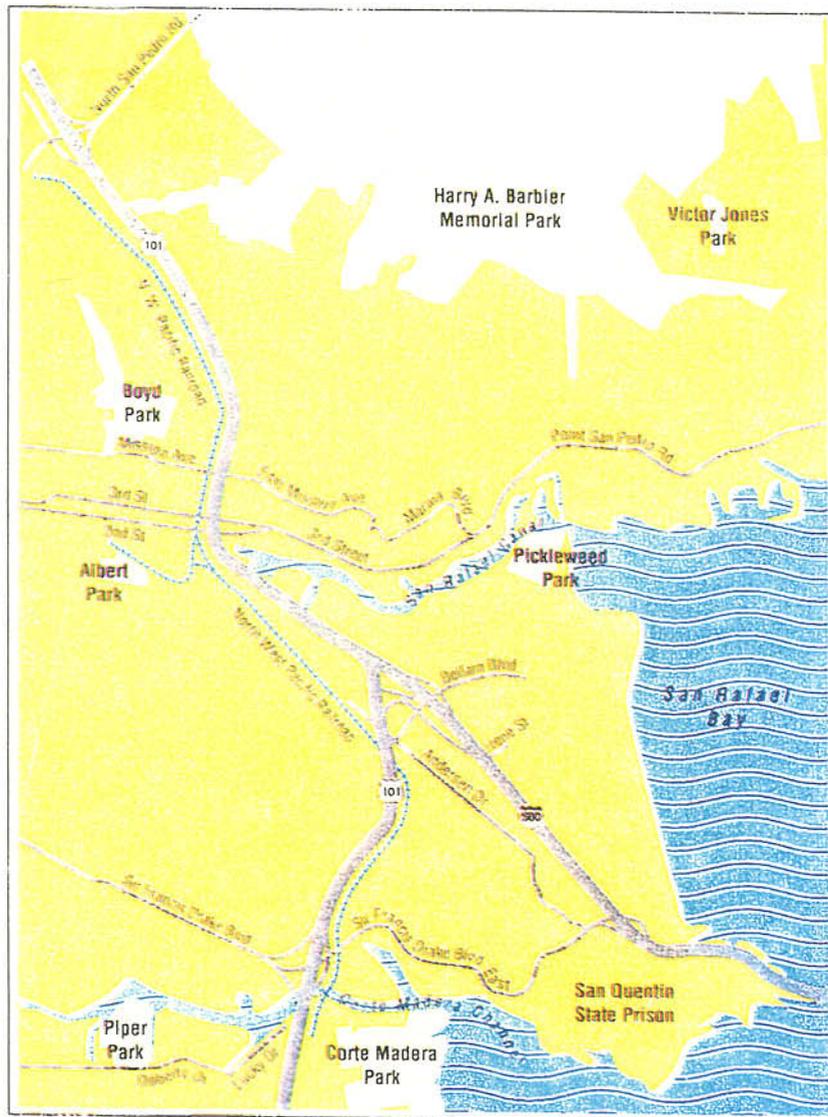


# MARIN 101 HOV LANE GAP CLOSURE PROJECT

## California Department of Transportation



## Final Environmental Impact Statement/Report

### Volume II



Prepared by  
State of California  
Department of Transportation  
District 4



US Department  
of Transportation  
Federal Highway  
Administration

# **MARIN 101 HOV GAP CLOSURE**

**Lucky Drive to North San Pedro Road**

**Response to Agency and Public Comments  
to the  
Draft Environmental Impact Statement/Report**

**Volume II**

**Federal Highway Administration**

**Department of Transportation**

**District 4 - Oakland**

**January 2000**

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Introduction

To organize and simplify reading and understanding the responses to the comments received after circulation of the Draft Environmental Impact Statement/Report (DEIS/R), this section of the Marin 101 HOV Lane Gap Closure Project Final Environmental Impact Statement/Report (FEIS/R) has been arranged by major environmental and project-related topics. Comments on the same topic are grouped together and the comments are summarized or paraphrased. Each comment is followed by a response. The original comments, comment #2 through comment #57 are included in the appendix to this section. They are referenced by both the name (or organization) of the commentor and by the comment number, see Volume II Appendix, Table of Contents for Original Comments. Original comments containing several issues may have responses under several different topics. An attempt has been made to respond to all comments received after circulation of the DEIS/R.

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## Responses to Comments by Topic

### HIGH OCCUPANCY VEHICLE (HOV) SYSTEM

#### **#26-Bob Ford, #53-Mick Spilsbury and #54-Marin Advocates for Transit(A)**

Comment: The project should only provide a long term and complete solution to the commute in the south and north directions. Anything less is not worth the cost and property invasion. The cost and disruption of the project for two carpool lanes is dubious. It is unclear how alternatives were withdrawn from the study.

Response: Planning and development of the Marin 101 HOV Lane Gap Closure Project was intended to provide a long-term solution to the traffic congestion in the Marin 101 corridor, to encourage carpooling and to encourage the use of other modes of transportation. There is insufficient funding available to complete the Ultimate HOV Lane Gap Closure Alternative that includes an additional lane in each direction. The strategy for this portion of US 101 is to construct portions of the Marin 101 HOV Lane Gap Closure Project, as funds become available. The Southbound/Reversible HOV Lane Gap Closure Alternative would construct a southbound HOV lane, providing an additional HOV lane in the southbound direction and then convert it to a reversible southbound/northbound HOV lane with a moveable barrier. An additional full northbound HOV lane may be completed when funding becomes available.

Section 2.3 Alternatives Considered and Withdrawn in Volume I of the FEIS/R discusses each of the alternatives considered and withdrawn and the reasons for their withdrawal. Additional information may be available in technical reports prepared for the Marin 101 HOV Lane Gap Closure Project. These reports are referenced in Appendix E of Volume I.

#### **#6-Conrad Oho**

Comment: A separated HOV zone should be constructed on the right side to promote HOV usage similar to the Bay Bridge. This could be done in Marin.

Response: A separated right side HOV bypass would present a number of traffic dilemmas. It would be in conflict with accepted traffic engineering and require approval from the FHWA. There would be the problem of traffic wanting to enter or exit US 101 across the right side HOV lane, which typically have higher speeds during their periods of operation. It would likely require a wider right of way.

#### **#25-Eugene Cantin, #43-Golden Gate Bridge, Highway and Transportation District (GGBHTD), #46-Bay Area Air Quality Management District, #51-Marin Audubon Society, #52-Environmental Forum of Marin and Public Hearing Comment – Bill Stender p. 59.**

Comment: Why can't we put the HOV lane into the existing lanes for the commuter to double up or take the bus? Convert a mixed-flow lane to an HOV lane.

Response: As discussed in the FEIS/R, see Sections 3.12 and 4.12, the existing traffic demand exceeds the capacity of the current three mixed-flow freeway lanes causing congestion and long traffic delays. The existing three mixed-flow lanes carry 4850 vehicles, 1600 vehicles per lane, southbound from Route 37 to North San Pedro Road. If one mixed-flow lane is converted to a HOV lane then the two remaining mixed-flow lanes must handle 2400 vehicles each.

Converting existing mixed-flow lanes to HOV lanes would contribute to additional mixed-flow traffic delays and extend traffic bottleneck sections in length and severity. See Section 2.3 Alternatives Considered and Withdrawn in Volume I of the FEIS/R.

**#43-GGBHTD**

Comment: Why do “Build SB HOV Only” delays (mixed-flow and HOV) for the southbound morning peak period decrease from 2000 to 2010 at Miller Creek Road?

Response: Marin 101 HOV Lane Gap Closure Project traffic modeling studies estimated a decrease in southbound AM delays between the years 2000 and 2010 caused by a slight decrease in projected demand at the bottleneck section at the Lincoln Avenue on-ramp. For the No-Build Alternative the difference is 170 vehicles (8,340-8,170) or 2%. For the Build Alternative, the difference is 70 vehicles (9,330-9,260) or 1%.

**#43-GGBHTD and #50 Marin Conservation League**

Comment: The DEIS/R estimates a significant benefit for northbound travel (particularly at the 580 interchange) in 2010 with “Build Ultimate With Light Rail Transit (LRT) compared to “Build Ultimate Without LRT” scenarios. Why are estimated benefits for southbound travel between these two scenarios shown to be only 0.2 minutes (12 seconds)?

Response: There are several differences between peak-period southbound AM and northbound PM traffic. Northbound PM peak-period trips are a mix of work, shopping, school, commuting, etc. Southbound AM peak period trips are primarily work trips and have lower traffic levels. Another factor is higher northbound peak period traffic compared to southbound peak-period traffic. The traffic volume reduction due to the LRT on US 101 southbound in the AM peak hour is small (maximum, -220 trips out of a volume of 8,520). The reduction in volume has a minimal effect on highway operations. However, volume reduction due to LRT northbound in the PM peak hour is much greater (maximum, - 970 trips out of the volume of 10,170). It has significant impact on highway operations and improves traffic flow.

**#54-Marin Advocates for Transit(A)**

Comment: The DEIS/R indicates that the auxiliary lanes produce an insignificant time saving that does not justify the \$100 million cost.

Response: As indicated in the FEIS/R, see Chapter Two of Volume I, auxiliary lanes are a minor part of the Marin 101 HOV Lane Gap Closure Project. They serve ramp-to-ramp local traffic and assist local circulation in the absence of frontage roads. They also increase the weave distance for traffic merging on and off the freeway. Time savings for regional traffic are not their prime purpose. There are very few auxiliary lanes proposed as a part of the current Marin 101 HOV Lane Gap Closure Project, see FEIS/R, Volume I, Chapter Two, Project Alternatives.

With respect to the estimated time savings for the entire Marin 101 HOV Lane Gap Closure Project, Section 4.12.2-Traffic Operations of the FEIS/R indicates time savings of up to 25.8 minutes for HOV lane traffic in the northbound evening peak period. Southbound HOV traffic and mixed-flow traffic will also see substantial reductions in delay times under the Build alternatives.

#### **#46-Bay Area Air Quality Management District (BAAQMD)**

Comment: A Sacramento study shows that HOV lanes increases vehicle miles traveled (VMT), does not increase transit use, and decreases the walk and bike modes.

Response: The Sacramento region is different from the Bay Area and Marin. There is more mass transit available in the Bay Area. Marin has a large number of multi-car families who make many local trips on the freeway that are not affected by HOV lanes.

#### **#43-GGBHTD**

Comment: The Bellam Road/I-580 service road intersection is not closed as stated in the DEIS.

Response: In the Ultimate HOV Lane Gap Closure Alternative geometrics, the proposed connector from southbound US 101 to eastbound I-580 will have access to Bellam Blvd only via the Irene Street interchange. The Bellam Blvd off-ramp will be closed to southbound US 101 to eastbound I-580 traffic under this alternative, see Appendix A-Project Mapping in Volume I of the FEIS/R. In the current geometrics for the Southbound Only HOV Lane Gap Closure Alternative and the Southbound/Reversible HOV Lane Gap Closure Alternative, the Preferred Alternative, southbound US101-to-eastbound I-580 traffic may still have an option to exit at Bellam Blvd.

#### **#43-GGBHTD**

Comment: In the Ultimate project the flyover will relieve northbound to eastbound congestion and improve access to the Larkspur Ferry Terminal by alleviating traffic demand on East Sir Francis Drake Blvd? How will the existing on-ramp traffic from eastbound Francisco West be accommodated at the intersection, at the adjacent intersection and traffic from eastbound Francisco West? These issues were not discussed in the DEIS.

Response: Traffic studies for the FEIS/R for the Marin 101 HOV Lane Gap Closure Project did not analyze local arterials or intersections other than the four in San Rafael. Maps of the proposed geometrics of each of the Build alternatives are available in Appendix A-Project Mapping in Volume I of the FEIS/R to illustrate proposed intersection alignments. In addition, the flyover is specifically mentioned in Section 2.2.3 of the FEIS/R as one of the proposed geometrics.

#### **#48-Marin County Department of Public Works**

Comment: On page 39 of the DEIS/R describes the existing traffic conditions and High Occupancy Vehicle (HOV) lane hours. That description is incorrect for the southbound operation in the morning hours. The Draft states that the southbound HOV hours are from 6:30 to 9:30 A.M. but should be 6:30 to 8:30 A.M.

Response: As suggested by the Marin County Department of Public Works, Section 3.12.1 of the FEIS/R now states that the HOV lane hours are from 6:30 to 8:30 A.M.

#### **#54-Marin Advocates for Transit(A)**

Comment: Rather than summarily dismissing such an alternative as substandard for not providing a shoulder for a breakdown lane, the DEIS/R should instead evaluate the probable frequency of breakdown incidents on this 4 mile stretch of freeway, using Caltrans statistics of breakdowns per lane-mile per year. A political decision will then need to be made on the basis of this analysis as to whether the likelihood of, for example, two breakdowns per year in this lane

would be an acceptable tradeoff for a savings of \$100 million dollars, the delivery of the northbound HOV function at least ten years earlier than planned, and the elimination of the horrible disruption of downtown San Rafael to be caused by the building of a new northbound viaduct.

Response: The No-Build, Ultimate HOV Lane Gap Closure Alternative and the Southbound Only HOV Lane Gap Closure Alternative were fully evaluated in the Draft EIS/R (DEIS/R). The DEIS/R described the Southbound Only HOV Lane Gap Closure Alternative as a fundable alternative. The DEIS/R described the Southbound/Reversible HOV Lane Gap Closure as “considered but withdrawn”. However, after receiving considerable public interest during the review of DEIS/R and public hearing held in July 31, 1997 regarding an alternative achieving a continuous HOV lane system in each direction and availability of the funding beyond the currently secured funds for the Southbound Only HOV Lane Gap Closure Alternative, the Southbound/Reversible HOV Lane Alternative has been reconsidered and has been selected as preferred alternative.

