

Section 4

Master Responses to Comments on the Draft SEIR

4.1 INTRODUCTION

This section contains master responses to address comments that were raised repeatedly and to provide information in a comprehensive, easily-located discussion that clarifies and elaborates upon the analyses in the Draft SEIR. The master responses address the following topics:

- Master Response 1: Present Status of the Proposed Project and CEQA Process;
- Master Response 2: Circulation and Safety in El Cerrito Plaza Shopping Center and Near Schools;
- Master Response 3: Noise Concerns; and
- Master Response 4: Air Quality Concerns.

4.2 MASTER RESPONSES

Master Response 1: Present Status of the Proposed Project and CEQA Process

On November 1, 2004, the Draft Subsequent Environmental Impact Report (SEIR) for the El Cerrito Plaza Mixed-Use Development Project was published. The public comment period lasted 63 days and ended on January 3, 2005. During the public comment period, the City received over 80 comment letters on the Draft SEIR. In addition, a public hearing before the Planning Commission was held on December 1, 2004, during which oral comments were received. Two general comments on the project that were frequently asked during the public review period concern the project description and the need for the Measure C parking garage.

On November 15, 2004, Mr. Charles Burress, representing the Behrens Neighborhood Association, wrote the City requesting that the Draft SEIR be withdrawn because the project described in the Draft SEIR was not the project presented to the Albany Board of Education on November 9, 2004. At that meeting, Mr. Carl Fortney, representing the developer of the proposed project, Forest Plaza Partners, presented a different project and site plan than that which was presented in the Draft SEIR. Mr. Fortney presented a reduced-size project that consisted of 84 residential units, a 400-space Measure C parking garage, and a revised Cerrito Creek daylighting and restoration plan. In addition, the 70-child care facility had been removed entirely from this new site plan. In a November 17, 2004 letter by Ms. Susan Westman, the Interim Community Development Director of El Cerrito, to Mr. Burress, she explained that Mr. Fortney had made an application to the City of El Cerrito to build the proposed project as described in the Draft SEIR. As of November 17, 2004, Mr. Fortney had not submitted to the City any modifications to his accepted application. According to Ms. Westman's letter, when and

if Mr. Fortney submits modified plans to the City, it would be the City's responsibility to review the new submittal to determine if additional environmental analysis were required. Comments from the public on the Draft SEIR should address the proposed project as presented in the draft report. In addition, she explained that the developer is free to meet with citizens and groups to present different ideas about the project and that the City has no authority to regulate what a developer says or shows about his project when meeting with them.

Another frequently raised concern was the public's feeling that the Measure C parking garage was not necessary. It was noted that the El Cerrito Plaza BART parking lot was not exceeding expected capacity and that the Measure C parking garage would not likely be used by BART patrons because of its distance from the BART station and because users would pay a charge to park in the garage. On March 7, 2005, the El Cerrito City Council decided to follow the West Contra Costa Transportation Advisory Committee's recommendation to use Measure C funds (a 1998 voter-approved half-cent sale tax) for other projects in Richmond, Hercules, and El Cerrito – Del Norte. This decision eliminated the Measure C parking garage component from the proposed project. Subsequently, the City of El Cerrito Community Development Department and Redevelopment Agency received revised plans for the project site from the project applicant, which proposed the Residential Only Project of 128 residential units, 158 parking spaces for residents and guests, and a revised daylighting and restoration plan for Cerrito Creek.

Several commentors raised concerns that the project described in the Draft SEIR was not the project that the project sponsor actually intended to build. Specifically, members of the community reacted to a presentation made by a representative of the project sponsor showing both the BART garage and residential project as reduced in size. It is not uncommon for a project proponent to suggest modifications to a proposed project during the CEQA review process, particularly where members of the community voice concerns over the project as happened here. CEQA encourages such modifications. In fact, as some courts have noted, "The CEQA reporting process is not designed to freeze the ultimate proposal in the precise mold of the initial project; indeed, new and unforeseen insights may emerge during investigation, evoking revision of the original proposal."¹

Master Response 2: Circulation and Safety in El Cerrito Plaza Shopping Center and Near Schools

Traffic Impacts

As currently proposed, the project (i.e., the Residential Only Alternative) would generate 67 am and 78 pm peak hour trips (the peak hour occurs in the morning between 7:00 am and 9:00 am, and in the afternoon between 4:00 pm and 6:00 pm). These trips would be divided between inbound and outbound traffic and could be expected to occur throughout the peak hour. As a result, the Residential Only Alternative is estimated to generate one additional trip per minute at the project site itself and less

¹ *Kings County Farm Bureau v. County of Solano* (1990) 221 Cal.App.3d 692.

than one trip per minute at the intersection of Evelyn Avenue and Brighton Avenue and at Talbot Avenue and Brighton Avenue (because the inbound and outbound trips would be divided between these two one way streets). At other study locations and throughout the area, the traffic would be less concentrated and thus result in lesser impacts.

