

Comment Letter #56 – Sierra Club Marin Group

- 56-1 See response 43-37.
- 56-2 See response 43-40. Provision of construction materials to the site is not a geology issue.
- 56-3 See Master Response R with regard to access/impact on the Marin Airporter and modifications to Larkspur Station design.
- 56-4 See response 43-40. Most of the questions in this comment are not related to the substantive environmental impact issues of the proposed project. The CEQA analysis is not an economic feasibility study. The exact number of railway ties will be determined during final project design.
- 56-5 See response 43-8. It should be noted that the design of the DMU includes space for an operator on both ends of the double-ended car.
- 56-6 See Response #41-23 regarding settlement comments. Impacts on wetlands from fill are addressed in DEIR Section 3.9, Biological Resources. Flooding did occur on limited segments of the ROW during the unusually concentrated winter storms of 2005-2006. In a few areas, including Novato Creek, the rail bridge will be raised higher than existing conditions. Maintenance costs are factored into the overall project operating costs.
- 56-7 Proper maintenance should prevent the release of fuel from trains; therefore any residue should be negligible and the impact of those residues on water resources would be less than significant. The potential release of fuel from daily operations would not create a substantial adverse change to the physical conditions affecting water resources.
- 56-8 Run off impacts are addressed in DEIR Impact WR-3, which finds that the proposed project would have a negligible adverse impact on peak flow rates and would improve hydrologic conditions as a result of the drainage improvements. As discussed in the cumulative water resources impact analysis on DEIR page 3-33, the proposed project's contribution to cumulative run off impacts is negligible.
- 56-9 See response 10-10 regarding potential flooding. There are segments of track that are currently subject to flooding; this is an existing condition. Track improvements as part of the proposed project would raise the track in several places, reducing the overall flood risk compared to existing conditions. If the track became flooded, train service would be halted for a short time period until the tracks are cleared and inspected. Substantial settlement is not expected; see response 41-23.
- 56-10 The DMU vehicles that would operate along the railroad right-of-way include a self-contained waste capture system that will regularly be emptied at the SMART maintenance yard using an appropriate waste disposal system. Freight train locomotives have self-contained waste systems as well. As a result, there is no anticipated impact on water quality, wetlands, surrounding habitat or population residing adjacent to the corridor from train-generated wastes.
- 56-11 The passenger trains would not be utilized to transfer garbage to other locations. If freight trains are operated on the line and are utilized to transfer garbage, the material transported would contain municipal solid waste (MSW) only. Redwood Landfill is a Class III disposal facility that does not accept hazardous waste. Sonoma County is also considering outhauling its MSW by rail to an out-of-state landfill facility. Hazardous materials are handled by the County under a separate program and are not accepted at any of the disposal facilities under consideration for out-of-state disposal of the county's MSW via rail. (Klassen, 2006). See Master Response O regarding future freight operations.