After receipt of public comments on the DEIS/R, Marin County requested a consultant to prepare a project Study Report (PSR) to evaluate various alternatives for implementing a reversible HOV Lane to complete the HOV gap in both direction on US 101 from State Route 1 near Richardson Bay to State Route 37 in Novato. This PSR was prepared under the technical oversight of Caltrans engineers, planners and right of way specialists and was approved on January 16, 1998. The PSR recommended that a reversible HOV Lane is technically and operationally feasible provided the additional funding is available. A portion of the required funding to construct the reversible HOV lane became available through the joint efforts of Marin County and Caltrans and from support of the Federal Highway Administration (FHWA) officials. So the Southbound/Reversible HOV Lane Gap Closure Alternative was studied in more detail during the development of the Final EIS/R (FEIS/R). The Southbound /Reversible HOV Lane Gap Closure Alternative proposes to use the planned southbound HOV lane to construct a reversible lane with a moveable barrier to provide an HOV lane in both the northbound and southbound direction along US 101. This alternative proposes to use a hybrid system that includes elements of a reversible lane system and a moveable barrier system. This alternative provides for a fixed barrier northbound and a moveable barrier southbound from Anderson Drive to the north of Coleman School Pedestrian Overcrossing (POC) on US 101 and this stretch is called “Isolated” lane. The “Isolated” lane section provides for a shoulder adjacent to the reversible HOV lane for safety and breakdown incidents. In the remaining section from Lucky Drive to Anderson Drive and north of Coleman School POC to North San Pedro Road, the right shoulder will be utilized for any breakdown incidents. So the Southbound/Reversible HOV Lane Gap Closure Alternative will achieve goals of completing the HOV gap on US 101 in Marin County without construction of a northbound Central San Rafael Viaduct. However, this alternative proposes to widen the southbound Central San Rafael Viaduct to accommodate the additional width required to construct the reversible HOV lane.

As mentioned above, a shoulder in the “Isolated” reversible lane is being proposed. Necessity of having a shoulder was questioned by Marin Advocates for Transit. In the “Isolated” area, having a shoulder is very important for safety and operational reasons. The Marin Advocate for Transit suggested backing of a tow truck in the case of breakdown incidents in this area. This could be done, however it has numerous safety and operational issues along with financial burden and delay to the public.

Based on the analysis from the California Highway Patrol Consumer Aided Dispatch (CHP CAD), from September 30, 1999 to October 13, 1999, there were 171 incidents involving accidents, disabled vehicles, debris, etc. This translated to an estimated approximately 17 incidents per weekday for both directions along US 101 from Lucky Drive to North San Pedro Road. During the HOV Lane operation hours (i.e. 5.5 hours period from 6:30 to 8:30 a.m. and

3:30 to 6:00 p.m.), incident rate is approximately 6 incidents per weekday. The analysis shows that the split between in-lane vs. shoulder and northbound vs. southbound direction may be assumed 50% - 50%. The analysis further shows that the estimated duration for typical in – lane incident is about 25 minutes. The duration of delay and cost of delay were calculated based on projected HOV volume from year 2000 for the Southbound/Reversible HOV Lane Gap Closure Alternative. One location from each direction with the highest projected HOV volume was chosen. Based on the analysis of impacts resulting from an incident, which would block the HOV Lane for 25 minutes, the costs and delays are estimated to be as follows:

In the southbound direction, between Lincoln Avenue and Mission Avenue, an incident causing a 25 minute delay results in congestion lasting 1 hour and 18 minutes. This results in 24,821 vehicle-minutes of delay for all vehicles in the queue. The total operating losses for the delay is \$3,922.

In the northbound direction, between Lincoln Avenue and North San Pedro Road, an incident causing a 25 minute delay results in congestion lasting 1 hour and 43 minutes. This results in 39,232 vehicle-minutes of delay for all vehicles in the queue. The total operating losses for the delay is \$6,199.

Based on the above costs, the total cost for a duration of one year for HOV vehicles is calculated as \$7.8 Million. It is emphasized that this cost is only for the operating costs of vehicles and does not include actual costs to public in lost personal time.

## REVERSIBLE ALTERNATIVE

### **#52-The Environmental Forum of Marin**

Comment: Add an auxiliary lane from Lincoln and Heatherston, a ramp on the San Rafael viaduct and another auxiliary lane between Andersen Drive and Sir Francis Drake Boulevard.

Response: The Reversible lane concept answers most of the concerns of this comment and saves right of way and cost and impacts. Please see the discussion of this alternative in the FEIS/R, Section 2.2.5-The Southbound/Reversible HOV Lane Alternative.

**#2-San Rafael Chamber of Commerce, #3-Stephan Gale, Fair, Isaac & Company, #5-Walter Strakosch, #10-Walt Strakosch, #47-Metropolitan Transportation Commission (MTC), #50-Marin Conservation League, #51-Marin Audubon Society, #52-The Environmental Forum of Marin and #54-Marin Advocates for Transit(A). Public Hearing Comment-David Schonbrunn p.38.**

Comment: The Reversible Alternative should be the Preferred Alternative.

Response: The Southbound/Reversible HOV Lane Gap Closure Alternative is now the Preferred Alternative. This occurred in response to public and agency comments on the DEIS/R and an increase in funding now available to fund this needed solution. When the Southbound/Reversible HOV Lane Gap Closure Alternative was initially evaluated, there was neither sufficient funding, nor enough information on its engineering and traffic feasibility.

The Southbound/Reversible HOV Lane Gap Closure Alternative would first construct a southbound HOV lane and convert it to a reversible HOV lane with a moveable barrier to provide an HOV lane in the northbound or southbound direction along US 101. This Alternative

requires no additional right of way beyond what is acquired to construct the Southbound Only HOV Lane Gap Closure Alternative. The lane may serve as a mixed-flow lane during off-peak periods (including midday, nights and weekends), until the lane is reversed for the next peak period.

**#54-Marin Advocates for Transit(A)**

Comment: The DEIS should acknowledge that the auxiliary lanes make the present project as proposed by Caltrans to be a different project than that proposed in local and regional plans. There is no regulatory support for the inclusion of auxiliary lanes in the Gap Closure project.

Response: Many highway improvements included in the Marin 101 HOV Lane Gap Closure Project, as in other projects, are not specifically listed in the brief project description found in local and regional transportation plans and programs. Improvements to substandard shoulders, lanes, and ramping; construction of a new freeway-to-freeway connector; replacement of the existing freeway-to-freeway connector with a two lane structure; constructing a new interchange on I-580; and the construction of new auxiliary lanes are all components of the Marin 101 HOV Lane Gap Closure Project. As discussed in the FEIS/R, auxiliary lanes are included in the Marin 101 HOV Lane Gap Closure Project Study Report (PSR). The PSR forms the basis for the programming of the project into the local and regional plans.

**ALTERNATIVE ANALYSIS**

**#54 Marin Advocates For Transit(A) and #55-Marin Advocates For Transit(B) and #56-Sierra Club**

Comments: The alternatives analyses in the DEIS did not support the final alternatives chosen. The DEIS does not discuss the avoidance and minimization of environmental damage for all alternatives.

Response: See the Alternatives section and Alternatives Withdrawn, Section 2.3. Reasons are given for the feasibility of each alternative and the environmental impacts were a major deciding factor in alternative choice. Numerous public meetings and discussions were held to solicit suggestions on alternatives and to receive comments on the issues involved in the alternatives. As reported in Section 2.1 of the FEIS/R, the alternatives were studied and evaluated for potential impacts and their ability to meet the project purpose and need. Many alternatives were withdrawn from consideration as discussed in Chapter Two-Project Alternatives of the FEIS/R. The reasons for their withdrawal are included in that discussion. The remaining alternatives were thoroughly evaluated and were evaluated to the same level of detail. Changes in the project alternatives to avoid negative effects on the natural environment, on communities, on business, etc. were considered. The availability of funding was also a factor. Since the project is contained within the existing corridor impacts are minimal. Impacts on housing and businesses are the only major measurable impact.

Identification of the Southbound/Reversible HOV Lane Gap Closure Alternative as the Preferred alternatives also included consideration of the substantial public and agency input received after the DEIS/R was circulated. Plans for this alternative include preserving the full width for the railroad corridor.

**#54-Marin Advocates for Transit(A)**

Comment: Caltrans requested scoping comments, but refused to enter into a full multimodal analysis.

Response: Numerous public meetings and discussions were held to solicit suggestions on alternatives and comments on the issues involved in the alternatives. Extensive planning efforts were made by community based studies, like the *Sonoma/Marin Multimodal Transportation and Land Use Study*. Caltrans, a partner in that study, held numerous public meetings in both counties soliciting input which went into the adopted alternatives and the adopted “Preferred Scenario.” Caltrans also met with the Marin Congestion Management Agency, members of the Board of Supervisors, and many other groups.

**#21-Carlos Casagrande**

Comment: The only solution to this project is to get the bulldozer out and widen the freeway to 16 lanes now. Blast the hills and maybe by 2010 you will be rid of the gridlock. The problem is not going to get better and in the end after billions of dollars spent. All of the graphs looks good, but don't address the weekend traffic. Let's do it for the future – its already later than we think.

Response: Marin County has limited space for expansion along the 101 corridor due to geographic limitations. Intense development adjoining the corridor precludes an indiscriminate approach to widening. Impacts of such a widening would devastate the economic center of Marin and funding for such a drastic approach is not available. Even if the funding were available for such a project it would not be environmentally and politically acceptable.

**#39-U.S. Environmental Protection Agency (EPA)**

Comment: The DEIS needs a better discussion of alternatives and the San Rafael viaduct.

Response: Chapter Two of the Marin 101 HOV Lane Gap Closure Project Final Environmental Impact Statement/Report (FEIS/R) identifies several alternatives that meet the project's purpose and need and impose the least negative impacts. In addition, the FEIS/R clearly identifies the Southbound/Reversible alternative as the preferred alternative in Section 2.1. It also clearly defines the basis for decision for the west side widening option. Due to this widening, relocations of businesses, residences, and the NWPR will take place. As stated in the DEIS/R, the NWPR right of way will be fully restored as part of the Marin 101 HOV Lane Gap Closure Project. This action does not preclude a future rail project, it ensures it. A full discussion of the residential and business relocations is provided in Sections 4.13.6 and 4.13.7.

Furthermore, Section 3.7.3 discusses the results of the San Rafael Viaduct investigation for Hazardous Waste. Section 4.7.3 discusses the hazardous waste impacts of construction and excavation beneath the existing northbound and/or southbound structures for each of the considered alternatives.

The northbound San Rafael viaduct would be replaced not relocated if in the future there is adequate funding to construct the Ultimate HOV Lane Gap Closure Alternative. The viaduct is not wide enough to accommodate an HOV lane in the northbound direction. Caltrans structural engineers have determined that the northbound viaduct is too old to be widened. The replacement was requested by the City of San Rafael in part because a new structure would have fewer columns, allowing local street improvements through this very congested area. It would improve the visual landscape by replacing the existing columns with fewer more aesthetically pleasing ones.

## MAJOR INVESTMENT STUDY (MIS) REQUIREMENTS

### **#54-Marín Advocates for Transit(A)**

Comment: A complete analysis of alternatives required in a Major Investment Study was not done in the DEIS.

Response: The staff of the Metropolitan Transportation Commission stated, in a letter dated August 20, 1997, "...agrees that Caltrans has satisfied the MIS requirements. The MTC letter can be found in the Original Comments section of this document on page 159. We concur that the HOV Gap Closure project was a 'pipeline' project, and the DEIS/R adequately documents prior studies and planning processes to demonstrate that the project has met the MIS requirements." See MTC's memorandum in Appendix B of Volume I of the FEIS/R. Also see the prior comment on the adequacy of alternative analysis.

The *Sonoma/Marin Multimodal Transportation and Land Use Study* concluded that the completion of the Gap Closure project was an integral component of the "Preferred Scenario" of transportation improvements on Highway 101. The Study summed up ten years of interagency and public planning to reach the alternatives.

## TRANSIT ISSUES

### **#43-GGBHTD**

Comment: Forecasts with Light Rail Transit (LRT) are not made making comparison between freeway expansion and multi-modal systems difficult. See also Marin Conservation League, p. 165, third bullet.

Response: The Ultimate Alternative was analyzed for 2010 and 2020 without the LRT. It was analyzed for 2010 only, because there was an assumption that the LRT would be constructed by that time.

### **#50-Marín Conservation League**

Comment: Provide estimates for highway delay under the assumption that light rail will terminate in San Rafael rather than Larkspur.

Response: It is speculative that the light rail will terminate in San Rafael rather than Larkspur. Caltrans cannot predict or model all possible scenarios considering the numerous limitations for any light rail system to develop in the Marin-Sonoma area.

### **#46-BAAQMD and #39-EPA**

Comment: Congestion Pricing.

Response: The Intermodal Surface Transportation Efficiency Act of 1991 established the Congestion Pricing Program to provide technical and financial support for market-based approaches to demand management in order to find ways to address congestion and air quality problems.

Caltrans has been actively involved in numerous Congestion Pricing projects. The I-15 Express Pass program is a cooperative 3-year demonstration made possible under the Congestion Pricing Pilot Program. The program allows single-occupancy vehicles to pay a fee in order to travel on an existing HOV lane, while maintaining an adequate level of service for HOV users.

There is no current plan to introduce “congestion-pricing” to the Marin Corridor.

#### **#43-GGBHTD**

Comment: Clarify “projected ridership” and costs inconsistent with County and MTC plans.

Response: Supporting documentation for projected transit ridership is a component of the traffic modeling done for the traffic study. Bus ridership was 19.6% of the total trips in the AM Peak for the year 2000 and 2010.

Transit alternatives are an important part of the multi-modal effort that Caltrans, the Metropolitan Transportation Commission, GGBHTD, and Marin County Congestion Management Agency have been involved in over the past 20 years. The Regional Transportation Plan, the Congestion Management Program and the current and past transportation plans have, in varying degrees, all agreed with this approach. All the different transportation modes have funds allocated to them, with their own criteria for approval and administration. This environmental document was prepared to assess various ways to close the gap in the HOV lanes on U. S. 101 through San Rafael, Larkspur and Corte Madera. More buses, ferries and a train do not achieve that goal. HOV lanes are used by buses and benefit riders commuting to ferry terminals and other destinations. The HOV lanes do reduce dependence on single-occupancy vehicles and relieve congestion by providing options to the congested mixed-flow lanes.

#### **#43-GGBHTD**

Comment: DEIS drawings do not recognize that the taper lengths for bus pullouts are inadequate.

Response: Only one bus pad located at Lucky Drive in Larkspur is affected and only for the Ultimate HOV Lane Gap Closure Alternative.