These trip generation assumptions are conservative. The trip generation rate used for the Residential Only Alternative is the same rate used for suburban development with no access to transit. Although there is evidence, cited in the report, that persons residing within a quarter mile of transit use transit for as much as 30 percent of their commute trips, no discount has been applied to the trip generation in this analysis. As a result, the projection of project-related trips is conservative (i.e., are greater) with respect to peak hour and daily traffic impacts.

During other periods, such as weekends or, for example, afternoon school pick up, the amount of project-generated traffic would be even less than that during the peak period. In the vicinity of the nearest schools, the project would be expected to generate less than one vehicle every three or four minutes. This amount of traffic is negligible with respect to circulation impacts, including pedestrian or bicycle impacts. It should be noted that the traffic analysis in the Draft SEIR focuses on the “peak hour;” that is, that period of the day when the project and the majority of surrounding uses generate the greatest number of trips. This peak period is different than the peak hour for school traffic, so that the peak hour traffic from residential development at the project site would not appreciably affect vehicular, pedestrian, or bicycle traffic around the schools.

Under the Residential Only Alternative, 65 percent of the project traffic would be expected to travel to and from the project on Albany streets. Roughly 25 percent would be expected to travel through the El Cerrito Plaza to between the project site and the intersection of Carlson/San Pablo and the Plaza driveway. Less than 10 percent of the project traffic would be expected to travel directly between the site and the intersection of Liberty Avenue and Fairmont Avenue. This distribution represents roughly one vehicle every 8 to 10 minutes that might travel behind Albertson’s and past Starbucks. Given this small amount of traffic, conflicts between project-related traffic and trucks or between project-related traffic and pedestrians would not reach a level of significance. In general, regardless of the existing conditions on site, the level of traffic from the Residential Only Alternative would not cause significant impacts to on-site circulation.

South of the Plaza, several commentors incorrectly assumed that all of the project traffic projected for Talbot or Evelyn Avenues should add up to the traffic projected for Brighton just east of San Pablo, where the additive effect of project traffic on Brighton is greatest. In fact, some project trips would continue south of Brighton, while others travel east towards Ashbury. Under the Residential Only Alternative, 350 vehicles would travel on Brighton to/from San Pablo, roughly 220 on Brighton towards Ashbury, and roughly 20 south of Brighton. The distributions of AM, PM, and daily trips differ, so that comparisons of the traffic assignment between peak hour and daily estimates are not meaningful.

Parking Impacts

Before discussing parking supply and demand, it is important to clarify what constitutes a “parking impact.” A shortfall in parking is certainly a planning issue, but it is not necessarily a significant impact, as defined in CEQA. Under CEQA, a significant impact occurs when there is a substantial change to the physical environment. Court decisions have specifically addressed whether parking shortfalls constitute a significant harm to the environment. The Court in *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* explained that the social inconvenience of having to hunt for scarce parking spaces is not an environmental impact; the secondary effect of scarce parking on traffic and air quality is. In addition, many planning professionals opine that an abundance of parking harms the environment by promoting driving. On the other hand, the failure to comply with established City policies can be considered an environmental impact according to CEQA and that standard has been applied in the Draft SEIR.

Under the Residential Only Alternative, the project would include 158 parking spaces. The proposal includes 55 single bedroom facilities and 73 two bedroom and townhouse units. Under City of El Cerrito zoning requirements, this development program would require 201 spaces. The Residential Only Alternative would, therefore, result in a shortfall of 43 spaces. As indicated in the Draft SEIR, this parking supply deficit constitutes a significant impact.

The impact is not the shortfall itself rather the failure of the project to meet established City policy. The City by making findings waiving its zoning requirements as part of its Incentives Program would mitigate this impact. If the City were unwilling or unable to make such findings, then the impact would be unmitigated. This result is appropriate because the Incentives Program recognizes that, under circumstances such as those of the Residential Only Alternative, both car ownership and vehicle use is reduced. The purpose of the SEIR analysis is not to justify this pre-existing policy of the City of El Cerrito but to identify it as a relevant factor in assessing parking impacts.

For practical purposes, it is apparent that typically there would be abundant parking at the Plaza to address whatever shortfall may result from the proposed project. The distribution of that parking activity may be such that residents and other Plaza users may be somewhat displaced from their preferred parking places but that does not constitute an environmental impact.

Despite considerable use of the Plaza parking lot by BART users and others, there is no documented evidence of an existing parking shortfall related to BART users or a Plaza-wide parking shortfall at any period. A parking study of the Plaza by George Nickerson shows a 90 percent parking utilization at the time the parking survey was performed in the early 2000s. There is no empirical reason to believe that the parking demand observed in that study was lower because the Plaza was new or that it is unrepresentative due to any other special circumstances. The information from the Nickerson study is appropriate for use in the SEIR analysis to establish baseline parking conditions.