- 56-12 One of the goals of the air quality analysis is to determine the amount of pollutants that would be generated by the project alternatives. Depending on the pollution source, emissions are calculated in various ways. For DMUs, the emissions factors are presented in grams of pollutant per gallon of fuel consumed. However, motor vehicles, such as cars, buses, etc. have emission factors presented in grams per mile driven. While assumptions could be made regarding the fuel economy and fuel usages of the buses, it would serve no real purpose in the air quality analysis; rather, the analysis of air quality focuses on the relative emissions of the alternatives.
- 56-13 As described on DEIR page 2-54, the trains would utilize six passing sidings along the corridor; see revised siding location mileposts and schematics in FEIR Chapter 4. There are no residences within 70 feet of the siding locations. It is expected that there would be no more than 8 meets per day by the passenger trains at each siding location. Under normal passenger rail operations there would not be substantial idling by trains at sidings; trains would be timed so that one would slow and enter the siding, the other would pass, and the first one would continue through the siding and accelerate away. There may be idling of 30 seconds to 1 minute on occasion, but the operating system is designed to avoid this on a regular basis. It should be noted that SMART has committed to limiting idling of trains operating on the right-of-way to 15 minutes; consequently, even under a worst-case scenario, idling at a siding would never exceed 15 minutes. Freight trains would operate on the right of way during off-peak hours, when the SMART trains are not. At the present time, it is expected that there would be only one roundtrip in the project area by a freight train per day. As a result, the impacts from freight trains at the passing sidings would be minimal. Since there are no residences closer than 70 feet of sidings, the impacts would be less than those described in the DEIR for trains traveling on the tracks, which was based on a worst-case analysis of residences within 30 feet of the right-of-way; all impacts were determined to be less than significant. Construction of new sidings was factored into the impacts on sensitive habitats addressed in DEIR Section 3.9 and on water resources in DEIR Section 3.3.
- 56-14 See Master Response O.
- 56-15 Increased delay at grade crossings is discussed in DEIR Impact T-9 on page 3-121; the air quality impacts associated with that increased delay is discussed in Impact AQ-5. The conclusions regarding localized air quality impacts around stations has not changed with the revised traffic modeling; see response 8-5 for additional information. The traffic data used for the proposed project includes cumulative development and growth assumptions; therefore, the localized air quality analysis of traffic on the local roads and at intersections near the train stations is cumulative in nature. See Impact AQ-7 regarding cumulative air quality impacts.
- 56-16 See Master Response A.3 regarding the basis for the assumed increase in transit services by 2025.
- 56-17 See response 42-56 regarding the accuracy of the ferry service level assumptions in the DEIR. See Master Response A.3 for additional information regarding Larkspur ferry services. Additional information requested on ferry services can be found on www.511.org, and in the GGT *Short Range Transit Plan*. Additional information about the proposed Larkspur station can also be found in Master Response R.
- 56-18 See response 56-17 above. If a rail passenger were unable to board the desired ferry departure, he or she would have to wait for the next departure, typically 30-40 minutes later.
- 56-19 See Master Response A.3 regarding an additional park-and-ride lot near the downtown San Rafael station. Information on ridership station origins and destinations is provided in Master Response C, Table C-1. Comments regarding the fairness of costs to Marin County are not directly relevant to the EIR analysis, but rather relate to the merits of the project. It

should be noted that Marin and Sonoma voters will have an opportunity to vote on whether to approve a sales tax measure to fund the project's operating costs.

- 56-20 The station locations have been based on physical constraints (e.g., locations of access, land availability), and the desire to make them convenient to both homes and workplaces. Accessibility to employment areas was considered for both Marin and Sonoma Counties. See DEIR Section 2.4.6 regarding station selection and planning.
- 56-21 The information requested is shown in DEIR Appendix I, Table 5.6-1; a revised table reflecting the revised travel forecasting is included in Chapter 4 of this FEIR.
- 56-22 The \$1 million placeholder is expressed in real, 2004/2005 dollars and was an estimate at the time. The Draft 2006 Expenditure Plan has updated this number to \$1.3 million. The nominal amount would be expected to increase over time, as increases in retail sales over time would generate more revenue; accordingly, SMART would not need to "compensate" for escalating costs in the future. For responses to questions regarding shuttle services, see Master Response B.
- 56-23 See Master Response S regarding Andersen Drive.
- 56-24 See Master Response H for additional information on impacts to GGT services.
- 56-25 See Master Response C regarding revised ridership estimates. The questions and comments regarding the financial benefits and burdens of rail versus ferries do not address the adequacy of the DEIR; no response is required.
- 56-26 The questions and comments regarding MCTD's operations is outside the scope of this document. It should be noted that the proposed project does not require MCTD to "focus" its service on the rail project. SMART will work with MCTD to coordinate its service to the maximum degree feasible. No change in the impact significance is necessary.
- 56-27 Any increase in fare revenue is generally beneficial to the transit agency. No change in the impacts is warranted.
- 56-28 See Master Response A.3 regarding an available park-and-ride lot for rail passengers using the downtown San Rafael station. See Master Response R for additional information regarding access to the Larkspur station. Other comments regarding the pros and cons for Marin and Sonoma County residents are not related to the adequacy of the EIR; no response is required.
- 56-29 The DEIR states, on page 3-115 in the final paragraph, that a greater presence of transit oriented development (TOD) around rail stations by 2025 will likely reduce the *percentage* of those accessing the stations by automobile. It does not claim that traffic in stations areas will be significantly reduced in station areas due to TOD. See Master Response I for additional discussion of TOD in relation to ridership.
- 56-30 See Master Response E.1 regarding why reductions in VMT and VHT are beneficial, notwithstanding the lack of a corresponding decrease in Highway 101 LOS.
- 56-31 See response 56-30.
- 56-32 Impact T-6 refers to a beneficial impact to some roadway segments as a result of the project; Impact T-5 addresses adverse impacts to other roadway segments. These impact discussions have been revised to address the more detailed intersection analysis prepared in response to comments; see Master Response E.2. Impacts to intersections in downtown San Rafael near the proposed rail station are discussed in Impact T-8; the DEIR concludes that these impacts will be less than significant with implementation of the environmental compliance and mitigation measures described, not solely due to the provision of shuttle services. See Master Response E.2 for additional information. TOD