Project Mapping shows the proposed geometrics for the Southbound Only HOV Lane Gap Closure Alternative and the Southbound/Reversible HOV Lane Gap Closure Alternative do not affect the existing bus pad located at Lucky Drive on the northbound side of the freeway. Similarly the proposed geometrics for the Southbound Only HOV Lane Gap Closure Alternative and the Southbound/Reversible HOV Lane Gap Closure Alternative do not affect the existing bus pad at North San Pedro Road in San Rafael. Caltrans would consider upgrading these bus pads for the Ultimate HOV Lane Gap Closure Alternative.

#### **#43-GGBHTD**

Comment: DEIS does not state the efficiency of the transit carrying 15 percent of traveling persons and 1 percent of vehicular morning peak hour volumes.

Response: This statement does not imply that utilization of HOVs would not reduce the direct energy use. It is only stating that operational improvements on the mixed-flow traffic would make greater impact on the project’s energy use than improvements on HOVs. That is the case since four out of five vehicles traveling on US 101 use the mixed-flow lanes during peak hours, including heavy trucks that are most fuel-consuming, and that ratio does not change drastically with the Build Alternatives.

### **#43 GGBHTD**

Comment: The DEIS makes no assessment of the effect of the Marin 101 HOV Gap Closure Project on the efficiency or effectiveness of District bus services.

Response: The DEIS/R states that the HOV lanes would improve travel times for buses and ride sharing vehicles. The HOV lane would improve access to the Larkspur Ferry Terminal. The Southbound Only/Reversible Lane Alternative would act to improve bus operations and access, especially at peak traffic hours on 101.

### **#43-GGBHTD and Public Hearing Comment – David Schonbrunn p.41.**

Comment: DEIS/DEIR states that funds for rail transit were not identified and then says that HOV lanes in the NWPR corridor was dropped due to the preservation of the corridor for rail. At the scoping we asked that Caltrans consider a transit-only alternative. The transit-only alternative and HOV lanes are in competition and it's necessary for the two to be studied in comparison.

Response: Projected use of the NWPR corridor for rail transit and identification of funds in the RTP are separate matters. The environmental evaluation, prepared by Caltrans, for the purchase of the NWPR right of way was done to allow rail service in the future when funds were identified. The DEIS/R stated, in reference to the *Sonoma/Marin Multi-modal Transportation and Land Use Study*, that as with all of the studies for the NWPR corridor through Sonoma and Marin, the need for regional consensus on the improvements and identification of a source of funding will be the major challenges. This study should help in defining some of the proposed rail service's operating and financing questions. At the present time, the RTP does not identify regional funds for constructing or operating a corridor rail transit system in either county.

Early traffic projections indicated a rail and/or bus alternative would not take a sufficient number of commute trips off the 101 corridor to make it a viable alternative. Also, the rail system would require separate funding and has major problems, such as lack of bi-county consensus, collapsed tunnels and does not connect well to major destinations on the 101 corridor. We do not think the transit in Marin and HOV systems are in competition. Any rail system cannot compete unless it would be constructed as a high-speed rail facility with fewer stations and have a better southbound final destination than Larkspur. The HOV system also supports buses better. The Marin bus system is fairly saturated and utilized now and a large increase in buses would not result in major increases in passenger trips.

### **#43-GGBHTD and #54-Marin Advocates for Transit(A)**

Comment: Projected expansion of the local arterial system in San Rafael to support HOV lanes on the NWPR right of way are not presented.

Response: Two locations were identified as problem areas. One is the downtown San Rafael where the NWPR corridor crosses every major cross-town arterial in the downtown area. Downtown San Rafael, in the vicinity of the tracks, experiences heavy traffic congestion from and to US 101. The other area is the Larkspur/Sir Francis Drake Boulevard area that would need to be traversed by buses or HOVs traversing between the NWPR right of way and US 101, either in the north or the south direction. The Sir Francis Drake Blvd/US101 intersection is also very congested during peak periods. Further detailed evaluation of local circulation for a "considered and withdrawn" alternative is beyond the scope of the FEIS/R.

**#43-GGBHTD**

Comment: Document does not discuss “system” needed to run two-way buses on the NWPR right of way.

Response: Once again, the problem is getting in and getting out in such a way that does not degrade the initial time-savings that exist now in the current HOV lane system and also the problem of local cross-street congestion. It is not the intent of the FEIS/R to determine specific details of the type of system required for such a complicated engineering and safety issue.

**#43-GGBHTD**

Comment: Will there be acquisition of the NWP right of way for a sidewalk at Irwin and Francisco Boulevard West?

Response: No sidewalk is proposed in this area.

**#43-GGBHTD**

Comment: Will the relocation of the southbound Andersen Drive exit along Francisco Boulevard allow room for a GGT bus to load and unload passengers along this arterial?

Response: Relocation of Francisco Boulevard West between the new southbound Andersen Drive exit and Second Street is required because of the widening of US 101 to accommodate the new HOV and auxiliary lanes. The proposed cross-section for Francisco Boulevard consists of a 4-foot west side sidewalk, two 12-foot traffic lanes, 4-foot eastern shoulder and 8-foot western shoulder. From curb to curb, a total of 36 feet would be available for bus operation. Caltrans is willing to work with the GGBHTD and the City of San Rafael during the design phase to explore the possibility of improving access for buses.

**#43-GGBHTD**

Comment: DEIS does not address traffic operations at US 101 and Sir Francis Drake. Northbound buses and bicycles experience delays and access problems.

Response: The operation of the US 101/Sir Francis Drake Boulevard interchange is the subject of past and proposed future studies by the City of Larkspur, the Marin County Congestion Management Agency and Caltrans. There are proposed projects for interchange improvements, but no funding is as yet available.

There are no improvements proposed for this interchange by the Marin 101 HOV Lane Gap Closure Project, except widening the US 101 bridges and the addition of a HOV lane. The addition of a HOV lane will reduce the traffic volumes in the mixed-flow lanes allowing better bus access. The completion of the northbound auxiliary lane between Sir Francis Drake Boulevard and Bellam Boulevard on northbound US 101 improved the operation of a portion of the US 101/Sir Francis Drake Boulevard interchange. A northbound US 101 to eastbound I-580 connector, proposed for the Ultimate HOV Lane Gap Closure Alternative, will provide an alternative route for eastbound Sir Francis Drake Boulevard traffic heading to the Richmond/San Rafael Bridge. This will help relieve congestion on Sir Francis Drake Boulevard.

It is our understanding that the comment concerning bicycle access across Corte Madera Creek is in reference to the path along the southbound ramp from Sir Francis Drake Boulevard to US 101. Minor improvements will be made to the southbound bicycle lane and trail on the south side of

the bridge at Corte Madera Creek. The existing width is maintained in the proposed geometrics for this project.

#### **#43-GGBHTD**

Data from #4 Comment: Temporary construction impacts are not identified regarding the northbound viaduct, GGT ridership, traffic circulation, NWP right of way and park-and-ride lots. Also, the opportunity to divert riders to transit during construction is not identified.

Response: The Marin 101 HOV Lane Gap Closure Project impacts to local access and circulation patterns as a result of the proposed Build alternatives are minor. No existing through streets are permanently closed by the project. Existing access and circulation (e.g., US 101 access to Francisco Boulevard West) are improved. Temporary lane closures, detours and other construction related effects might occur during project construction. Construction staging, Caltrans standard specified practices, and local agency policies will minimize these impacts. Completion of the Southbound HOV lane will minimize traffic congestion related to construction of the Reversible HOV lane, which will take place in the second phase.

Impacts to the traveling public would be minimized by scheduling construction activities during non-peak commute periods, closely coordinating with local jurisdictions, and providing notice of any temporary ramp closures. Standard lane closures during the off-peak traffic periods will be used on US 101 and I-580. Temporary railing (Type K) or equivalent barriers will be used to separate the construction area from traffic. Temporary gawk screens on the top of railing could be used at appropriate locations. Traffic would be kept on the existing structure until the new connector from southbound US 101 to eastbound I-580 is built. Businesses on Francisco Boulevard West would be given full access from the existing arterial until relocation of Francisco Boulevard West to its ultimate location is complete. This will cause minimum disruption to the businesses and traveling public. At the northern end of the project, the bike path from Merrydale Road to Ranchitos Road will be relocated before the widening of US 101. This will maintain bike and pedestrian traffic.

#### 2. Temporary impacts on GGT ridership.

Increasing transit ridership is one of the goals of the Marin 101 HOV Lane Gap Closure Project. Caltrans plans to increase GGT ridership during the construction period to minimize impacts and delays due to construction. Options to increase GGT ridership during this period may include possibly expanding the express bus system and increasing the number of local shuttle buses. Completion of the Reversible HOV lane will also give opportunity to use HOV lane as a mixed-flow lane during off-peak hours and weekends which permanently facilitate improved ridership by reducing delays for GGT vehicles throughout the Marin corridor.

#### 3. Temporary impacts on the Northwestern Pacific Rail (NWPR) right of way.

Since the rail corridor is not currently in operation and there is no current rail project approved or scheduled, there will be minimal, if any, temporary impacts to the Northwestern Pacific Rail right of way.

The Southbound/Reversible HOV Lane Gap Closure Alternative will be constructed to accommodate future rail transit in the US 101 Marin corridor. Between Mission Avenue and the Lincoln Avenue interchange, a portion of the NWPR right of way is required for the Marin 101 HOV Lane Gap Closure Project. In areas where highway-widening activities will encroach into the existing rail corridor, the full NWPR right of way will be relocated further west. This will provide the full NWPR right of way width and allow future transit development. The NWPR corridor is not currently in operation. A rail transit project for this portion of the NWPR right of

way is not currently funded, nor is it a component of the *Regional Transportation Plan*. To maintain the full width of the rail right of way for future rail transit, as well as to acquire sufficient highway right of way for the Ultimate HOV Lane Gap Closure Alternative, the acquisition of parcels on the east side of Brookdale Avenue and on Lincoln Avenue and acquisition of off-street parking on Lincoln Avenue is required.

4. Impacts specific to the reconstruction of the northbound San Rafael Viaduct on GGT service.

The reconstruction of the northbound San Rafael Viaduct is a feature of the Ultimate HOV Lane Gap Closure Alternative and is not identified as the current preferred alternative, the Southbound/Reversible HOV Lane Gap Closure. Should this Ultimate HOV Lane Gap Closure project be approved for construction, the northbound viaduct would be replaced. Temporary rerouting of northbound US 101 traffic during this reconstruction onto the widened southbound San Rafael Viaduct would occur. All attempts will be made to keep on and off ramps open at all times during the project construction. Local traffic circulation on streets beneath the San Rafael Viaduct may have temporary disruptions. GGT vehicles in central San Rafael would be given as full access as possible on and off the freeway and on the existing streets under and adjacent to the San Rafael Viaduct until construction is complete. This will cause minimum disruption to the businesses and traveling public.

Temporary lane closures, detours and other construction related effects may occur during project construction. Construction staging, Caltrans standard specified practices, and local agency policies will minimize these impacts.

5. Impacts specific to the reconstruction of northbound San Rafael Viaduct on traffic circulation.

The reconstruction of the northbound San Rafael Viaduct is a feature of the Ultimate HOV Lane Gap Closure Alternative and is not identified as the current preferred alternative. This reconstruction is not a part of the currently identified Preferred Alternative, the Southbound/Reversible HOV Lane Gap Closure Alternative. Should this Ultimate HOV Lane Gap Closure project be approved for construction, the northbound viaduct would be replaced. Temporary rerouting of northbound US 101 traffic during this reconstruction on to the widened southbound San Rafael Viaduct would occur. In addition local traffic circulation on streets beneath the San Rafael Viaduct may have temporary disruptions. Standard lane closures during the off-peak traffic periods will be used on U.S. 101. A detour will be required to maintain traffic movement on US 101 at all peak traffic times. Businesses in central San Rafael would be given as full access as possible from the existing arterials until reconstruction is complete. This will cause minimum disruption to the businesses and traveling public.

Temporary lane closures, detours and other construction related effects may occur during project construction. Construction staging, Caltrans standard specified practices, and local agency policies will minimize these impacts.

6. Impacts specific to the reconstruction of northbound San Rafael Viaduct on potential closure of existing park and ride lots.

The reconstruction of the northbound San Rafael Viaduct is a feature of the Ultimate HOV Lane Gap Closure Alternative and is not identified as the current Preferred Alternative. This reconstruction is not a part of the currently identified Preferred Alternative, the Southbound/Reversible HOV Lane Gap Closure Alternative. Should this Ultimate HOV Lane Gap Closure project be approved for construction, the northbound viaduct would be replaced. During the replacement of the northbound San Rafael Viaduct temporary disruption of the activities under viaduct will occur. Staging of the demolition and reconstruction process will

limit this disruption to short durations. Park and ride lots will be temporarily closed similar to the staging of the seismic retrofit of the northbound San Rafael viaduct structure in 1998.

At the completion of the replacement of the northbound viaduct, there will be increased parking availability beneath the new viaduct due to improved structure design. The City of San Rafael also plans to revise and improve the streets beneath the viaduct structure.

7. Diverting commuters to transit services (especially GGBHTD) during project construction to mitigate anticipated delays along US 101.

Increasing transit ridership is one of the goals of the Marin 101 HOV Lane Gap Closure Project. Plans for increasing GGT ridership during the construction period will help mitigate and minimize impacts and delays on US 101 and feeder streets due to construction. Options to increase GGT ridership during this period may include possibly expanding the express bus system and increasing the number of local shuttle buses. GGBHTD may decide to temporarily revise their transit schedules and/or routes, including revising the Larkspur Ferry Terminal feeder routes. Completion of the Reversible HOV lane will also permanently facilitate improved ridership by reducing delays for GGT vehicles throughout the Marin corridor. Completion of the reversible HOV lane will also permanently facilitate improved ridership by reducing delays for GGT vehicles throughout the Marin corridor.

This alternative does not meet the purpose and need for the project because of the low number of projected ridership, the inconsistency with the transportation planning for the HOV lane approved by Marin County and the MTC, the unresolved gap in the HOV lane system in Marin County, and costs that are far more than what is programmed in the STIP. As part of a multi-modal transportation system, it is an important element, but it is not intended to take the place of a fully developed HOV lane system. Therefore, it was rejected as a viable alternative.