The above notwithstanding, there may be times when the parking demand available at the Plaza may exceed supply and that this condition may occur with or without the project. However, parking impact analysis is conducted to identify parking conditions under typical conditions. It is not standard practice

among transportation professionals to design parking facilities to meet annual peak conditions. For commercial uses, the standard rule is to ensure that parking supply exists to serve the 20th busiest hour of operation (“Parking Requirements for Shopping Centers,” The Dimensions of Parking, Urban Land Institute). This standard typically is adequate to serve 80 to 90 percent of the demand during the peak parking demand of a given year.

In the United States, it is generally accepted as impossible to fully serve peak shopping days, such as the start and end of the Christmas season, so this standard is never used to judge the adequacy of a parking facility. During the normal weekday arrival times for residents, the Plaza has a surplus of parking. It is not likely that residents would need to find parking spaces on Saturday afternoon, as most cars would be parked in their overnight spaces. The impact, if any, would be a shift in the parking of the shopping center itself and even at 90 percent occupancy, the available spaces within the Plaza would be sufficient to offset the parking from the Residential Only Alternative with sufficient space to allow shopping center patrons to avoid using the Albany streets, which are further from their destinations than the on-site parking.

Parking that now occurs at the project site is not a part of the designated parking supply for the Plaza. The project site has been identified for development since the Plaza renovation was proposed and the use of that space for unofficial parking should not infringe on the development of the site.

TIRE Index

The TIRE index is a tool that can shed some light on the effect of traffic volumes on residential environments. The TIRE index measures the proportion of the increase in daily traffic volumes that result from a proposed project. The notion of proportionality is essential because the impact being addressed is not sensitive to some fixed level of capacity; the effect of capacity is covered by LOS analysis. Instead the use of the TIRE index is an effort to understand how a project may change people’s perceptions of traffic. The criteria used to determine if there is an impact is stated in the Draft SEIR and is consistent with the 1997 EIR for the Plaza Redevelopment Project; namely, an increase in the TIRE index of 0.1 or greater.

In general terms, where existing traffic is low and the contribution of new traffic is proportionally high, there is more likely to be an impact. This is because people’s perceptions of the change are likely to be noticeable and to create unsafe conditions along the street. Conversely, where existing traffic is high and the new traffic is proportionately low, there is less likely to be an impact. This is because residents will not perceive much of a change in the environment. Consequently, where traffic counts are low, a project is more likely to register an impact on the TIRE index; whereas, where traffic counts are high, a project is less likely to show an impact.

Qualitative measures of traffic volumes, such as “high,” “very high” or “severe,” are informative, but are not indicative of a project impact, because there is no distinction between existing conditions and the project’s contribution to a change in perception. If people feel the traffic level is “high” under existing conditions, they will still feel that traffic is high after project implementation, but they will not perceive any effect due to the project. To illustrate this concept, using Brighton Avenue as an

example, if the project traffic were somehow prevented from using this street and the residents were not informed of the change; they would, according to the TIRE index, not be able to tell the difference.

The project as currently proposed does not trigger any impacts based on the TIRE index and mitigation is not required.

Albany Street Closures

The streets identified for possible closure by the City of Albany have provided access to this commercial site for decades. During times when the Plaza was economically vital, it is likely that traffic volumes on these streets were likely to be relatively higher; whereas during times when the Plaza was economically stagnant, the volumes have probably been relatively lower. Continued use of the Albany streets for access to the project site would not represent a change in any long-standing condition; however, the closure of these streets would represent such a change. This closure would itself be a 'project' under CEQA and thus require environmental review. A proposal for street closures is a policy option available to the City of Albany and neither a part of the Residential Only Alternative or an impact of the project. If the City of Albany decides to close the streets between the Plaza and Brighton, it is the responsibility of the City of Albany to provide a detailed environmental analysis of that undertaking.

The Draft SEIR contains an analysis of a scenario where the streets south of the Plaza in Albany have been closed. Project-generated impacts as a result of street closure are identified beginning on page 3.4-40 of the Draft SEIR. Appropriate mitigation measures are also noted to address significant impacts from this proposal. Given that these impacts would result from a street closure that is proposed or approved as part of the project sponsor's application, these impacts are not impacts of the proposed project, except perhaps when cumulatively considered. To the degree that that measure affects the traffic impacts of the Residential Only Alternative, the analysis provided in the SEIR is adequate.

On-site Congestion

Under existing conditions, the El Cerrito Plaza Shopping Center experiences a significant amount of traffic in the evenings around peak shopping times. This is a typical condition at successful retail centers including suburban malls and downtown shopping districts. Although the congestion can be a source of frustration, this traffic does not represent a deficient environmental condition unless it affects public streets or unless there is an impact to safety. The El Cerrito Plaza serves thousands of patrons each day, and no information has been provided by commentors to document any substantial traffic safety hazards for pedestrians. From a CEQA perspective, a clear distinction must be made between circulation environments that seem uncomfortable and those that are unsafe. Often traffic calming techniques, such as narrow streets, speed humps, or chicanes require that drivers be uncomfortable precisely so that traffic slows and is safe.