was not assumed in the travel forecasting model. See Master Response I for a discussion of TODs and possible impacts on rail ridership.

- 56-33 See Master Response B.
- 56-34 The DEIR analyzes the environmental benefits and impacts of the proposed project; the questions in the comment regarding the value of the project to Marin residents in light of these benefits and impacts go to the merits of the project; no further response is required.
- 56-35 See Master Response O regarding future freight service. The cumulative impacts of freight and passenger rail service are addressed in the individual impact areas within the DEIR, as supplemented and clarified by this FEIR. However, the focus of the SMART DEIR is the rail project's contribution to any cumulative impact; the contribution that freight service makes to a cumulative impact is addressed in less detail, as prescribed by CEQA. Much of the information regarding freight service requested in the comment is not yet available.
- 56-36 See Masters Response O and P.
- 56-37 Noise levels falling between descriptions generally have characteristics of the two nearest descriptions. For example, according to the table, at 75 dBA, a freight train at 50 feet would be somewhat less annoying than a city bus at 50 feet (80 dBA) but more intrusive than a freight train idling at a station at 50 feet (65 dBA). It should be noted that Table 3.7-1 describes typical noise sources and is not an analysis of the specific elements of the proposed project.
- 56-38 Table 3.7-2 states FHWA noise abatement criteria. The FHWA does not establish noise abatement criteria for undeveloped lands. See responses 41-58 regarding evaluation of potential noise impacts on wildlife.
- 56-39 See response 41-58 regarding noise impacts on wildlife.
- 56-40 The analysis was completed for a typical rail condition. See response 43-80 regarding maintenance.
- 56-41 Impacts BR-18 and BR-19 (see revised BR-19 in FEIR Chapter 4) address potential impacts on wildlife from train operations. Sensitive wildlife was not observed in the ROW during surveys conducted for this project. It is not expected that noise from passing trains would cause a significant impact on wildlife. See response 41-58 for additional information on noise impacts.
- 56-42 Section 3.9.1 of the DEIR lists many regulations that require analysis of impacts on wildlife, habitat and endangered species. Analyses include impacts from any effects, including noise. See response 41-58 for additional information on noise impacts.
- 56-43 Existing noise levels are shown in Table 3.7-3. Noise generated by the SMART project at various distances from the tracks is shown in Figure 3.7-4. The dominant sound at higher train speeds are rolling sounds. See response 42-17 regarding "wheel squeal." Freight operations would be louder than the proposed SMART operations but much more infrequent, and are discussed under Cumulative Impacts. See response 41-58 for further discussion on wildlife noise issues.
- 56-44 Replacing concrete ties and structures with timber ties is proposed as part of the project in DEIR Section 2.9 Environmental Compliance Measures. A train passing over a structure will generate more noise than the same train traveling over solid ground. FTA has found on average a train traveling over a bridge generates 4 dBA more noise than the same train traveling at the same speed over ballasted welded rail. There are limited areas of elevated rail along the corridor, and speeds would generally be reduced over the elevated structures. See response 41-58 for further discussion of noise impacts on wildlife. All anticipated significant impacts related to noise are identified in the DEIR.