### Traffic Circulation Measures

Impacts to the traveling public would be minimized by scheduling construction activities during non-peak commute periods, closely coordinating with local jurisdictions, and providing notice of any temporary ramp closures.

1) Standard lane closures during the off-peak traffic periods will be used on U.S. 101 and I-580. Temporary railing (Type K) or equivalent barriers will be used to separate the construction area from traffic. Temporary gawk screens on the top of railing could be used at appropriate locations.

2) A detour will be required to maintain traffic movement from southbound U.S. 101 to eastbound I-580 during replacement of the direct connector from southbound U.S. 101 to eastbound I-580.

3) Businesses on Francisco Boulevard West would be given full access from the existing arterial until relocation of Francisco Boulevard West at the ultimate location is complete. This will cause minimum disruption to the businesses and traveling public.

4) At the northern end of the project, the bike path from Merrydale Road to Ranchitos Road will be relocated before the widening of U.S. 101. This will maintain bike and pedestrian traffic.

### **#43 GGBHTD**

Comment: DEIS does not address traffic operations at the Sir Francis Drake and 101 interchange. Bicycle access across the Corte Madera Creek is substandard.

Response: No basic changes to geometry will be made to the Lucky Drive to Sir Francis Drake

interchange, except for the addition of the HOV lane. The addition of a HOV lane will reduce the traffic volumes in the mixed-flow lanes allowing better bus access. Minor improvements will be made to the existing bicycle lane and trail on the south side of the bridge at Corte Madera Creek.

**#43 GGBHTD**

Comment: Have the impacts on bus pull-out operations been quantified on Andersen Drive and is a bus priority control system signal proposed?

Response: Bus preemption devices are not planned at the bus yard driveway because the warrants are not met. The City will continue to monitor the driveway to determine if warrants will be met to justify a signal installation. If warrants are met, the City will attempt to secure the necessary funding to install same.

**#28-Stephanie Jackson**

Comment: Expansion of the Ferry System into Northern Marin.

Response: Expansion of the ferry system into Northern Marin and Sonoma County, increasing the number of ferries at existing ferry terminals, and improving access has been proposed as a way of reducing the number of SOV trips on US 101.

Ferry service is currently limited with respect to where it starts and ends and the need to change to other transportation modes to either get to the ferry or get to a destination other than the ferry terminal. The feasibility of new ferry routes to alleviate congestion in the corridor is discussed in the “Regional Ferry Plan” by the Metropolitan Transportation Commission. As discussed in the Section 4.12.2 of the FEIS/R, the Marin 101 HOV Lane Gap Closure Project will reduce delays of buses and vehicles heading to and from the ferry terminal and encourage ferry use.

**#18-Iris Manfred, #26-Bob Ford and #54-Marin Advocates for Transit(A)**

Comment: Include the possibility of rail transit. It is unfair to displace people when commuter will be delayed only a little further down the road. People working at home are better. You will never be able to build enough lanes to satisfy traffic problems. We must try other ways to control traffic. The “transit only alternative” was dismissed without adequate analysis. A rail and HOV system without auxiliary lanes would be a more cost effective and environmentally benign alternative.

Response: See the prior responses to the rail transit issue. The rail alternative at this time is not feasible due to financial limitations.

**#55 Marin Advocates for Transit(B) and #56 Sierra Club**

Comment: Caltrans rejected the recent study on rail commuter service, the upcoming county ballot initiative, and reporting on the *Sonoma/Marin Multi-Modal Transportation and Land Use Study* in the FEIS/R.

Response: The comment does not take into account the situation regarding funding and purpose of the project. The purpose of the project is to complete the HOV Gap in Marin. The more recent Calthorpe study lists the Gap Closure as a project that should be completed in addition to

rail transit. The *Sonoma/Marin Multi-Modal Transportation & Land Use Study* developed a number of hypothetical scenarios for transportation improvements and land use to meet present and future transportation needs. As with all of the studies for the rail corridor through Sonoma and Marin, the need for regional consensus on the improvements and identification of a source of funding would be the major challenges. The *Sonoma/Marin Multi-Modal Transportation & Land Use Study* concluded that completion of the US 101 HOV Gap Closure Project was an integral component of the preferred scenario of transportation improvements as listed in the *Sonoma/Marin Multi-Modal Transportation & Land Use Study*. A rail transit only option does not meet the Marin 101 HOV Lane Gap Closure Project goals of completing the highway HOV lane system and was withdrawn from consideration.

**#14-B. Herrias**

Comment: The Gap Closure is a very expensive Band-Aid. Construction will lead to more traffic.

Response: The Gap Closure is the best solution with the funds available. Local and regional growth will lead to more traffic.

**#17-Francis Allison**

Comment: Adding more concrete to afford more traffic lanes disturbs me. Can't you come up with something different?

Response: See the prior comments in this section.

**#15-K. Corlett**

Comment: The fat lady is buying a bigger dress, instead of going on a diet. We must forcefully encourage public transit or fully use our private vehicles. Sorry, Caltrans your aim is to spread more blacktop and build more concrete viaducts a la L.A. Bad idea!

Response: The Preferred Alternative is designed to increase transit use and increase the use of HOVs. Traffic studies indicate that this alternative is the most efficient in achieving more efficient vehicle and transit use with limited funds.

**#54-Marin Advocates for Transit(A) and #43 GGBHTD**

Comment: We need an information-rich fine-grained solution to the costly Ultimate Alternative, an unaffordable brute force remnant of a bygone era. GGBHTD: The DEIS/R evaluates ten project alternatives. However, it does not consider transit alternatives as a viable option.

Response: Please review the other responses in this topic. Transit alternatives are an important part of the multi-modal effort that Caltrans, the Metropolitan Transportation Commission, GGBHTD, and Marin County Congestion Management Agency have been involved in over at least the past 20 years. The Regional Transportation Plan, the Congestion Management Program and the current and past transportation plans have all agreed with this approach, in varying degrees. The different transportation modes have their own criteria for approval and administration. This environmental document was prepared to assess various ways to close the gap in the HOV lanes on U. S. 101 through San Rafael, Larkspur and Corte Madera. More buses ferries and a train do not achieve that goal. HOV lanes are used by buses to the advantage of riders to the ferry terminals and other destinations. The HOV lanes do reduce dependence on single-occupancy vehicles and relieve congestion by providing options to the congested mixed-flow lanes. The analysis of the alternatives was not intended to rigorously evaluate specific

details of all the alternatives that were “considered and withdrawn.” Local, regional, state, and federal transportation planning agencies have decided that transportation funding should go into a mix of highway improvements and public transit in order to best serve the needs of the public.

Traffic projections were studied for an all transit alternative; however, the purpose and need of the project was to complete the gap in the HOV system in Marin. The traffic projections for all transit did not show as high a reduction in vehicle trips. Only small increases are possible in commute bus ridership in Marin. The difficulties of developing the rail corridor are staggering and projections of ridership are not sufficient to reduce delays on the 101 corridor. When you look at the lack of funding, collapsed tunnels, poor connections and slow speed the obstacles are overwhelming. The Marin County Travel Demand Model shows for the year 2005:

No-Build Transit Trips = 5.0227% of the total  
Southbound Only HOV Lane Transit Trips = 4.9374% of the total  
Rail Only Transit Trips = 4.8242% of the total

## RELOCATION

### **#3-Stephan Gale, Fair, Isaac & Company, #7-James Baxter, #23-Phillip Cotton and #25-Eugene Cantin**

Comment: Tenants, owners and businesses should be notified as soon as possible to determine availability and to find replacement locations.

Response: Completion of the environmental process is a key step to finalizing the project schedule and beginning the right of way acquisition. Owners of affected businesses that require relocation or displacement will be made aware of their rights, entitlement and eligibility under the *Uniform Relocation Assistance and Real Property Acquisition Act of 1970*.

All displacees will be given the State booklet entitled *Your Rights and Benefits As A Displacee Under the Uniform Relocation Assistance Program*. This booklet summarizes the State's program of acquisition and relocation assistance.

### **Public Hearing Comment–Steve Wilgenbush p.47 and #25-Eugene Cantin**

Comment: I live on Brookdale and Caltrans, Marin County and San Rafael have not kept me informed. This process has been going on for twenty years. I would like to live in the same setting. My children don't want to go other schools. I don't want to trade my house for a \$450,000 rat-trap fixer-upper. We want to be compensated, treated fairly and a definite time line. (Eugene Cantin) Homes in the Canal area, or Terra Linda are unacceptable as replacement areas.

Response: There have been many public meetings, news releases and media coverage of the proposed project. It is unfortunate that delays and funding problems have made the project process slow for several years. The primary replacement area is San Rafael; the secondary replacement area is San Anselmo, Fairfax and Larkspur. Affected residents may try to find replacement properties in the same neighborhood or a designated replacement area. Each resident will be made aware of their rights, entitlements and eligibility under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Appendix H of Volume I has a fuller discussion of the relocation process.

**Public Hearing Comment-Joan Nelson p. 53**

Comment: I want to go on record as one scared old lady. We will not be able to get a mortgage and will have to become renters. I do not mind if it does some good for people or the environment. I would like some reassurance. Hitler told people he would take care of them.

Response: All persons to be displaced will be assigned a relocation advisor to see that all payments and benefits will be fully utilized. The program could include moving costs, purchase supplements, rental supplements, last resort housing and other information. Each resident will be made aware of their rights, entitlements and eligibility under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Appendix H of Volume I has a fuller discussion of the relocation process.

**#23-Phillip Cotton**

Comment: If I am relocated where in the city limits of San Rafael would I get the zoning for my business to operate. I currently store about 100 cars.

Response: The Final Relocation Housing Impact Report indicates that only four businesses will be impacted by the widening and Terra Linda Tow will not be one of them. However, the space needed for the car storage may be critical. It will not be known until closer to acquisition whether this business will be affected.

**RIGHT OF WAY ISSUES**

**#45-City of San Rafael, #52- Environmental Forum of Marin**

Comment: The City is very concerned about the proposed 70-foot take on Francisco Boulevard West. The City and Caltrans agreed in past years that the ultimate take would be 55 feet.

Response: During the review period for the DEIS/R, the City of San Rafael requested that Caltrans reduce that by 15 feet to 55 feet. In response to these concerns and in an effort to avoid and minimize adverse environmental effects, the current right of way take along Francisco Boulevard West between Rice Drive and the Harbor Street drain has been reduced from 70 to 55 feet.

**#50- Marin Conservation League**

Comment: Clarify the impact on community and businesses on West Francisco Boulevard of adding auxiliary lanes and HOV lanes between Bellam and downtown San Rafael.

Response: The auxiliary lane on the west side will be retained and moved over to the west. Businesses on the West Francisco side will be affected by a 55 foot expansion in the right of way. According to the addendum to the Final Relocation Impact Report eleven businesses are affected by this expansion. Traffic studies have shown that eliminating the auxiliary lanes causes merging problems and the auxiliary lanes are necessary to permit safe access to I580.

**#45-City of San Rafael**

Comment: Serious consideration should be given to the assembly of parcels to accommodate the construction of housing to replace that lost by the project.

Response: Consideration will be given to assembling parcels, moving existing structures, the use of excess right of way for lost parking and possible additional retail uses. The City of San Rafael would probably get first right of refusal on any assembled parcels.

**#47-MTC**

Comment: Reconsider with recent information the need for a full right of way take for the railroad in the northerly section.

Response: In order to construct this project in a more cost-effective manner, partial use of the NWPR right of way would be necessary. The full NWPR right of way width or length will not be needed. To restore the full right of way width will require the purchase of all the homes on the east side of Brookdale Avenue and a few properties and some off-street parking on Lincoln Avenue. The proposal to use a portion of the NWPR right of way has been explored with the GGBHTD. This alternative defers indefinitely the eventual right of way acquisition on the west side to restore the NWPR right of way, and puts an undue hardship and uncertainty on the property owners affected. It was dropped from further consideration.

**#47-MTC**

Comment: What is the correct cost of Right of Way in the DEIS?

Response: The right of way cost in the DEIS/R is the **Current Net Assessed Value**. This is not the same as the Appraised Value, used for estimating the cost to purchase the right of way. See Chapter Two-Project Alternatives in Volume I.

**#43-GGBHTD**

Comment: Drawing W-3 through W-5 should be modified to show correct ownership at the southern portal of the Cal Park Hill Railway tunnel.

Response: According to the Grant Deed recorded on May 15, 1957 in Vol. 1114, Page 426 of Official Records of Marin County and the Caltrans Right of Way Record Maps, the State right of way shown in drawings W-3 through W-5 and S-3 through S-15 is correct.

**#43-GGBHTD**

Comment: Mitigation of impacts to the Cal Park Hill tunnel will result in greater expenditures than stated in the DEIS/DEIR, especially if transit is implemented first.

Response: Tunnel #3 through Cal Park Hill will not be affected by the Southbound Only HOV Lane Gap Closure Alternative or the Southbound/Reversible HOV Lane Gap Closure Alternative. The Ultimate HOV Lane Gap Closure Alternative requires additional cut on the east side of Cal Park Hill. Currently there is no evidence that this additional excavation would affect the tunnel. The Geotechnical Report states, "The effects of the proposed project on the tunnel, as well as the effect of the tunnel on the highway, will be the subject of a special study during the design phase of the project

A recent geotechnical investigation that consisted of two horizontal borings at the face of the existing cut showed that the material was homogenous and very slightly fractured. This investigation was done for the northbound auxiliary lane project from Sir Francis Drake Boulevard to Bellam Boulevard. To avoid any potential problems with the tunnel, no blasting was allowed for this cut. Additionally, instruments were installed in the tunnel by Caltrans to

monitor ground movement during construction. The results of this monitoring showed no effect on the structural integrity of the tunnel.

**#24-Bruce Bagnoli**

Comment: My property at 7 Myrtle Avenue is a duplex, not a single family dwelling (APN-11-076-02).

Response: Your unit APN-11-076-02 has been corrected to a duplex in the Final Relocation Impact Report.

**Public Hearing Comment-James Baxter p.51**

Comment: The Relocation Impact Report states that my parcel is full acquisition. My parcel has 15 businesses on it, why is it scheduled for full acquisition? If my property is not scheduled for full acquisition, then how many feet from the property's east corner will be the Road take? How many square feet will be taken by the project? How will you notify my tenants? Are the parcels on either side going to be taken for full acquisition?