There are no standards for evaluating delay or congestion on private land. Unless the effects of congestion spill onto public streets or occur at public intersections, there are no criteria governing

significance. Analysis of proposed site circulation patterns is typical as part of a project's environmental review. This analysis was performed for the 1997 EIR for the existing facilities that are part of the El Cerrito Plaza. It is not appropriate to evaluate in detail the traffic operation of existing private rights-of-way, unless changes are being proposed that would affect traffic safety or unless the owner of that property asserts that the project would infringe on his or her rights. Instead, the Draft SEIR focused on impacts on public facilities.

On that subject, the incremental impact of the Residential Only Alternative would be negligible. The total project traffic circulating through the Plaza is estimated to be 28 vehicles in the PM peak hour. By comparison, the background volume of vehicles entering and exiting the Plaza at the intersections of San Pablo Avenue/Carlson Boulevard and Liberty Avenue/Fairmont Avenue is 1,791 vehicles during the PM peak hour. The CCTA applies a 50-trip guideline for analyzing an intersection to determine whether impacts might be significant. Consequently, even if locations of concern within the Plaza were public streets, the project contribution to traffic congestion would not meet the recommended threshold for LOS analysis.

Internal Project Pedestrian Circulation

The Residential Only Alternative and the Cerritos Creek restoration provide considerable benefits in terms of pedestrian linkages, compared to the existing conditions. The daylighting of the portion adjacent to the residential development completes a pedestrian link from San Pablo Avenue to the Ohlone Greenway. Other pedestrian paths are provided to connect Evelyn Avenue to the Ohlone Greenway and from the Ohlone Greenway to the south side of the El Cerrito Plaza. These improvements contrast with current conditions, where paths are not marked off and pedestrian paths terminate in undifferentiated areas of surface parking.

Around the edges of the project, the residential development is adequately set back from the sidewalk curbs. According to the plan, crosswalks are indicated in locations that allow for adequate lines of sight for pedestrian safety.

Internal to the project, potential vehicular-pedestrian conflicts would be focused at the entrance to the parking near the respective lobby entrances of each building. Entering and existing vehicles at these locations would make 90-degree turns to enter and exit the garages and therefore would move through these areas at low speeds. Decorative pavement as indicated on the plan would establish these areas as shared space between vehicles and pedestrians.

From the southern building (Building 2), however, the lobby exit would lead pedestrians directly into the path of vehicles exiting the garage. This design feature should be addressed by moving the doors, so that they open to the north. A path should extend to the north leading pedestrians across to the path shown along the southern edge of the northern building. From here, pedestrians would have better views off site to the west, and improved lines of sight to both of the garage entrances. While not significant impacts, the City should consider (1) using warning signs to alert drivers that pedestrians are at the garage exits, and (2) ramping the paths that cross the garage entrances to form humps or raised crosswalks.

Master Response 3: Noise Concerns

Construction Noise

The construction of the proposed residential building would produce noise similar to the construction of any large residential building, whether it is in Albany or El Cerrito. The construction contractor would be expected to adhere to the guidelines and standards regarding construction noise that are enforced by El Cerrito. These guidelines and standards are expected to be imposed as conditions of project approval and would be included in the Mitigation Monitoring and Reporting Plan for the project. The noise standards as contained in the municipal codes of Albany and El Cerrito for construction are similar except for somewhat different construction hours allowed, most notably on weekends (El Cerrito - 8am to 5pm, and Albany - Saturday: 8am to 6pm and Sunday: 10am to 6pm).

The Draft SEIR provides feasible noise mitigation that would control noise emission with noise reduction devices such as mufflers, erection of temporary plywood walls, up to 15 feet high, along portions of the construction site facing the residences, and minimize the use of impact tools. With these measures, the noise impacts would be less than significant.

There is no evidence that normal construction activities associated with construction of a multi-family residence would have serious impacts on local residents, teachers, students, or Plaza shoppers. The apartment building adjacent to the southeast corner of El Cerrito Plaza was constructed much closer to classrooms at Albany Middle School than the proposed residential building, with apparently no significant impact to school activities.

Reflected Sound from Eastern Building Facade of New Multi-Family Residences

The Draft SEIR addresses noise impacts that could occur to Cougar Field, Albany Middle School, and residences east of the project site. Specifically, the Draft SEIR reports this impact as being potentially significant (see Impact NO-5 on page 3.5-13) and identifies mitigation options that would result in these impacts being less than significant. Consequently, no follow-up noise monitoring is warranted at Cougar Field, Albany Middle School, or in the residential neighborhood east of the project.