- 56-45 See Master Response Q.
- 56-46 Liability issues are outside the scope of the analysis of environmental impacts under CEQA. The DEIR acknowledges that implementation of Mitigation Measure N-5 is uncertain and concludes that the impact would remain significant and unavoidable if Quiet Zones are not implemented. See Master Response Q.
- 56-47 See Master Response A.3 regarding the assumption about the modest increase (15%) in transit service. Please note that the No Project Alternative now includes the same assumption as the proposed project and the revised VMT and associated energy consumption incorporate that assumption. Therefore, a consistent approach has been used to facilitate comparison of alternatives.
- 56-48 See response 56-47 regarding the future transit service assumption, which is now the same for both the proposed project and No Project Alternative. Please note that using the revised ridership forecasts now reflected in the FEIR (see Master Response C), the proposed project will result in a decrease of 21,800 barrels of oil in direct energy consumption (as compared with the 2025 No-Project Alternative)
- 56-49 A major shift to non-fossil fuels that would affect projected fuel use is not expected to occur by 2025. Therefore, the alternatives analysis is based on fossil fuel use. It is not possible to predict whether a shift would happen, or which sectors would be most affected by such a shift (i.e., rail, bus or auto).
- 56-50 SMART has developed an additional model run to forecast ridership in the event that gasoline rises to \$5 per gallon; see Master Response G. SMART will monitor ridership on a daily basis, will provide monthly ridership summaries to the Board of Directors and will develop five year service plans that address shifts in forecasted ridership. SMART is constrained by the total amount of rolling stock. Given current ridership forecasts, SMART could accommodate some additional passengers on the proposed rolling stock recommended for this project. Train service will be coordinated with off-peak freight service and controlled by SMART's dispatch center.
- 56-51 A restoration plan has not yet been prepared. Details will include recommendations from agencies, permit conditions, and actions to address site-specific needs. Restoration of impacted areas following construction occurs through both artificial and natural processes. A target of 80% success for planted vegetation is typical. The restoration program should be successful with 80+% success of artificial revegetation in combination with natural recovery.
- 56-52 Should survival fall below 80%, additional vegetation would be planted. Restoration activities would continue until metrics for success are achieved, even if this goes beyond three years following construction.
- 56-53 See response 41-49. The precise placement of the safety structure gaps will be determined in consultation with resource agencies, such as CDFG, during their permit process.
- 56-54 See response 43-92. If permanent loss of occupied CTS habitat cannot be avoided, SMART will provide compensation through protection and enhancement of CTS habitat within the ROW, purchase of off-site mitigation credits, and/or contribution to regional conservation and recovery efforts for the species in consultation with the USFWS and CDFG.
- 56-55 See response 41-58.
- 56-56 See response 41-58. The Project Area is an existing railroad corridor. Most of the habitat adjacent to the tracks is disturbed or developed and not suitable for nesting. No special-status animals were observed in the ROW during field surveys conducted for this

project. Presence of feral animals and people along the tracks both in urban and rural locations makes it unlikely that any special-status animals occur close to the ROW.

There is a very slight potential that wildlife, particularly nesting birds, could be affected by vegetation maintenance within the ROW. For example, mowing grass adjacent to tracks could directly affect an active nest. Since there is a low occurrence of nesting birds and wildlife within the existing ROW due to the presence of people and feral animals, anticipated effects are low. Also, routine maintenance of vegetation discourages nest building and reduces the potential for direct effects on birds.

Mitigation of potential impacts on riparian habitat are addressed in MM BR-1a, BR-1b, and BR-2c. Noise impacts, which are expected to be less than significant, are further discussed in response 41-58.