Response: The early version of the Housing Study indicated that the Baxter parcel was a full take. That has been corrected and it is now listed as a "partial take." Approximately 1,195 sq. m. (12,863 sq. ft.) would be used by the road and 6,745 sq. m. (72,604 sq. ft.) would remain. Tenants would be notified during the right of way process after the ROD is signed. See Volume I, Appendix H for information relating to Relocation Benefits.

**PROJECT SCHEDULE**

**#36-Alnea Turner**

Comments: I want to be able to sell my property on Lincoln Avenue and need a decision as soon as possible.

Response: Completion of the environmental process is a key step to finalizing the project schedule and beginning the right of way acquisition. The environmental process effectively ends when a Record of Decision is signed by the Federal Highway Administration and the California Transportation Commission releases funds for the Appraisal/Acquisition phase to begin. Estimates of the current schedule have been distributed to the community. Caltrans will notify affected residents of the definite dates as soon as possible.

**#35-Thorley and Bob Murray**

Comment: We support the project and want it expedited for those property owners on Lincoln and Brookdale who will be displaced.

Response: Caltrans regrets the project delays involved in evaluating the Southbound/Reversible HOV Lane Gap Closure Alternative for the Marin 101 HOV Lane Gap Closure Project. Most of the delays resulted from incorporation of new plans and information. See response above.

## NORTHWEST PACIFIC RAILROAD (NWPR) ISSUES

### **#4-David Coleman, #12-David Schonbrunn, #16-Teresa Badler, #43-GGBHTD and #47-MTC**

Comment: Housing Loss Due to Non-existent Railroad Project.

Response: In order to construct this project in a more cost-effective manner, partial use of the NWPR right of way would be necessary. The full NWPR right of way width or length will not be needed. The portion affected is approximately 2400 feet. The property is needed for the relocation of the NWPR right of way, the ultimate project and potentially for the mitigation of impacts to Irwin Creek. This will require the purchase of homes on the east side of Brookdale Avenue and a few properties and some off-street parking on Lincoln Avenue. The proposal to use the NWPR right of way has been explored with the GGBHTD. The decision to maintain the option for future use of the NWPR corridor and construction of the ultimate requires homes on the east side of Brookdale and other adjoining parcels. If this were not preserved there would be an additional hardship and uncertainty on the property owners affected when the ultimate project was implemented. The reduced Southbound Only alternative was rejected for this reason and was dropped from further consideration.

Comment: Railroad Alignment

Response: The relocation of the railroad alignment was done using guidelines from the Public Utilities Commission standards for operating rail lines. The new curve radius will not reduce the operating speed that currently exists along this segment of track.

### **#28-Stephanie Jackson**

Comment: Rail and Other Transit Instead of Cars. Caltrans should do a cost value analysis of freeway expansion versus the cost of opening the old railroad, my personal first choice, and bring back the car ferries to the Petaluma River and Coyote Point.

Response: A 1994 feasibility study of rail passenger service on the San Francisco Bay Area-Eureka Corridor, funded by Caltrans, evaluated a number of scenarios for the future use of this corridor. The *Sonoma/Marin Multi-Modal Transportation and Land Use Study* (1998), funded by Caltrans, developed a number of hypothetical scenarios for transportation improvements and land use to meet present and future transportation needs. As with all of the studies for the NWPR corridor through Sonoma and Marin, the need for regional consensus on the improvements and identification of a source of funding will be major challenges.

### **#47-MTC**

Comment: Is it necessary to use the full NWPR right of way in the northerly segment?

Response: In order to construct the Southbound/Reversible HOV Lane Gap Closure Alternative, partial use of the NWPR right of way north of Mission Avenue would be necessary. The full NWPR right of way width or length is not needed for this alternative. The portion affected is approximately 2400 feet. Railroad proponents want to maintain the full width of the railroad operating right of way. The proposal to use the NWPR right of way has been explored with the GGBHTD. Since this alternative defers indefinitely the eventual right of way acquisition on the west side, needed to restore the NWPR right of way, and puts an undue hardship and uncertainty on the property owners affected, it was dropped from further consideration.

**#54-Marin Advocates for Transit(A)**

Comment: The DEIS/R misstated the composition of the Northwestern Pacific Railroad Authority.

Response: Comment noted.

**#39-US EPA**

Comment: This relocation could cause significant impacts to the human environment such that implementation of a future rail line would be less likely.

Response: The nature of the relocation of residences is so small that it doesn't change the nature of land use even on a neighborhood level. Relocation changes for businesses are primarily redevelopment oriented and act as a positive community impact for jobs and tax revenue. If the author is saying that the displacement of several hundred people will cause the potential failure of a rail line that would serve several hundred thousand residents of two counties, then it is unclear what the exact mechanism could be that would be this devastating.

**NOISE BARRIERS AND REFLECTIVE NOISE**

**Public Hearing Comments-Lee Greenberg p.61 and Annette Tosh p. 48, #8-Bob Cooper, #9-Gail Glifford, #11-Vickie Hatos, #13-David Phepps, #26-Bob Ford, #30-Farhad Farazmand, #45-City of San Rafael, #50-Marin Conservation League, #51-Marin Audubon Society, #52-Environmental Forum of Marin, and #57-John Featherstone**

Comment: Reflective Noise

Response: Caltrans has conducted detailed studies and concluded that for single noise barriers, noise levels can increase to 0.5 to 2.4 dBA at an elevated receptor directly across the highway. Such small changes in the noise levels are nearly imperceptible to the human ear.

As for distant receptors on the hillsides, Caltrans has sponsored a number of before and after soundwall studies in areas similar to this project in terms of topography and meteorological conditions and the results of these studies have been very consistent. Strong fluctuations in noise levels do occur as a result of meteorological conditions such as wind speed and direction, temperature, profiles with height above ground, humidity and sky conditions. Caltrans will conduct an additional study of reflective noise and alternative wall types during the final design phase per request of the Marin County Congestion Management Agency.

As for the aspect (W/H) ratio and multiple noise reflection issue, Caltrans has conducted three studies. It is our conclusion that with an aspect (W/H) ratio of 10:1 or greater, any change in noise levels as a result of multiple noise reflection due to parallel barriers is nearly imperceptible to the human ear. The proposed barriers for this project have an aspect (W/H) ratio greater than 10:1 with the exception of a short segment at Linden Avenue Undercrossing. The aspect (W/H) ratio at this segment is 9.5:1. This ratio is within an acceptable range and Caltrans does not believe that the degradation at this segment will be perceptible to the human ear.

Comment: Noise Sensitive Areas

Response: Noise sensitive areas are identified as picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.

Noise abatement measures for residents are only considered for the residents immediately adjacent to the freeway and affected by the traffic noise. Far away receptors, such as residences on hillsides, would only be considered if their noise levels exceed 67 dBA. We have no further data for homes on the hillsides. As for freeway noise levels on the hillsides prior to the construction of the existing walls, Caltrans does not have any data for homes on the hillsides that predate the existing noise barriers.

Comment: Wall Design - absorption material; earth berm; green walls

Response: The exact dimensions, locations, aesthetics of noise barriers, alternative noise barrier materials and design will be determined during the final design phase. This detailed study will also determine the feasibility and the cost effectiveness of building noise barriers. During this phase of the project, the design of noise barriers will be presented to the adjacent community for review, comment and approval. The desires of the immediately adjacent property owners will be a major deciding factor in wall design.

Comment: Noise Barriers at Specific Locations and Relocate Soundwall to the west side of the Northwestern Pacific Rail R/W

Response: Noise abatement features are normally constructed within the State right of way because FHWA holds Caltrans responsible for maintenance. To locate a noise barrier west of the NWPR right of way, outside of the State R/W, all parties involved must agree and enter into a contract that states that Caltrans is not responsible for any future costs of operating or maintaining the noise abatement improvements.

Comment: Results of Caltrans Noise Study on August 19 - 21, 1997 at 21 La Vista Way

Response: Caltrans conducted two 24-hour noise studies at the above address. One of the studies indicated a peak noise level of 63 dBA. Since this is below 67 dBA, no further studies were conducted. The other 24-hour noise study occurred on a rainy day, automatically voiding the study.

Comment: Two Separate Noise Sources Impacting Receptors 22 and 22A

Response: There are two separate noise sources impacting Receptors 22 and 22A. One source is the traffic on the elevated viaduct. The Marin 101 HOV Lane Gap Closure Project noise abatement barrier will mitigate this noise source. The other source is the local traffic underneath the viaduct, which is identified as background noise. Caltrans does not mitigate for ambient or background noise.

Comment: Overlapping Walls

Response: Barriers S633, S655 and S661 are on the same side of the freeway. They are set up in such a manner to provide access to the local streets. To maintain the integrity of the sound attenuation of the main barrier, these access openings must be 2.5 to 3 times the offset distance. Also, these overlapping walls are considered rather short and Caltrans does not believe that the degradation will be perceptible to the human ear.

Comment: Gap For Bicycle Path at S457

Response: This noise barrier (#S457) has been deleted from the project. See Volume I of the FEIS/R, Section 4.14.2-Noise Barriers.

Comment: Barrier S600

Barrier S600, along the eastern edge of shoulder of the Mission Avenue on-ramp to northbound US 101, is to be connected with the existing noise barrier. This barrier recommendation is identical for all of the Marin 101 HOV Lane Gap Closure Project Build alternatives. Noise Barrier S596 has been deleted from the project. Barrier S596 would have been located on the northbound San Rafael viaduct and is unlikely to be approved.

**#33-Annette Tosh**

Comment: Try to address reflective noise concerns in your environmental studies. Consider using sound absorptive material. Do not tell us the noise is psychological.

Response: Caltrans has met with the community and acknowledges the residents concerns regarding noise issues. As a result, Caltrans will conduct an evaluation of reflective noise and will investigate alternative wall types at the request of the Marin County Congestion Management Agency.

**#22-Patricia Sheppard**

Comment: I want greater noise mitigation along Grand Avenue near Receptor #27. Noise reflection adds 2.5 to 3.5 decibels to your figures for predicted noise of 64-65 decibels near my home, because I am on a hill. The noise is already deafening with the Southbound HOV alternate, it will increase.

Response: Existing noise levels at receptor #27 is an estimated 59 dBA. Predicted future noise levels will be 63 dBA. Caltrans has no evidence of a noise increase of 2.5 to 3.5 dBA due to noise reflection in your area. However, Caltrans will conduct an additional study of reflective noise and alternative wall types during the final design phase per request of the Marin County Congestion Management Agency.

**#32-Bruce Bagnoli**

Comment: Soundwalls reduce animal deaths. Soundwalls help the environment, but could be improved by making them less reflective.

Response: Caltrans will conduct an additional study of reflective noise and alternative wall types during the final design phase per request of the Marin county Congestion Management Agency.

**# 13-David Phepps**

Comment: The Ultimate project will increase noise and traffic in the northbound direction and shatter the peace in the Dominican neighborhood.

Response: The effect of the Ultimate Project in terms of noise increase is evaluated and addressed in the FEIS/R for both northbound and southbound directions. As discussed in the FEIS/R all neighborhoods adjacent to the project were evaluated and noise barriers were proposed if noise level predictions reached the Noise Abatement Criteria, see Section 4.14 of the FEIS/R.

**#45-City of San Rafael and #52-Environmental Forum of Marin**

Comment: Coordination must be done with the city to have pleasing appearance of the soundwalls. Consideration should be given to deterring graffiti.

Response: Caltrans' Office of Landscape Architecture will work with the City of San Rafael to address these concerns during the final design phase. It was determined in conversations with the Caltrans North Bay Maintenance Region Manager that graffiti was not a significant problem in the San Rafael area and therefore the issue was not addressed at this time. Visual impacts due to soundwalls have been addressed in the Visual Impact Report and Section 4.15 of the Final Environmental Impact Statement/Report. Detailed soundwall design will be conducted after the completion of the environmental document.

**#54-Marin Advocates for Transit(A)**

Comment: Figures on p. 99 show proposed soundwalls S675, S661, S655 and S633 on the east side of the NWPR right of way. It would be desirable to build the walls on west side of the NWPR right of way.

Response: Noise abatement features are normally constructed within the State right of way because FHWA holds Caltrans responsible for maintenance. To locate a noise barrier west of the NWPR right of way, outside of the State R/W, all parties involved must agree and enter into a contract that states that Caltrans is not responsible for any future costs of operating or maintaining the noise abatement improvements.

**AIR QUALITY**

**#39-EPA, #46-BAAQMD and #54-Marin Advocates for Transit(A)**

Comment: EIS did not discuss indirect impacts to air quality.

Response: The Air Quality Impact Report and the FEIS/R, Section 4.16, did not identify any project-related indirect air quality impacts resulting from the Marin 101 HOV Lane Gap Closure Project. For several years there has been a debate about **induced trips** and induced air pollution. The BAAQMD and US EPA take the position that HOV lanes contribute to more trips and air pollution through the satisfaction of unmet trip demand. Caltrans, FHWA and MTC do not concur with this position and promote HOV lanes as policy that has showed success in many areas.

As discussed in Section 4.16.3 of the FEIS/R, HOV lanes are considered a Transportation Control Measure (TCM) that the MTC develops in cooperation with the Bay Area Air Quality Management District (BAAQMD), which are then incorporated in the Bay Area Clean Air Plan. In Marin County, Caltrans is involved in many of these, in particular TCM #20, which is the Regional HOV System Plan.

One comment indicated that there should have been a discussion of "changing the capacity of the vehicles on the local networks." The Marin 101 HOV Lane Gap Closure Project does not change any local networks or their capacity. The City of San Rafael has made local improvements separately from the Marin 101 HOV Lane Gap Closure Project and has improved CO levels at a number of intersections

**#39-EPA**

Comment: Page 3, paragraph 4 - The FEIS should offer a discussion of the current air quality status of the Bay Area.

Response: Section 3.16-Air Quality and Section 3.16.5-Existing Air Quality in Volume I of the FEIS/R discusses current air quality status of the Bay Area.

**#39-EPA**

Comment: The air quality analysis presented on p. 3 in the DEIS was incomplete. It did not disclose the location and types of receptors modeled.