The project would not cause significant noise impact due to reflected BART sound to residences to the south, because the south facade of the new multi-family residential building would be perpendicular to the BART tracks, reflecting very little sound. BART noise reflected from the south and north facades of the proposed multi-family building would result in increases of noise levels less than 1 dBA, because they are perpendicular to the tracks. This could only occur in directions to the southwest and northwest. In directions to the southeast and northeast, there would be virtually no reflected BART sound because of the orientation of the south and north facades.

Any increase in noise level due to reflection of BART noise from the eastern building facade of the Residential Only Alternative would be 2 dBA or less. This is based on analyses involving similar situations with transportation noise from motor vehicles and rail transit reflected from large walls. In the BART situation with the proposed multi-family building, the sound from BART would travel to the

building façade and be reflected back. In this process, it is attenuated because of normal “spreading losses” before coming back to where it was emitted. The sound is then attenuated further just as is the direct sound from the trains. Furthermore, both the BART structure and the train itself will provide some shielding of the reflected sound. Hence, a conservative estimate of 2 dBA increase at most is projected for the case with no mitigation.

It should be noted that a difference of 3 dBA is “minimally detectable” (refer to page 3.5-3 of the Draft SEIR). Therefore, any increase in noise for the residences to the east and people using Cougar Field would be barely detectable if not undetectable. With the mitigation options provided, Mitigation Measure NO-5.1 (implement residential architectural design features) or Mitigation Measure NO-5.2 (use sound absorptive treatment on residential walls facing the BART tracks), the increase in BART noise levels due to reflection from the building facade can be adequately controlled to 1 dBA or less.

Sound absorption treatment is used in transportation projects when there are large flat walls. This is done to effectively reduce the reflected sound. An “architectural feature” is a concept used by acousticians to produce “diffusion” and to minimize specular reflection, which normally enhances (increases) sound. Diffusion is used inside concert halls to spread sound in all directions, which is desirable for a closed performance space. For the proposed project, architectural features would scatter the reflected sound from the building façade in a manner so that it does not combine with the direct sound in a significantly adverse way. The primary frequency of the measured BART noise at the levels is 500 Hz, which has a wavelength of about two feet. This is a short wavelength and relatively easy to reflect diffusely with architectural features (steps in façade, breaks in façade, etc.) that are of a similar dimension or larger.

It was noted in the Draft SEIR on page 3.5-6 that BART noise levels were measured to be approximately 4 dBA higher in 2004 than noise levels obtained in a similar measurement in 1997 for the Redevelopment Project Draft EIR. Wayside BART noise levels are affected primarily by two factors: (1) the condition of the rails in the BART tracks and (2) the speed of the BART train at any specific location. The speed of the trains south of the El Cerrito Plaza BART Station has presumably not changed, although the 2004 measurement was made somewhat south of the 1997 measurement location and southbound trains would have accelerated to a slightly higher speed.

What apparently has changed since 1997 is the condition of the rail. BART has a maintenance program in which they grind the rails at regular intervals, at least once a year and sometimes every six months. The rail grinding is done to remove short wave length rail corrugations that are a result of wear. The 4 dBA difference in noise levels between 1997 and 2004 can be attributed to the condition of the BART rails.

When grinding the steel rails, sparks are produced as metal is removed from the top of the rail head. In normal situations the sparks are harmless, except when cars are parked close enough to where the sparks land and would damage the paint. This may be the situation at El Cerrito Plaza where nearby residents park their cars in the southeast corner of the parking lot. BART is averse to grind the rails when cars could be damaged. The ambient noise levels associated with BART operations are reduced by rail grinding.

The project has no control over BART's rail grinding program; however, construction of the residential building would eliminate this area of parking and allow BART to grind the rails in this segment of track. Consequently, the elevated ambient noise levels would be expected to be reduced once BART resumes its rail maintenance program.

Some commentors suggested that an appropriate mitigation would be the construction of sound walls on the BART aerial structure. While this measure would be effective, the project applicant would have no authority to cause this measure to be implemented; changes to the aerial structure are solely within BART's discretion. However, any increase in noise levels associated with reflected noise, with mitigation applied to the eastern building facade, would be substantially less than that associated with normal variation in BART noise over time due to normal changes in rail conditions, and, on average, the noise levels would be less, because BART can grind the rails on a more regular basis.

Increased BART noise (1 dBA or less) due to reflection from the eastern building facade, with mitigation, would be undetectable and would not make it significantly harder for announcers at Cougar Field to be heard, nor would teachers at Albany Middle School notice a difference, nor would the teen center or joggers using Cougar Field suffer. A 1 dBA or lesser increase in BART noise due to reflection from the proposed multi-family residential project (of the Residential Only Alternative), would not threaten the mental and physical development of the Albany Middle School students any more than the existing condition does.

The users of Ohlone Greenway would be no more affected by reflected BART noise, and less so with the mitigation provided, than when they are opposite the apartment building adjacent to the southeast corner of the Plaza. There is no evidence that this situation presents a significant impact.