- 56-57 Herbicides are rarely used along the existing railroad to manage vegetation. Mitigation Measure BR-15b notes that herbicides would only be applied according to label directions. Labels specify application restrictions that avoid negative impacts on wildlife.
- 56-58 Impact BR-18 and Mitigation Measure BR-14 address potential impacts on wildlife from train collisions. Impacts from operational noise on wildlife is detailed in response 41-58, and in DEIR Impact BR-19. Impact BR-9 and Mitigation Measure BR-7 address impacts on wildlife corridors. Freight operations may resume, but would not be expected to produce significant cumulative impacts. If reintroduced, freight service would operate north of the Ignacio Wye only, with three to six trains per week (see Master Response O). Because freight trains would travel at lower speeds than the SMART trains, collisions with wildlife are expected to be less frequent than with passenger trains. Where both passenger and rail freight would operate, cumulative daily noise exposure would be under 60 dBA at 50 feet, which is less than the noise of a passing truck. See response 41-58 regarding noise impacts on wildlife. The additive effect of infrequent freight service is not expected to create a significant cumulative impact.
- 56-59 Cumulative impacts analysis considers reasonably foreseeable future projects. Of the 29 projects identified as potential contributors to cumulative impacts, none were restoration projects. If, during final design, restoration projects are identified, SMART will coordinate with the appropriate agencies.
- 56-60 Provision of improved access to some parks during the week, even during the summer, would not create a substantial increase in park users to the extent that it would cause substantial physical deterioration of park facilities. This improved access would be a benefit, not an adverse effect.
- 56-61 SMART will be responsible for maintenance of the portions of the pathway under SMART jurisdiction.
- 56-62 Liability for the pathway is not related to the CEQA analysis.
- 56-63 Consistent with CEQA, growth-inducement is fully addressed in Section 5.3. CEQA does not dictate where in the EIR the growth analysis is included.
- 56-64 All potential project development impacts (within and adjacent to the right of way) on wetlands or other sensitive habitats have been analyzed and are documented in DEIR Section 3.9. The impact analysis is based on a worst-case analysis, so the actual acreage of disturbance is likely to be less than identified in Section 3.9. See responses 1-1 and 1-2 for additional details.
- 56-65 Biological factors were considered for all land acquisitions. The comment references the land use section. Biological resources are addressed in DEIR Section 3.9.
- 56-66 The comment requests a re-classification of Impact LU-2 from beneficial to less than significant, but does not state what adverse land use impact would occur under this

- impact category to justify changing the classification. The focus of this particular analysis is on the identified beneficial land use effect. Reducing the need for auto use and increasing transit ridership are additional benefits, but they are not the sole focus of this discussion. The DEIR statement about the outcomes of mixed-use development is documented by the many examples throughout the Bay Area and elsewhere where walkable communities and downtowns have been established. By developing a mix of land uses, there is a higher likelihood of reducing auto trips for jobs, errands, and everyday shopping. The DEIR does not attempt to claim that most TOD residents will use the passenger rail service. For additional discussion of TODs and rail ridership, see Master Response I.
- 56-67 The comment appears to confuse cumulative effects with growth-inducing effects. The referenced analysis on DEIR page 3-209 addresses cumulative land use impacts. DEIR Section 5.3 addresses growth-inducement, consistent with CEQA Guidelines referenced on page 5-3. The comment requests analysis of impacts from potential future unknown changes to local land use plans. It would be speculative at this time to try to anticipate what changes local jurisdictions might contemplate. The comment also requests an analysis of the potential TOD capacity around each rail station before significant impacts would occur. This type of analysis is beyond the required scope of this project EIR and is more appropriate at the local general plan level when local jurisdictions consider changing the density or type of land uses.
- 56-68 Please see Master Response O for general information on freight service and Master Response P for freight safety information.
- 56-69 Please see Master Response P for information about SMART passenger safety.
- 56-70 Please see Master Response O.
- 56-71 The commenter may be familiar with the role that the Southern Pacific Railroad played in the 1906 earthquake, when over half the population of San Francisco was successfully evacuated by rail (www.sfmuseum.org/1906/spr.html). SMART's ability to respond to emergency situations will be dependent upon the size, scope, location, time of day and other specific impacts of that emergency. An Emergency Preparedness Plan will be developed in cooperation with first responders along the corridor as stated in the DEIR (see Section 2.9 Environmental Compliance Measures for details regarding the Emergency Preparedness Plan). The plan will address SMART's assistance capabilities in extreme emergencies, working in cooperation with other responders in the event of earthquake, tsunamis, severe weather, fire, flooding, and other plagues upon the earth.
- 56-72 The "sensitive links" the commenter refers to may include low lying areas susceptible to flooding and historic bridge and tunnel structures not built to current seismic standards. All of these project components are being upgraded to modern engineering standards as part of the proposed project or as part of the CalPark Hill Tunnel Rehabilitation Project. SMART will also provide drainage facility upgrades along the entire 70 mile right of way including new culverts and bridge trestle replacement. Wildfires are controlled along the rail line by annually cutting back low growing grasses – a standard rail maintenance practice.
- 56-73 DEIR Section 3.12.3 does include a comprehensive criterion, "creation of a hazardous condition" that applies to any type of safety hazard that could occur as a result of the proposed project. Conflicts between freight and passenger rail are considered in the cumulative impact discussion on DEIR page 3-222. See Master Response O for additional freight information and Master Response P regarding safety.
- 56-74 Trains will not be idling at the sidings for a significant period of time, but will occupy the sidings only briefly while the train going in the opposite direction passes by; see response