Response: The FEIS/R discusses the determination of local air quality levels in Section 4.16.4-Local Air Quality. MTC Resolution 2270 was in effect at the time the initial report was prepared. MTC Resolution 2270 and EPA's Final Transportation Conformity Rule (FTCR) required only localized CO impact analysis. There is also a discussion of the new Project-Level Carbon Monoxide Protocol for local air quality analysis. Specific details of each of the protocol's methods and materials is beyond the scope of the FEIS/R. For this information, see the Air Quality Impact Report(s) referenced in Appendix E of Volume I of the FEIS/R.

**#39-EPA**

Comment: There should have been a discussion of any intersections or street segments that will operate at a LOS D or worse for inclusion in a CO hotspot analysis, even if they are outside of the study area. If there were intersection that evidenced a deterioration of LOS to D or worse, which would be cause to model the CO emissions from that location. Provide much more detail on the modeling that was performed, the receptors modeled, and the criteria for modeling those receptors.

Response: After examining the area traffic projections at all intersections of surface streets and their proximity to local receptors, Thompson Traffic Engineering (TTE) performed detailed traffic analysis at 12 intersections, which can be found in *Traffic Technical Memorandum 2 - Air Quality Input Data and Methodology*. The analysis shows 11 of the 12 selected intersections will operate similarly to or better under the Build than the No-Build Alternative. The only increase appears at the intersection of Mission/Hetheron/SB 101 Off-Ramp, a 15% increase in PM peak hour volume. This intersection is in Central San Rafael, where a number of receptors are present at close distance. Intersection CO analyses were then conducted at this location along with three other intersections in the area. The methodology and details of the specific type and location of receptors modeled are beyond the scope of the FEIS/R, but are documented in the Air Quality Technical Reports.

**#39 EPA**

Comment: "We recommend that the FEIS include a discussion of possible mitigation measures to ensure that these activities are protective of air quality."

Response: The following has been added to the text of Volume I, Sections 4.17.3 and Volume II. Adverse impacts due to construction activities will be avoided, minimized, or rectified by a combination of Caltrans standard specifications and procedures for construction and by additional conditions supplied by permitting and regulatory agencies. All of the Build alternatives will generate air pollution during construction. These include equipment emissions and exhaust from construction equipment and other vehicles, odors from construction materials, wind blown dust from grading and hauling, etc. these effects are temporary and localized.

Construction equipment emissions are accounted for in the regional air quality plan and the contractor is required by Standard Specifications and Special Provisions to meet the Air Quality Management District (AQMD) and other applicable emission control rules for construction equipment that may be in effect at the time of construction.

Wind blown dust and particulate matter is a major contaminant of construction-generated air pollution. Sufficient watering activities will be required to accompany dust-generating

construction activities. Caltrans contracts and Standard Specs and Special Provisions include these provisions and all applicable (e.g. AQMD) air quality control rules also apply.

**#46-BAAQMD, #54-Marin Advocates For Transit(A)**

Comment: Page 4, paragraph 2 - DEIS did not provide a discussion of management practices that would be employed to minimize related construction impacts. A discussion of possible mitigation measures is needed to ensure that these activities are protective of air quality.

Response: Section 4.17.3-Construction Impacts and Mitigation in Volume I of the FEIS/R discusses the potential for temporary construction-related air quality impacts and the special procedures to reduce and manage them.

**#55-Marin Advocates For Transit-B, #56-Sierra Club**

Comment: The FEIS will have to be redone to evaluate its compliance with new Federal standards for smog.

Response: Regional pollutants such as smog are addressed in the State Implementation Plan (SIP). The San Francisco Bay Area Air Basin has been designated as a maintenance area for carbon monoxide (CO) and a non-attainment area for ozone. For PM-10, the area is undesignated for federal standards and non-attainment for state standards. The Southbound Only HOV Lane Gap Closure Alternative and the Southbound/Reversible HOV Lane Gap Closure Alternative are included in the 1998 conforming Regional Transportation Plan (RTP) and the 1998 Regional Transportation Improvement Program (RTIP), and the design concept and scope of the project are essentially the same as the design scope and concept in the RTP and RTIP listings. All applicable transportation control measures are included in the project. The two project alternatives therefore meet the regional tests for conformity with the State Implementation Plan.

**#54-Marin Advocates For Transit(A)**

Comment A \$150 million project ought to be accompanied by statistics that carry a high level of confidence. There is no explanation why the air quality is worse for the Southbound Only Alternative for year 2000. Are the model inputs of poor quality?

Response: The Southbound only HOV Lane Alternative was initially studied in a microscale carbon monoxide analysis. The analysis showed air quality improvements on the freeway but resulted in an exceedance at one local intersection. The state criteria for carbon monoxide was exceeded at this intersection. Caltrans addressed this exceedance in the environmental document. Subsequently, due to changes in the air quality regulations, a new carbon monoxide analysis was conducted using the new Transportation Project-Level Carbon Monoxide Protocol. This new air quality analysis which superceded the previous one did clear the project and showed no exceedances on either the state or federal levels at local intersections or on the freeway.

**#47and #47A-MTC**

Comment: The air quality analysis is not in conformity with Resolution #2270.

Response: The initial CO analysis for the Marin 101 HOV Lane Gap Closure Project *Air Quality Impact Report* included traffic projections from the Association of Bay Area Governments (ABAG). MTC required a more current traffic projection for conformity with their Resolution

2270, CO analysis protocol. However in this case, the ABAG projections are more conservative with higher traffic volumes than the later ABAG traffic projections. Caltrans suggests that the more stringent model does conform to the intent of Resolution 2270 and that there would be little point in reanalyzing the Marin 101 HOV Lane Gap Closure Project under less stringent constraints.

As discussed in Section 4.16.2 of the FEIS/R, current project alternatives, including the Southbound/Reversible HOV Lane Gap Closure Alternative, employ a new local CO analysis protocol, the Project-Level Carbon Monoxide Protocol. This Project-Level Carbon Monoxide Protocol does satisfy the current air quality requirements.

As discussed in Section 4.16.2 of the FEIS/R, the alternative identified as the Preferred Alternative has no predicted CO exceedances of the state or federal one-hour or eight-hour standards. For additional information see the initial Air Quality Impact Report and the recent Air Quality Impact Report for the Southbound/Reversible HOV Lane Gap Closure Alternative, both referenced in Appendix E of Volume I of the FEIS/R.

#### **#46-BAAQMD and #54-Marin Advocates for Transit(A)**

Comment: CEQA requires a discussion of mitigating to levels of insignificance. CEQA requires discussion of ways in which mitigation can be offered.

Response: As discussed in Section 4.16.2 of the FEIS/R, an additional Air Quality Impact Report was prepared using the newly-adopted Transportation Project-Level Carbon Monoxide Protocol to analyze the Southbound/Reversible HOV Lane Gap Closure Alternative. Based on this analysis, there is no air quality exceedance of either state or federal CO levels and the Preferred Alternative has only minor air quality impacts.

The original modeling assumed a 1,000 vph upward adjustment for the Build 2000 and a 200 vph for a No-Build scenario in an attempt to build in capacity conditions. This assumption resulted in CO exceedances at a difficult-to-model intersection for the Southbound Only HOV Lane Gap Closure Alternative. Analysis of the currently identified Preferred Alternative, the Southbound/Reversible HOV Lane Gap Closure Alternative, indicates no CO exceedances.

#### **#46-BAAQMD and #54-Marin Advocates for Transit(A)**

Comment: DEIS does not discuss the impacts that project related traffic would have on regional and local air quality from increased emissions of reactive organic gases, nitrogen oxides and particulate matter.

Response: As discussed in Section 4.16.3 of the FEIS/R, MTC in their assessment of the Marin 101 HOV Lane Gap Closure Project and listing in the RTP and TIP has analyzed the regional aspects of the projects' emissions and determined that the project conforms to the SIP. This project also implements one of the Transportation Control Measures adopted by the BAAQMD as part of the Bay Area Clean Air Plan.

As discussed in Section 4.16.4-Local Air Quality of Volume I of the FEIS/R and above, current MTC resolutions and the EPA's Final Transportation Conformity Rule require only microscale CO analysis for local air quality conformity.

#### **#46-BAAQMD**

Comment: How do the transportation models used by Caltrans account for induced trips?

Response: The Air Quality Impact Report and the FEIS/R did not identify any project-related indirect air quality impacts resulting from the Marin 101 HOV Lane Gap Closure Project. For several years there has been a debate about **induced trips** and induced air pollution. The BAAQMD and US EPA take the position that HOV lanes contribute to more trips and air pollution through the satisfaction of unmet trip demand. Caltrans, FHWA and MTC do not accept this position and promote HOV lanes as policy that has showed success in many areas.

As discussed in Section 4.16.3 of the FEIS/R, HOV lanes are considered a Transportation Control Measure (TCM) that the MTC develops in cooperation with the Bay Area Air Quality Management District (BAAQMD), which are then incorporated in the Bay Area Clean Air Plan. In Marin County, Caltrans is involved in many of these, in particular TCM #20, which is the Regional HOV System Plan.

#### **#46-BAAQMD**

Comment: There is a current belief in some areas that HOV Lanes may increase Vehicle Miles traveled.

Response: (Also see HOV topics.) The completion of the HOV lane system through Marin County has been a consistent goal of the Countywide Plan, the US 101 Corridor Strategic Plan the Marin County Congestion Management Plan, the Metropolitan Transportation Commission (MTC) 2005 HOV Master Plan and the MTC Regional Transportation Plan (RTP). It also has had continuing support from the Federal Highway Administration (FHWA).

As discussed in Section 4.16.3 of the FEIS/R, HOV lanes are considered a Transportation Control Measure (TCM) that the MTC develops in cooperation with the Bay Area Air Quality Management District (BAAQMD), which are then incorporated in the Bay Area Clean Air Plan. There are currently 28 TCMs that the MTC tracks for success of implementation either through direct funding approval or assistance in getting funds. In Marin County, Caltrans is involved in many of these, in particular TCM #20, which is the Regional HOV System Plan.

There are some groups that believe HOV lanes are not successful at reducing congestion and encouraging high occupancy vehicle travel. There is some feeling that HOV lane restrictions are governmental interference into private rights. The FEIS/R can not respond to these opinions nor change policy based on anecdotal information.

#### **#50-Marin Conservation League, #54-Marin Advocates for Transit(A)**

Comment: Table D-2 shows disparities in bus ridership numbers in the Traffic Study. HOV projections in the H-1 of the Traffic Study Report are 50% lower than the actual figures. Page J-6 of the Traffic Study Report shows the maximum delay for northbound traffic is reduced by the LRT, but there is no change for the southbound. Are the model inputs of poor quality? Is there an explanation?

Response: Information contained in the DEIS/R was obtained from actual traffic counts. The occupancy numbers are not model generated. Counts done in 1996 by Caltrans showed 39 buses or 1365 persons in the southbound AM peak hour; 1341 carpools or 2893 persons in the southbound AM peak hour. In the northbound PM peak hour there were 25 buses or 875 persons; and 845 carpools or 1940 persons. The Traffic Study Report shows that the model projections were adjusted to be consistent with expected future travel behavior. A more detailed explanation of the adjustments can be found in that report.

Since Route 101 northbound is more congested in the PM peak hour than the southbound AM peak hour the Light Rail Transit Alternative has a greater impact on Route 101 northbound in the PM peak hour. The Light Rail Transit Alternative improves the operations of the highway in the PM peak hour northbound and has minimal impacts on the southbound AM peak hour traffic.

## VISUAL IMPACTS

### **#37-Scott Kaplan**

Comments: The DEIS/R and the Visual Impact Report (VIR) failed to adequately determine scenic and aesthetic impacts by a sensitive evaluation of the public's perception of existing resources. The unsightly soundwalls do not blend in with the surrounding environment. The document acknowledges the monotony of the walls, but doesn't indicate whether the landscaping is adequate to mitigate that effect.

Response: According to the Visual Impact Report, future sound walls will add to the monotony of the driving experience and will "exacerbate the horizontal qualities of the highway itself". This is an unfortunate fact of adding an additional 1000 feet of sound wall to an area. The report recommends constructing sound walls utilizing similar design elements. The intent is to avoid a kaleidoscope effect of differing and contrasting walls within a relatively short section of the highway corridor. This is not to say that the new walls have to exactly mimic the existing walls, but that they utilize similar color and texture to maintain continuity within the project area. Additional, or somewhat differing, detail may certainly be desirable.

The Visual Impact Report recommends specific types of landscaping for each landscape unit. This planting would help to mitigate negative impacts of the project. Although the amount of mitigation is not quantified, all efforts will be made to attain the maximum mitigation possible by working in cooperation with local City and County agencies and any community groups which have an interest in the project.

Comment: The DEIS/R and VIR failed to adequately illustrate the visual impacts of this project for homeowners:

Response: Section 4.15.3 of the FEIS/R, as well as the DEIS/R, describe the residents and the neighborhoods as the most visually sensitive areas affected by the project. The FEIS/R states that the construction of some sound walls is an integral part of the Marin 101 HOV Lane Gap Closure Project and that if they are constructed they will, to some degree, be visible. Section 4.15.3-Visual Impacts and Mitigation specifically discusses several project-related visual impacts on residents.

Comment: The DEIS/R and VIR failed to illustrate which trees would be lost and the extent of that visual loss.

Response: The FEIS/R discusses the project-related loss of trees and conceptual tree mitigation plans in Section 4.6-Natural Environment of volume I of the FEIS/R. The Natural Environment Study Reevaluation specifically lists the estimated tree losses and proposes specific details for their mitigation. The specific details are beyond the scope of the FEIS/R but are available in the technical study.

Section 4.15.3 of Volume I of the FEIS/R identifies removal of trees and plantings when they disrupt visual integrity. Several specific tree groups are mentioned in the discussion in section 4.15.3-Visual Impacts and Mitigation. A field trip can be arranged with those persons interested

to review the exact location of these trees if necessary. The conceptual mitigation plan for the Irwin Creek area would restore the open natural feeling around the creek and the natural habitat. California native species would be planted to mitigate for the loss of larger trees.

Comment: The DEIS/R and VIR failed to illustrate two noise barriers (S676 and S685) in the DEIS/R.

Response: neither of these noise barriers are included as a part of the Marin 101 HOV Lane Gap Closure Project. Noise wall S685 is not within the project limits. Noise wall S676 did not qualify for inclusion in the project.