The adequacy of the design of the multi-family building eastern façade to minimize reflected sound should be reviewed during the project design review phase by the City at the same time adequacy of the exterior to interior noise reduction is reviewed (see Mitigation Measure NO-4.1 beginning on page 3.5-12). An acoustical consultant will be required to provide recommendations for both issues and it would be appropriate for the City to review and approve the design at that time.

BART Train Noise inside New Multi-family Residences

Ambient 24-hour noise conditions at the project site exceed the “conditionally acceptable” 80 dBA L_{dn} or CNEL² noise level for residential uses in the City of El Cerrito's General Plan Noise Element. However, the noise level of 82 dBA L_{dn} for the project site, as presented in the Draft SEIR, is an existing condition and all other adjacent residential and sensitive uses are exposed to this level of noise currently, irrespective of project implementation. CEQA does not require a project sponsor to mitigate

² L_{dn} , the day-night average noise level, is a 24-hour average Leq with a 10 dBA “penalty” added to noise during the hours of 10:00 pm to 7:00 am to account for the greater nocturnal noise sensitivity of people. CNEL, community noise exposure level, is a 24-hour average with a 5 dBA penalty added to noise during the evening from 7:00 pm to 10:00 pm and a 10 dBA penalty added during the nighttime from 10:00 pm to 7:00 am. The CNEL is very similar to the L_{dn} , with the CNEL about 0.2 to 1 decibel greater than the L_{dn} .

an existing problem. If the proposed project were to exacerbate an already unacceptable level, then mitigation may be warranted. As reported in the Draft SEIR on page 4-9, noise impacts of the Residential Only Alternative would be similar to or less than those identified for the proposed project, and these impacts can be mitigated to less than significant.

Aside from changes in the ambient noise environment, there is the question whether residential development should be allowed at the site given that the noise levels are considered unacceptable for residents. This determination lies with the City decision makers. The Draft SEIR explains that the current noise level is 82 dBA L_{dn} which exceeds the conditionally accepted noise conditions for residential uses. However, the Draft SEIR also describes the California Administrative Code Title 24, Part 2, Noise Insulation Standards, which require that if multi-family dwellings are located where the CNEL is greater than 60 dBA L_{dn} or CNEL, it is necessary to prepare an acoustical analysis to demonstrate that the proposed design will limit interior noise to less than 45 dBA L_{dn} or CNEL. Implementation of Mitigation Measure NO-2.1 would reduce this impact to a less-than-significant level for the Residential Only Alternative.

Although 82 L_{dn} is a high noise level for residential land use, high noise level situations are encountered at other locations along BART tracks with residences in close proximity (e.g., apartments near Del Norte BART Station and in Pleasant Hill), and in San Francisco next to I-80 (e.g., The Clock Tower adjacent to the eastbound approach to the Bay Bridge). Although more expensive to mitigate, it is possible to implement adequate exterior-to-interior noise isolation, that will achieve 45 L_{dn} . The most important noise control elements in the building shell are the windows. Windows are available that reduce noise substantially, especially at the higher frequencies evident in the BART noise spectrum measured at the project site. The specific window design and the adequacy of the exterior shell of the building façade would be reviewed by the City during the design phase.

Street Traffic Noise

The increase in noise in the surrounding residential areas due to changes in traffic patterns are indicated to be less than significant. Without the BART parking structure, the changes in traffic noise would be even less.

Master Response 4: Air Quality Concerns

The issue of air quality impacts and consequent public health effects was a major concern among commentors of the Draft SEIR. The following discussion is intended to clarify and expand upon the analysis in Chapter 3.6, Air Quality, of the SEIR. This master response discusses the following topics:

- Construction emissions (including particulate matter and construction exhaust emissions); and
- Operational emissions as a result of the project
 - PM_{10} and asthma
 - PM_{10} and cancer risk
 - SEIR analysis of project-related emissions.

Construction Emissions

Potential Impacts. Project construction would occur over a course of approximately 20 months. Activities such as site grading, installation of utilities, and construction of the basic circulation system, construction of the new buildings, the daylighting and restoration of Cerrito Creek, and the installation of landscaping and site design features would involve truck traffic and construction equipment that generate local air emissions. Specifically, the Draft SEIR on page 3.6-10 explains that “Heavy construction activity on dry soil exposed during construction phases could cause emissions of dust (usually monitored as PM₁₀). ROGs [reactive organic gases], NO_x [nitrogen oxides], CO, and additional particulate matter emissions also would be created from the combustion of diesel fuel by heavy equipment and construction worker vehicles.”

EIR Impact Analysis Methodology. The methodology used in the EIR to identify the amount and significance of these emissions follows the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines for Evaluating Construction Emissions. The Guidelines note that PM₁₀ is the pollutant of greatest concern, potentially leading to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. Notably, the Guidelines do not recommend use of air quality models to quantify emissions during construction; rather, the District’s approach is to “emphasize effective and comprehensive control measures.”³ The Guidelines identify a set of PM₁₀ control measures that should be implemented at all construction sites and state that “The determination of significance with respect to construction emissions should be based on a consideration of the control measures to be implemented.”