- 56-13. The visual impact will be temporary and insignificant. Trains will operate primarily during daytime hours; light and glare at sidings will be minimal.
- 56-75 See response 1-3.
- 56-76 The bicycle/pedestrian pathway is not proposed to have lighting, except at roadway crossings where lighting typically already exists. See Response 44-91 for additional information.
- 56-77 The train headlights are fixed and will not rotate, thus lights will be focused on the rail right of way. Light and glare from train lights on surrounding properties is not expected to cause substantial impacts, especially since the lights are not a constant source at a stationary location.
- 56-78 The tables noted in the comment have been revised; see Chapter 4 of this FEIR. The revised tables show that even with the completion of the HOV lanes through the Novato Narrows, the LOS on Highway 101 under No Project conditions in 2025 would not improve substantially over existing conditions and in some cases would worsen. See Master Response E.1 for further discussion. A discussion of whether or not Marin residents should tax themselves to complete the HOV lanes rather than the proposed project is beyond the scope of an EIR document.
- 56-79 The study requested is outside the scope of this EIR and is unnecessary for selecting a reasonable range of alternatives to the proposed project. See DEIR Section 5.3 regarding potential growth-inducing impacts of the proposed project. The DEIR does not make the claim that “as part of the proposed project, per se, growth in the vicinity of the proposed rail stations will be less than in the No Project Alternative.” See DEIR p. 4-19 (Land Use and Planning) for a discussion of likely growth and development under the No Project Alternative compared to the proposed project. See Master Response I for additional discussion of TODs.
- 56-80 The No Project alternative has been revised to include the same assumptions for bus service as the build alternatives. See Master Response A.3.
- 56-81 Although segments of the proposed 70 mile bicycle/pedestrian pathway are being funded by others, the SMART project makes a major commitment to completion of a north-south pathway in the two counties. Caltrans construction of the bike path through the Novato Narrows is required because it is upgrading the roadway from an expressway to a freeway as part of the widening; since bicycles are not allowed on freeways in this Caltrans district, Caltrans must construct this facility in order to maintain the existing level of bicycle accessibility.
- 56-82 See response 43-107.
- 56-83 An improvement in LOS by definition improves traffic flow. However, air quality may or may not improve if LOS on Highway 101 improves. One reason it might not improve is that motor vehicle emissions actually increase as travel speeds increase from about 50 to 65 miles per hour. So, if the LOS improvement was enough to increase the average vehicle speed, the air pollutant emissions could go up in that area.

Transportation improvements associated with the No Project Alternative are described in Section 3.6.4 of the DEIR and are consistent with MTC's 2001 Regional Transportation Plan. The air quality analysis is primarily derived from the traffic modeling results. As a consequence, the air quality analysis reflects the improvements included in the No Project Alternative.. As noted, newer and cleaner vehicles would be part of the No Project Alternative and would help reduce air pollutant emissions. The calculations for the No Project Alternative do include these assumptions.