Comment: The DEIS/R and VIR failed to provide a visual representation (from the southbound driver's view) of the noise barrier that juts out into the freeway near Linden Street for the Southbound Alternative.

Response: Although it is agreed that the 'jog' in the noise wall (S633) results in a visual impact for southbound drivers. The resulting visual effect is so small and passes so quickly that no visual simulation was deemed necessary for this site.

Comment: The DEIS/R and VIR failed to illustrate the location of the existing noise barriers within the boundaries of the project in order to estimate cumulative impacts of parallel barriers.

Response: The current FEIS/R has illustrated the location of the proposed noise barriers for each of the project Build Alternatives in Volume I, Appendix A-Project Mapping. These proposed noise barriers are enhanced on the maps to help them stand out. The existing noise barriers were not enhanced or identified on these maps to avoid confusion between existing barriers that will be replaced and those remaining. Preliminary maps delineating existing noise barriers are available from the Caltrans Project Design Office.

Comment: The DEIS/R and VIR failed to represent the "worst case" visual impacts of the planned soundwalls for motorists and homeowners.

Response: Section 4.15.3-Visual Impacts and Mitigation of Volume I of the FEIS/R discusses the visual impact of the proposed project-related noise barriers on residents and motorists in several sites. The Visual Resources Technical Report identified these noise barrier impacts to the visual environment as the most adverse of the project. Details of noise barrier materials and design will be decided in later design stages. They will be designed and constructed to mitigate visual impacts as much as possible.

Comment: The DEIS/R and VIR failed to illustrate the visual impact for the driver's perspective and the homeowners located behind the proposed noise barrier S517.

Response: Noise barrier S517 is relatively short in length, and mitigation screen planting, including plantings of trees, shrubs, and vines, can be implemented in this area. It was not deemed necessary to produce a visual simulation for this wall. The Visual Resources Technical Report provides additional details on the effects of each of the noise barriers on the visual environment and specifically describes impacts to homes west of noise barrier S517. This level of detail is beyond the scope of the FEIS/R.

Comment: The DEIS/R and VIR failed to provide an adequate description or visual representation (driver's POV) on the overpass or from the street below it of the noise barrier S596.

Response: Noise barrier #S596 was deleted from the project.

Comment: The DEIS/R and VIR failed to provide an adequate visual simulation for the 580/Irene overcrossing.

Response: The visual simulation for the I-580/Irene Street Overcrossing, Exhibit “M” of the Visual Resources Technical Report is not included in the FEIS/R. The selected point of view (POV) illustrates the on and off-ramps rising and connecting to the Irene Street overcrossing in the distance. The frontage road is at the same elevation as shown in the existing photo and is located outside of the on and off-ramps.

Comment: The DEIS/R and VIR failed to adequately describe or illustrate the visual impact for the noise barrier S457 and S458 located along Corte Madera Creek.

Response: Noise Barrier S457 was deleted from the project. Noise barrier S458 is located on the east side of US 101 adjacent to the mobile home park. It is primarily motorists’ views that are blocked, and because of the motorists’ speed, the duration of view blockage is very short. For these reasons, no visual simulation was prepared.

Comment: The DEIS/R and the VIR ignore the issue of graffiti on the soundwalls and maintenance costs.

Response: According to the Caltrans North Bay Maintenance Region Manager, graffiti was not a significant problem in the San Rafael area and therefore the issue was not addressed.

#### **#45-City of San Rafael**

Comment: Delete the proposed soundwall located at the northbound viaduct structure from Fourth St. to Irwin St. The existing structure may not have the structural capacity to accommodate the additional weight of this wall. The visual impact of this wall would be significant.

Response: The soundwall, denoted in the DEIS/R as S596, has been deleted.

## **WATER QUALITY**

#### **#42-San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)**

Comment: The project would impact up to 1.76 acres of jurisdictional wetlands. The Board requires a minimum 2:1 mitigation ratio for wetland acreage, so it would not be sufficient.

Response: The FEIS/R clearly presents the type and quantities of project-related, temporary and permanent, impacts to wetlands and waters of the U.S. Conceptual mitigation plans are presented and negotiations are underway with several regulatory agencies. The current Marin 101 HOV Lane Gap Closure Project Preferred Alternative, the Southbound/Reversible HOV Lane Gap Closure Alternative will impact less acreage than noted above, see Section 4.6.3 of the FEIS/R.

#### **#39-EPA, #42-SFBRWQCB, #51-Marin Audubon Society, #55-Marin Advocates for Transit(B) and #56-Sierra Club**

Comments: Caltrans should discuss the capacity of the storm water conveyance to handle additional pollutant loads.

Response: Section 4.8.2-Storm Water Runoff Impacts and Mitigation in Volume I of the FEIS/R discusses highway runoff within the project limits. The existing drainage system and the proposed improvements are designed to collect and remove surface water from the traveled way and adhere to the Best Management Principles of storm water pollution prevention as contained in current permits and approvals, including that required for construction. Analysis of the available data and the proposed widening options suggests that the increase of pollutant loading will be minimal due to the proposed freeway widening alternatives.

Existing storm water runoff from US 101 and I-580, from bridges and from other transportation facilities contribute to the pollutant load of runoff waters entering the creeks, ditches and channels, and eventually San Rafael and San Francisco Bays. Analysis of highway runoff indicates the presence of suspended solids, dissolved solids, metals, hydrocarbons, phosphorus, nitrates, nitrites and coliform bacteria, among other pollutants in roadway runoff. The actual pollutant loading from the existing state roadway system to the surface waters has not been determined, since site-specific data is required to perform such calculations. Storm water runoff from US 101 and I-580 are only a small fraction of the total quantity of surface runoff draining into local creeks, channels and into San Rafael and San Francisco Bays. Similarly, the increase in the quantity of the existing runoff due to the widening of US 101 and I-580 will be a very small component of the overall surface drainage.

Much of the widening of US 101 occurs in a highly urban setting. The existing adjacent land uses include frontage roads, parking lots, commercial buildings, etc. These areas are already impervious surfaces and contribute their own pollutant load to the receiving water bodies. The proposed freeway widening of the Build alternatives replaces one impervious surface with another. In these areas, there may not be a net increase in the quantity or net decrease in the quality of the surface runoff.

Studies have shown that stop-and-go traffic patterns have the potential to produce more pollutants than free-flowing traffic. Therefore, improving the level of service on the freeway may reduce the amount of pollutants on the roadway. The improvements proposed for US 101 would reduce traffic congestion and reduce the pollutants in storm water runoff.

**#54-Marin Advocates for Transit(A) and #55-Marin Advocates for Transit(B) and #56-Sierra Club**

Comment: The discussion of environmental impacts is not documented as to area and too vague and too general. Small separated patches of wetland can be valuable.

Response: See discussion above. The FEIS/R provides written and visual sketches of several conceptual plans throughout Chapter 4. Environmental impacts to the Natural Environment are documented as to area in Section 4.6.3.

**#39 US EPA**

Comment: (1) “We recommend that FHWA and Caltrans commit to the implementation of the storm water pollution prevention plan containing Best Management Practices (BMPs) prior to commencing any construction, in the Record of Decision (ROD).” (2) “We recommend that FHWA and Caltrans consider this guidance for the Marin Route 101 HOV gap closure project. These guidelines should be referenced in the discussion of mitigation of the construction impacts...”

Response: This response below has been added to Volume I, 4.17.3 under Construction Impacts. Construction activities have the potential to degrade nearby water resources by leaking or spilled chemicals, runoff, erosion, etc. A Regional Water Quality Control Board Certification/Waiver will be required. Economically achievable measures are required to contain pollutants from nonpoint sources through the use of available nonpoint pollution control practices, technologies and operating methods. Caltrans will require from its contractors a Storm Water Pollution Prevention Plan or a Water Pollution Control Plan containing best management practices prior to construction. Additional water quality, erosion, or hazardous waste provisions may also be required to avoid contaminating waterways or groundwater.

## **BICYCLE ISSUES**

### **#44-Association of Bay Area Governments-Bay Trail**

Comments: We found no mention of the Bay Trail alignment in the DEIS/R.

Response: Portions of the San Francisco Bay Trail occupy existing bicycle and pedestrian facilities within the US 101 right of way from the Greenbrae Overcrossing, over Corte Madera Creek, to Sir Francis Drake Boulevard, see FEIS/R Volume I Section 3.12.5-Non-Motorized Transit, section 4.12.4-Bicycle and Pedestrian Impacts and Mitigation, and Appendix A-Project Mapping. The San Francisco Bay Trail also crosses the US 101 right of way in San Rafael at Andersen Avenue, at Bellam Boulevard and at Third Street. The Marin 101 HOV Lane Gap Closure Project will not affect continuity of the San Francisco Bay Trail. There are bicycle and pedestrian paths crossing Corte Madera Creek on both the east and west structures of US 101. All of the Build alternatives, including the Southbound/Reversible HOV Lane Gap Closure Alternative will require the temporary closure of a portion of the Bay Trail over Corte Madera Creek. However, the existing route over Corte Madera Creek on the Lucky Drive On-Ramp Structure which connects Sir Francis Drake Boulevard to the Corte Madera bike and pedestrian paths will not be affected by the project. Therefore, construction of the Marin 101 HOV Lane Gap Closure Project will not impair the continuity of the San Francisco Bay Trail.

### **#44-Association of Bay Area Governments-Bay Trail**

Comment: The bicycle section in the document does not explain the Andersen Drive facilities.  
Response: Andersen Drive is a local project. The approved bicycle route on Andersen Drive has been improved as a result of local extensions and construction. The newest portion of Andersen Drive (Bellam Boulevard to A Street) has Class II bike paths incorporated into them.

### **#49-Marin County Parks, Open Space and Cultural Services**

Comment: There was no discussion of new or improved bikeways in the document.

Response: Section 3.12.5-Non-Motorized Transit and Section 4.12.4-Bicycle and Pedestrian Impacts and Mitigation in Volume I of the FEIS/R discuss the proposed bikeways within the project limits. In addition, Section 4.17.3-Temporary Effects During Construction discusses alternate bike routes to be provided during the construction phase.

A proposed Marin County north-south Class I bike lane parallels US 101 over Cal Park Hill and uses portions of the Northwestern Pacific Railroad right of way. This trail extends south through

Corte Madera and continues north beyond the project limits. The Marin 101 HOV Lane Gap Closure Project does not include funding to construct bicycle lane improvements over Cal Park Hill or to make improvements to the Northwestern Pacific Railroad right of way.

The San Francisco Bay Trail is a proposed 644 kilometer (400 mile) multi-use shoreline trail system traversing nine Bay Area counties. A portion of designated Bay Trail system occupies existing bike and pedestrian facilities within the highway right of way in Larkspur between Lucky Drive and Sir Francis Drake Boulevard, including the pedestrian and bicycle path over Corte Madera Creek. The Marin 101 HOV Lane Gap Closure Project will not affect completion of the San Francisco Bay Trail.

Caltrans has consulted with BCDC on the Marin 101 HOV Lane Gap Closure Project for several years. Caltrans is working on a plan to permanently enhance public and bicycle access to Corte Madera Creek to offset any interruption of public access, especially the temporary closing of one of the bike lanes over the bridge.

Widening of the Sir Francis Drake on-ramp to southbound US 101, over Corte Madera Creek, will result in a temporary closure of the bicycle and pedestrian path on the southbound on-ramp. Alternative bicycle and pedestrian routes over Corte Madera creek are available on the east side of the US 101 bridge and to the west of the project at Bon Air Road. Temporary rerouting of bicycle and pedestrian traffic on the Greenbrae Pedestrian Overcrossing will occur late in the project related to the installation of the moveable barrier. Alternate routes between the east and west sides of US 101 are available both north and south of the Greenbrae overcrossing. Alternate routes to provide continuity are available and detour information will be provided.

#### **#6-Conrad Oho**

Comment: Caltrans should study providing secure bicycle parking and restrooms along the 101 corridor to reduce auto usage.

Response: Caltrans currently designs and funds Park and Ride lots along State highways. There are several Park and Ride lots within and nearby the limits of the Marin 101 HOV Lane Gap Closure Project. See Section 3.12.6-Parking in Volume I of the FEIS/R for locations. Suggestions for additional amenities at these lots to encourage their use for bicycle commuting should be made to the Office Chief, Public Transportation Branch c/o California Department of Transportation, 111 Grand Avenue, Oakland, CA 94623-0660.

#### **#29-Jerome Kuykendall**

Comment: Bicycles on North San Pedro off-ramp.

Response: The route that the writer refers to is not intended as a bike path to the North San Pedro Road off-ramp, even though it appears to be signed as such. Permission to use this shoulder was probably given after requests were made by bicyclists. Caltrans policy is that freeway shoulders are not to be used as bicycle lanes, because of the safety issues the writer mentioned. It has been proposed as an alternative in the Marin County North-South Bikeway Feasibility Study. However, to make it a Class I path would require widening to the east and a concrete barrier. This particular slope is very unstable, and it is not prudent to remove material from the toe of this slope. As far as using the Lincoln Avenue Undercrossing as a way for bicyclists to access the west side trails, this idea was rejected by Caltrans traffic engineers because of problems with sight distance and inadequate width.

**Public Hearing Comment–Bill Stender p. 59**

Comment: We need more bikers.

Response: Caltrans agrees bicycle riders are needed. The County of Marin and Caltrans have worked to promote bicycle facilities in the 101 corridor.

**SITE SPECIFIC COMMENTS**

**#34-Beverly and Richard Stone**

Comments: Access to Residence. We would like to be able to make a left turn off Lincoln Avenue to our home on Hacienda Court instead of using the Linden Lane overpass.

Response: Please refer to drawing S-8 in the Final Environmental Impact Statement/Report. It shows that the direction that you want to take is: left on Lincoln, go under the freeway, then right on Villa to Hacienda Court.

**#45-City of San Rafael**

Comment: Properties scheduled for acquisition should be checked against the City of San Rafael's historic property survey.

Response: See Section 3.11.5-Historic Architecture in Volume I of the FEIS/R. The FEIS/R summarizes the Historic Properties Survey Report (HPSR), referenced in Appendix E of Volume I. The HPSR includes the sources used to evaluate the historical significance of the effected properties needed for this project.