In accordance with the BAAQMD CEQA Guidelines, the construction-period air quality analysis in the Draft SEIR does not quantify emissions. The Draft SEIR acknowledges that in the absence of feasible control measures, particulate emissions would be potentially significant (see Impact AQ-1, pages 3.6-12 to 3.6-14) and would affect sensitive land uses in the project vicinity, including adjacent residential uses and Cougar Field.

To reduce these emissions and, hence, the potential impacts to surrounding uses, the Draft SEIR proposes the control measures identified by the BAAQMD. Specifically, pages 3.6-10 and 3.6-11 of the Draft SEIR include the BAAQMD comprehensive list of “Basic Control Measures,” “Enhanced Control Measures,” and “Equipment Exhaust Control Measures,” taken directly from Table 2 and from Chapter 4.2, “Mitigating Construction Impacts” of the BAAQMD CEQA Guidelines, as proposed mitigation measures for construction emissions of PM₁₀ and construction equipment exhaust. The Draft SEIR concludes that with implementation of these mitigation measures in accordance with City practice and BAAQMD standard mitigation requirements, project construction-related air quality impacts would be reduced to a less-than-significant level.

³ BAAQMD, *BAAQMD CEQA Guidelines*, December 1999, page 13.

Operational Emissions

The State has adopted various regulations that would reduce diesel emissions in the overall fleet of diesel-fueled vehicles. These regulations include new diesel fuel and emissions standards, and inspection and maintenance requirements. In addition, the California Air Resources Board (CARB) is expected to establish a protocol for modeling the associated risk of placing people near roadways with diesel vehicles sometime in the future, but has not yet done so.

PM₁₀ and Asthma. In October 2000, CARB prepared a report on the potential cancer risks associated with activities exposed to diesel-fueled engines entitled, “Risk Characterization Scenarios.” According to this report, “many factors greatly influence the determination of whether a diesel PM emitting activity or operation poses a significant health risk, such as size of an operation, the frequency of activity, the age of vehicles, and the location of sensitive receptors in relation to the diesel PM emitting sources.” The report continues, “Other critical factors are the air dispersion model used to characterize the risk, emission factors, meteorological data, and modeling configuration such as area source, point source, and volume source.”

Commentors on the Draft SEIR expressed concern about the susceptibility of adjacent residents and children and other users of Cougar Field to asthma as a result of diesel particulate emissions (from both construction and operational emissions). According to CARB:

Asthma is a serious chronic lung disease that appears to be on the rise in California, the United States and many other countries around the world. The prevalence of asthma in the U.S. has increased by more than 75 percent since 1980; children and certain racial groups, especially African Americans, have experienced relatively greater increases in asthma prevalence. An estimated 11.9 percent of Californians - 3.9 million children and adults - report that they have been diagnosed with asthma at some point in their lives, compared to the national average of 10.1 percent. Nearly 667,000 school-aged children in California have experienced asthma symptoms during the past 12 months. Asthma causes breathing problems due to a narrowing of the airways causing the lungs to get less air. Attacks are characterized by a tight feeling in the chest, coughing and wheezing.⁴

Regarding the relationship between asthma and air pollution, CARB concludes “Air pollution plays a well-documented role in asthma attacks, however, the role air pollution plays in initiating asthma is still under investigation and may involve a very complex set of interactions between indoor and outdoor environmental conditions and genetic susceptibility.” Many studies have been undertaken by various agencies in order to determine if there is a causal relationship between diesel particulate emissions and asthma. According to the West Oakland Environmental Indicators Report, *Reducing Diesel Pollution in West Oakland*, “Recent studies have shown that diesel exhaust cannot only make asthma worse, but

⁴ <http://www.arb.ca.gov/research/asthma/asthma.htm>, accessed December 3, 2004.

may actually cause asthma.”⁵ Many studies suggest that PM₁₀ exposure is associated with asthma symptoms.⁶ However, the preliminary findings of the Fresno Asthmatic Children’s Environment Study (F.A.C.E.S.), which focused on the acute and chronic health effects of particulate matter by studying the relative risks for nitrogen dioxide (NO₂), ozone (O₃), and PM_{2.5}, indicated that “PM_{2.5} associations were the smallest in the analysis,” and that “relative risks were generally higher for O₃ and NO₂.”⁷