- 56-84 The DEIR has not found a significant project impact on habitat and wildlife from noise. See response 41-58 for further discussion. As stated on page 4-17, none of the noise impacts associated with the project would occur under the No-Project Alternative; this would include any noise impacts on habitat and wildlife.
- 56-85 See response 43-109.
- 56-86 See responses 42-40 and 56-81.
- 56-87 See response 43-111.
- 56-88 See response 43-112.
- 56-89 The comment is noted. See response 43-101. Light and glare impacts were determined to be less than significant. This is not a significant issue on which to base the comparison of alternatives.
- 56-90 The Express Bus Alternative was designed to provide point-to-point service, and therefore would not require shuttle services involving additional transfers. See Master Response D for additional information regarding the Express Bus Alternative assumptions.
- 56-91 A Novato transfer station in the vicinity of Roblar Drive has been added to the Express Bus Alternative. See Master Response D. The *Marin Transit Vision* was not available at the time of writing of the DEIR.
- 56-92 See Master Response D regarding the design of the Express Bus Alternative.
- 56-93 See Master Response A.4.
- 56-94 See response 56-81.
- 56-95 See response 43-115 in regard to emissions from buses and DMUs in future years. The average life expectancy of a bus is 12-18 years. The average life expectancy of a DMU is at least 30 years. It is not known whether future buses will use alternative fuels. Fuel technology may change for both locomotives and buses, but it would be speculative to make assumptions. It is reasonable, for purposes of the CEQA analysis, to use consumption and emission standards that are currently available.
- 56-96 See responses 42-40 and 56-81.
- 56-97 The energy analysis has been updated since publication of the Draft EIR based on revisions to VMT (see Master Response E and EIR text revisions in FEIR Chapter 4). The MOS Alternative now requires slightly more indirect energy consumption than the proposed project, 2,767,000 barrels of oil vs. 2,760,000 barrels of oil. The primary reason the MOS Alternative requires more indirect energy is that people would need to drive automobiles more under the MOS Alternative, requiring a higher level of construction and maintenance associated with using automobiles. The revised analysis also shows that the No Project has the highest level of indirect energy consumption for this same reason: without the proposed project, people will be more dependent on automobiles which are less energy-efficient on a per passenger basis than rail or transit.
- 56-98 The Minimum Operable Segment (MOS) Alternative would include rail service in the SMART corridor from Windsor Station to the San Rafael Downtown Station. Bicycle/pedestrian pathway construction by SMART as a part of this alternative would be limited to the Windsor to San Rafael portion of the ROW. In all other matters this alternative would be identical to the proposed project. Table 6.5-1 of the Biological Technical Report provides differences in habitat effects between the two alternatives.
- 56-99 See response 43-101 and 56-77.

- 56-100 See Master Response E for a summary of clarified LOS analysis. Regarding the comparison of the proposed project to the implementation of HOV lanes, Highway 101 HOV lanes are not part of SMART's proposed project but are assumed in all the EIR alternatives.
- 56-101 The DEIR identifies freight service as part of the cumulative project scenario in Section 3.1 and freight service is factored in to the cumulative impact analyses for each issue area in DEIR Chapter 3, where relevant. However, in response to comments, Master Response O provides additional details on expected future operations, given current information from NCRA. To respond to the request for details on potential impacts specifically associated with freight service, as a subset of the cumulative scenario, the cumulative analysis of air quality impacts in DEIR Impact AQ-7 has been clarified. See response 23-18 for further information on cumulative air quality impacts. DEIR Section 3.7.7, page 3-140, discusses the cumulative effects of passenger and freight rail operations on the noise environment. See response 10-4. As noted on DEIR page 3-148, the analysis of energy consumption is cumulative in nature with regards to future development in the region and corresponding changes in the regional transportation system. While the introduction of new freight service in the SMART corridor would result in an expenditure of energy, the cumulative impact is not expected to be significant due to the relatively low intensity of the proposed use, and the potential shifting of freight trips from trucks to trains. Safety issues associated with combined freight and passenger rail are addressed in Master Response P and DEIR page 3-222. Given the relatively low frequency of freight service, cumulative effects from freight operations on other issue areas would be negligible.
- 56-102 As stated in DEIR Section 5.3, there is the potential for some indirect job growth or shifting of growth within the region from outlying areas to urban areas along the corridor. The referenced statement on DEIR page 5-8 is a summary sentence, making the distinction that since there is already substantial growth projected for the area, the project is not expected to induce additional *substantial* population or employment growth in the two counties.
- 56-103 The statement is not a contradiction, but is identification of one potential outcome of the proposed project. Growth projections for the North Bay indicate that even without the project substantial growth will occur; the proposed project may have some influence on where that growth occurs. See also response 42-78.
- 56-104 See Master Response M regarding the Sonoma-only rail alternative.
- 56-105 Fares are calculated in real, 1990 dollars. The change in the Bay Area consumer price index (CPI) between 1990 and the end of 2005 was approximately 1.56 (so for example, the \$5 maximum fare cited between Cloverdale and Larkspur is equivalent to \$7.80 in current dollars). The fares are assumed to be adjusted upward in the future, based on the Bay Area CPI.
- 56-106 DEIR Appendix I Table 5.4-1 has been revised; see Chapter 4 of this FEIR. The statement about 95.8% growth refers to a lightly populated area east of Highway 101, and is not reflective of Novato's overall growth. Novato's ridership is divided between two stations, which lead to a commensurately lower ridership at each station.
- 56-107 See Master Response R.
- 56-108 Riders may drive and park at some stations, may walk, bicycle, be dropped off by others, or may take transit to stations. Regarding shuttles to Larkspur Ferry, see Master Response B.
- 56-109 The shuttles are an integral and feasible part of the proposed project. The comment does not indicate how shuttles would prove to be infeasible and it would be speculative to assume the proposed shuttles cannot be implemented. Since shuttles help reduce the

