare the average score of the issue with the size of the city/count in which the respondent works. Some observations:

- Training is a bigger issue for smaller localities
- Funding, cost overruns, and obtaining PE authorization are bigger issues for larger localities
- Caltrans considers staffing a greater impediment than any locality size (its also their biggest concern overall)

Table 12: Issue Score by Size of Population of City/County in Which Respondent Works

SIZE	Less than 25,000	25,000 to 100,000	100,000 to 500,000	Greater than 500,000	CalTrans
POLICY	2.67	2.84	2.73	2.90	2.73
TRAINING	3.00	2.74	2.76	2.70	2.70
FUNDING	3.05	2.78	2.81	3.50	3.40
OVERRUN	2.79	2.51	2.84	3.30	3.00
DLAE	2.83	2.31	2.95	2.40	2.45
STAFF	3.12	2.89	3.38	2.90	3.50
ENVIORNMENT	3.59	3.25	3.46	3.80	3.18
ROW	3.41	2.53	2.84	2.70	2.55
TIMING	3.33	2.69	3.11	2.70	2.64

ATTACHMENT E

HES Program Survey Summary and Results

SCHEDULE	2.82	2.17	2.73	2.30	2.91
FTIP	2.61	2.26	3.32	2.90	3.27
PE	2.88	2.58	3.14	3.40	2.73
CONSULTANT	2.35	2.18	2.41	2.10	2.45
CONSTRUCTION	2.71	2.66	3.19	3.10	3.00
BIDS	2.18	2.17	2.43	2.00	2.73
COMPLETE	2.18	2.20	2.49	1.50	2.55