The FHWA, in consultation with the State Historic Preservation Officer (SHPO), has determined that the proposed project will have no effect on properties listed in or eligible for inclusion in the National Register of Historic Places, see Section 4.11 of the FEIS/R.

**HAZARDOUS WASTE / RUNOFF**

**#39-EPA**

Comment: Compliance with the Pollution Prevention Act (Public Law 010-508) should have been presented in the DEIS.

Response: All mitigation of contaminated materials will be in accordance with Public Law 010-508, the Pollution Prevention Act of 1990 (PPA). The potential for recycling exists for some of the excavated soil from the Marin 101 HOV Lane Gap Closure Project. Soils and asbestos containing waste will be disposed of in an environmentally safe manner and in accordance with all Federal and California State environmental laws and local ordinances. Contractors are required to conform to all local, state and federal laws as well as specific conditions and provisions of their contract with Caltrans.

**#55-Marin Advocates for Transit(B), #56-Sierra Club**

Comment: Explain the possible use of biofilters for water runoff and the possibility of toxic ponds in the project area, etc.?

Response: The draft environmental document included a discussion on the potential measures for treatment of storm water runoff. It is Caltrans standard procedure to investigate the potential water quality impacts from the proposed projects, as well as the possible mitigation measures to minimize such impacts. After studying the possibilities, their potential benefits and secondary impacts, it was determined that no mitigation measures were justified in this project. However, the use of temporary best management practices (BMP) during construction, will be identified in the Storm Water Pollution Prevention Plan (SWPPP) for the project.

Caltrans procedure is to determine whether a mitigation measure is needed, then study the possibilities that will satisfy that need and select the most appropriate one for the specific situation. In many situations, after going through the process, it is determined that the potential measures will have a secondary impact, therefore no net benefit will be obtained from implementing the control measure. See also the section of Volume II titled Water Quality.

**GROWTH**

**#54-Marin Advocates for Transit(A) and Public Hearing Comment–David Schonbrunn p.40**

Comment: The DEIS/R makes the misleading statement that “The study found no growth inducement....” Traffic modeling is faulty because it doesn’t show added capacity, which induces added travel through the conversion of latent demand to active demand. It’s obvious to anybody that this is an inducer to growth.

Response: Residential growth is an issue in Marin County. The FEIS/R discusses growth in Section 3.13-Land Use and Socioeconomic Issues and Section 4.13.2-Growth Inducement. The FEIS/R concludes that projected residential growth pressures in Marin are based on job accessibility. The growth inducement that would occur as a result of the Marin 101 HOV Lane Gap Closure Project Build Alternatives is not significantly different from that of the No-Build Alternative.

Planned development in Marin has been occurring independent of the Gap Closure project. Most growth in Marin will occur in northern Marin from different causes relating to availability of large tracts of developable land. Virtually all of the area in San Rafael is developed or undergoing redevelopment. It is difficult to assign growth causes to a project to relieve commute congestion in an area that has already infilled with mature growth.

Comment: A statement on Section 12.0, page 112 mentions the development of St. Vincent-Silviera in conjunction with the McInnis Parkway. The countywide plan eliminated the McInnis Parkway and this statement is no longer true.

Response: See page 113 of the DEIS/R: “However, if McInnis Parkway is built, then the parkway and CMP improvements together could remove a major obstacle to development east of US 101.” This discussion about McInnis Parkway was for information purposes, it was not meant to imply that it would be constructed.

**#54-Marin Advocates for Transit(A)**

Comment: (1) Expanding lanes will change latent demand to active demand and create more congestion, pollution and fuel consumption.

Response: All car pool lane widening projects have always shown an improvement to freeway operations. This benefit to air quality and freeway operations as a result of HOV lane widenings continues for quite some time before the additional freeway capacity attracts more vehicles, in line with the concept of latent demand.

The statement in the Energy Impact Study indicating an improvement in freeway operations in the mixed flow and HOV lanes is accurate. Caltrans has been able to show evidence of this improvement with a multitude of HOV lane widening projects throughout the state (you may need to confirm this with Highway Operations).

**#54-Marin Advocates for Transit(A)**

Comment: There is no indication that the statement under Cumulative Impacts about the McInnis Parkway being developed in conjunction with Bel Marin Keys is still true .

Response: The comment is correct. Since the DEIS/R the McInnis Parkway has been cancelled. This action was independent of the Gap Closure project. Local development plans are continuing concerning Bel Marin Keys and St. Vincent-Silviera. The quantitative model indicated no growth inducement from the Marin Gap Closure. The section on Cumulative Impacts has been totally rewritten to support the non-growth impact of the Southbound/Reversible project.

## MITIGATION

**#51-Marin Audubon Society**

Comments: Identification of Mitigation sites near Irwin Creek.

Response: Section 4.6.4 of the FEIS/R discusses potential impacts and mitigation for Irwin Creek. The FEIS/R includes an illustration and discussion of a conceptual mitigation plan for potential impacts to Irwin Creek due to the future relocation of the NWPR right of way.

**#52-Environmental Forum of Marin**

Comment: Appropriateness of Mitigation Site.

Response: Caltrans strives in all instances to locate mitigation sites in close proximity to the sites being mitigated. Conceptual mitigation plans have been developed for the Marin 101 HOV Lane Gap Closure Project. Mitigation for the impacts are discussed and illustrated in Section 4.6 of the FEIS/R. Much of the oak/bay woodland habitat impacted by the project is adjacent to the Lincoln Avenue area. The two proposed sites, indicated in the FEIS/R Section 4.6, are in close proximity. Additional details are available in the *Natural Environment Study Reevaluation* referenced in Appendix E of Volume I of the FEIS/R.

**#51-Marin Audubon Society, #55 Marin Advocates for Transit(B) and #56-Sierra Club**

Comment: Can natural environmental impacts be mitigated with “out-of-kind” mitigation? It is vital that mitigation be in the same area.

Response: Generally, in-kind” and “on-site or adjacent” mitigation is preferred by the regulating agencies. However, there are always exceptions and special cases that may not follow this guideline. It is the intention of Caltrans to mitigate in the same area or habitat, unless the resource agencies do not approve the plan or require mitigation in another area or habitat. Section 4.6.4 of the FEIS/R discusses and shows several conceptual mitigation plans proposed for the Marin 101 HOV Lane Gap Closure Project.

**#51-Marin Audubon Society**

Comment: Identify trees and plants in the mitigation areas.

Response: The suggested identity of replacement plants are listed in the conceptual mitigation plan of the *Natural Environment Study (NES) Reevaluation* and are a part of the mitigation and landscaping plan. The FEIS/R, in Section 4.6.4, illustrates these plans and identifies the proposed replacement tree and plant species.

**#51-Marin Audubon Society and #52-Environmental Forum of Marin**

Comment: Tree Size, Counts and Replacement.

Response: The specific details of the tree count for the Marin 101 HOV Lane Gap Closure Project is included in the *Natural Environment Study Reevaluation*, see Appendix E of Volume I of the FEIS/R. Specific mitigation recommendations are also included in this *NES Reevaluation*. The FEIS/R, in Section 4.6.4, discusses and illustrates the mitigation plan on a conceptual basis. Details of tree counts and the species and sizes necessary for a mitigation plan are being developed as part of the FEIS/R and the mitigation plans. Specific details are available in the initial NES and the NES Reevaluation. For example, the NES Reevaluation specifically prescribes a 2:1 replacement ratio for oak/bay woodland habitat.

**#51-Marin Audubon Society**

Comment: Relocation of Culverts and Ditches at Irwin Creek.

Response: Section 4.6.4 of the FEIS/R discusses potential impacts and mitigation for Irwin Creek. The FEIS/R includes an illustration and discussion of a conceptual mitigation plan for potential impacts to Irwin Creek due to the future relocation of the NWPR right of way.

**#51-Marin Audubon Society, #55-Marin Advocates for Transit(B) and #56-Sierra Club**

Comment: Public Participation in Mitigation.

Response: The general public is encouraged to participate in Public Meetings and Hearings. During these meetings and hearings, essential knowledge is gained about a community’s values. This knowledge of community values is incorporated into the project to avoid, minimize, and mitigate impacts. Mitigation plans are then developed with the cooperation of various resource agencies and have been available at recent public meetings. This information is available in technical reports from Caltrans.

**#51-Marin Audubon Society**

Comment: Care should be taken at the north Grand Avenue mitigation site that native willows not be removed in mitigating for the loss of native oaks and bays.

Response: Caltrans biologists will survey tree removal areas prior to any tree removal, will be monitoring the tree replacement efforts, and will be participating in pre-construction meetings. Each of these conditions provided in the NES Reevaluation will ensure that native willows will not be unnecessarily removed in mitigating for the loss of native oaks and bays.

NOTIFICATION OF MEETINGS

**#20-Eugene Cantin**

Comment: I did not receive notice of meetings.

Response: It is surprising that the writer did not receive any notification of meetings. Although there was a focused mailing, it did include Brookdale Avenue. In addition, there was a blanket notification that was sent out for every public meeting that Caltrans held, as well as notices in local newspapers. Future information will be disseminated by hand-carried distribution to each residence to ensure that all residents are notified of changes in the project schedule or design.

**#27-Susan Turner**

Comment: I would like a monthly newsletter.

Response: A monthly newsletter would be ideal, but would be unnecessarily repetitive due to the long delays the project has faced in its five year history. However, project developments, when prudent, will be released to the public through a variety of media sources.

MISCELLANEOUS COMMENTS

**#55-Marin Advocates for Transit(B) and #55-Sierra Club**

Comment: The DEIS is seriously inadequate and could violate the civil rights of the East Canal neighborhood.

Response: The section on Environmental Justice 4.13.5 describes the Canal neighborhood, which is about a half-mile from the project area. There is a Hispanic population in a portion of Tract 1122, a San Rafael neighborhood that is located about 0.8 kilometer (half a mile) east of US 101. Even a description as Hispanic is not accurate; since the 1990 Census the nature of the neighborhood has changed and twenty-four languages are now spoken there. This ethnic enclave is not homogenous, and is not negatively impacted by the project. The socioeconomic report did not identify groups of minorities or low-income groups living in closer proximity to the project.

The project will not impact individual health or cumulative human health nor have environmental effects, including social and economic effects, which may include, but are not limited to:

- bodily impairment, infirmity, illness or death;
- air, noise and water pollution and soil contamination;
- destruction or disruption of man-made or natural resources;

- destruction or diminution of aesthetic values;
- destruction of or disruption of the availability of public and private facilities and services;
- adverse employment effects;
- displacement of persons, businesses, farms, or nonprofit organizations;
- increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and
- the denial of, reduction in, or significant delay in the receipt of benefits of FHWA programs, policies, or activities.

**#39-EPA**

Comment: The DEIS/R did not indicate if FHWA has consulted with the California Coastal Commission regarding development of the HOV gap closure project. The FEIS should contain a discussion concerning the applicability of the CZMA and the State CZMP to the proposed development activities.

Response: Administering the federal Coastal Zone Management Act within the San Francisco Bay segment of the California coastal zone is handled by BCDC to ensure that federal activities reflect Commission policies. The Bay Conservation and Development Commission (BCDC) was contacted in conformance with the Coastal Zone Management Act (CZMA). BCDC was contacted during the NOP/NOI issuance and during coordination on work at Corte Madera Creek. In all decisions involving wetlands, the BCDC and its staff evaluate projects in light of the McAteer-Petris Act (the BCDC's primary law), the San Francisco Bay Plan, the federal Coastal Zone Management Act, the California Environmental Quality Act and other special area wetland plans.

**#55-Marin Advocates for Transit(B) and #56-Sierra Club**

Comment: Unavoidable Adverse Impacts should provide primary and secondary impacts of a project in terms of energy wasted, air pollution, water quality, wildlife habitat and community well being.

Response: Chapter 4 of the FEIS/R evaluates all of the project impacts on resources, including those mentioned in the above comment. The Marin 101 HOV Lane Gap Closure Project has no significant unavoidable adverse impacts. The project consists of minor widening in urbanized, residential and commercial areas. Primarily the widening will include narrow strips of land that have been previously developed for other urban land uses.

**#47-MTC**

Comment: Please provide a detailed finance plan.

Response: The Financial Plan in constant FY 2000 dollars will be submitted to the MTC by the end of the release of the FEIS/R for this project. Funding is addressed in Volume I of the FEIS/R in Section 2.4.

**#54-Marin Advocates for Transit(A)**

Comment: The DEIS does not discuss Construction Impacts.

Response: This information is included in the FEIS/R as section 4.17.

**#54-Marin Advocates for Transit(A)**

Comment: There is no mention of ramp metering in the DEIS.

Response: Ramp metering is a local option. The wiring for ramp metering is installed during construction of ramp areas according to state policy and could be used in a future situation. Ramp metering is an operational feature and is not a feature of the Marin 101 Gap Closure HOV lane project.

**#54-Marin Advocates for Transit(A)**

Comment: The Marin Gap Closure discriminates against the Canal neighborhood in direct and indirect pollution. This is not covered in the Environmental Justice section.

Response: The FEIS/R discussion of Environmental Justice has been supplemented as follows: Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed February 11, 1994, also directs federal agencies "... to make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States." As discussed in this section, it has been determined that the Marin 101 HOV Lane Gap Closure Project will not have disproportionate impacts on low-income or minority populations. See the FEIS/R, Section 4.13.5 for the complete discussion.

**#43-GGBHTD**

Comment: DEIS should quantify energy savings of reconfiguration of I-580/101 interchange.

Response: Concerning the configuration of the US 101/I-580 interchange, it is not the intent of the Energy Report to establish the expected energy expenditure for each incremental improvement. The amount of energy savings at this location would be minute in the overall scheme.

**#19-Susan Page**

Comment: I found the Caltrans representative to be very helpful.

Response: The project staff appreciate such compliments.

**#31-Charles Garfink**

Comment: Improved traffic flow is necessary for the revitalization of downtown San Rafael. Completion of the HOV Gap makes sense to realize the full benefit of carpool lanes in Marin.

Response: We agree. The completion of the Marin 101 HOV Lane Gap Closure Project will serve to reduce delays on Route 101 in the San Rafael area.

APPENDIX Original Comments

Comments received after circulation of the Marin 101 HOV Lane Gap Closure Project Draft Environmental Impact Statement/Report (DEIS/R)