number of automobiles accessing the proposed stations, an alternative without shuttles would have greater traffic impacts in those areas. CEQA does not require consideration of an alternative that has greater impacts than the proposed project.

- 56-110 The text in Appendix I regarding 8,000 trips is incorrect; the number used in the DEIR analysis was the 4,756 rail trips projected by the model, as shown in Appendix I Table 5.4-1. Revised forecasting shows a projected ridership of 5,050. See Master Response C and revised Appendix I Table 5.4-1 in Chapter 4 of this FEIR.
- 56-111 These ridership figures have been revised; the revised Appendix I Figures 5.4-1 and 2 appear in Chapter 4 of this FEIR. For information on the mid-day ridership, see Master Response C. The *original* Figure 5.4-1 in Appendix I referred to in the comment showed 1,934 peak period boardings, which multiplied by 2 equaled 3,868; with the addition of the original estimate of 905 mid-day boardings, the total was 4,773. (The difference between 892 and 905 was due to rounding.) As noted in Master Response C, the mid-day train ridership was unreasonably high; these figures have been revised; the current mid-day train ridership is predicted to be 156 passengers, and the combined peak period ridership – AM and PM – is predicted to be 4,900.
- 56-112 The DEIR modeling assumed that the shuttles were available to non-rail passengers; this has been revised in the latest modeling. The revised shuttle ridership is 500 to 600 trips per day. See Master Response B for additional information.
- 56-113 See response 56-112.
- 56-114 See response 56-112.
- 56-115 See response 56-112 regarding shuttle bus ridership revisions. The revised shuttle ridership at Larkspur is shown in Appendix I, Table 5.4-5 (see FEIR Chapter 4), and would be approximately 100 to 150 boarding passenger trips per weekday. The revised number of transfers between rail and ferry is estimated between 40 and 55 per day.

Comment Letter #57 – Sierra Club Marin Group (additional comments)

- 57-1 A discussion of project costs in the environmental document is not required by CEQA. However, for informational purposes, Master Response N provides additional information on project costs. The EIR responses to comments have been prepared and provided to the public well in advance of the November 2006 ballot measure.
- 57-2 See Master Response O.
- 57-3 See response 56-101.
- 57-4 Cumulative traffic impacts of passenger and freight service are discussed on page 3-123 of the DEIR. See Master Response O for additional information. Freight service is far less frequent than the passenger service, and would occur at off-peak time periods. Furthermore, there is no freight service proposed south of the Ignacio Wye in Novato (Highway 37); therefore there are no freight impacts at all in San Rafael or Larkspur. See Master Response Q regarding Quiet Zones and their application to freight trains.
- 57-5 See Master Response O.
- 57-6 See Master Response O for information on freight operations.
- 57-7 See Master Responses O and P.
- 57-8 See response 23-18 for detailed information regarding cumulative air quality impacts from passenger and freight operations.