Another study, *Evaluation of the Health Impacts of Toxic Air Pollutants in a Southern California Community* conducted by Epidemiology Division, Department of Medicine of the University of California at Irvine, reports “Although deficits in peak expiratory flows of the lungs were found in relation to increases in some air pollutants, most findings were not statistically significant.”⁸ The study concludes “Results suggest that more work is needed on potentially causal air toxics in the pollutant mix from both traffic and industrial sources.”⁹ The Irvine study also mentions several other epidemiological studies that were recently completed regarding children and asthma symptoms associated with specific air toxics, including studies completed in Northern Ireland in 2001, Norway in 2000, and London in 2000. The Irvine report finds that “These studies suggest that the lung may be responding to a large number of compounds, and the attributing effects to any one agent ignores the importance of the mixture.”¹⁰

In light of these studies, the U.S. Environmental Protection Agency has not issued an official position on the link between asthma and PM₁₀ emissions. In its comprehensive final Health Assessment Document for Diesel Engine Exhaust, the U.S. Environmental Protection Agency states that effects from diesel emissions may include exacerbation of existing allergies and asthma symptoms, but the nature and extent of these symptoms are highly variable across the population.¹¹ Although a correlation may exist between particulate emissions and asthma, based on the information now available, a causal relationship has not yet been established and research continues to be conducted on the subject. Thus, there is no scientific basis for any determination that emissions from project construction and traffic would have an effect on the incidence of asthma on nearby receptors. Even though a causal relationship has not been proven, construction-related emissions of PM₁₀ and construction exhaust would be mitigated through implementation of the control measures identified in Mitigation Measure AQ-1.1 and AQ-1.2, beginning on page 3.6-10 of the Draft SEIR. Because of the uncertainty over

⁵ West Oakland Environmental Indicators Report, *Reducing Diesel Pollution in West Oakland*, November 2003, page 2.

⁶ *Housing, Asthma and Health*, a presentation by Eric Roberts, MD, PhD from Community Action to Fight Asthma, June 10, 2004.

⁷ U.C. Berkeley, California Department of Public Health, Sonoma Technology, and California Air Resources Board, *Fresno Asthmatic Children's Environment Study (F.A.C.E.S.)*, 2002, page 195.

⁸ Epidemiology Division, Department of Medicine, University of California, Irvine, *Evaluation of the Health Impacts of Toxic Air Pollutants in a Southern California Community*, 2002, page xx.

⁹ Epidemiology Division, Department of Medicine, University of California, Irvine, *Evaluation of the Health Impacts of Toxic Air Pollutants in a Southern California Community*, page xviii.

¹⁰ Epidemiology Division, Department of Medicine, University of California, Irvine, *Evaluation of the Health Impacts of Toxic Air Pollutants in a Southern California Community*, page 128.

¹¹ U.S. Environmental Protection Agency, Office of Research and Development's National Center for Environmental Assessment, Health Assessment Document for Diesel Engine Exhaust, EPA/600/8-90/057F, May 2002.

whether particulate emissions cause asthma and because mitigation measures would reduce PM₁₀ and construction exhaust emissions, the project's effect on asthma would be considered to be less than significant.

Background Cancer Risk. Because there is no scientific basis for determining the likelihood of a causal link between diesel particulate emissions and asthma, the BAAQMD does not suggest evaluating asthma incidence.¹² Instead, the BAAQMD suggests that long-term health effects, as measured by effects such as cancer risk, be considered. The potential cancer risk associated with diesel particulate emissions has been studied by CARB. Cancer risk is the probability that a person would develop cancer after being exposed to diesel exhaust of a certain concentration. Cancer risk estimates for air toxic purposes are based on measured ambient air chemical concentrations and theoretical chemical cancer potency factors. Cancer risk is expressed as the upper-bound, increased likelihood of an individual developing cancer as a result of exposure to a particular chemical. For example, a cancer risk of “one-in-a-million” refers to an upper-bound increased chance of one individual developing cancer out of an exposed population of one million.

It is important to consider risk estimates in light of other “natural” cancer-causing agents. It is well known that humans are routinely exposed to many agents that contribute to a “background” cancer risk. Contributors to this background risk include lifestyle, hormonal, nutritional, bacterial, viral, and environmental factors. The background risk of eventually developing cancer for every American is four in ten. The background cancer incidence rates in California from 1995 to 1999 were 5.26 per thousand for males and 4.11 per thousand for females (or 5,260 and 4,110 per million, respectively). These measured cancer incidence rates include cancers from all source and environmental factors.

Diesel Particulates and Cancer Risk. On a statewide basis, the average potential cancer risk associated with existing background diesel emissions is over 500 potential cancer cases per million people. In addition to these general risks, diesel exhaust particulates can also present elevated localized or near-source exposures. Depending on the activity and nearness to receptors, these potential risks can range from small to 1,500 cancer cases per million or more people.¹³ In a report published by the South Coast Air Quality Management District (*SCAQMD Multiple Air Toxics Exposure Study—MATES II* [Final Report], 1999), the cancer risk from ambient air was estimated to be 1,400 per million people. Approximately 90 percent of the cancer risk estimated by the SCAQMD is attributed to vehicle emissions (70 percent from diesel vehicles) and 10 percent to stationary sources (including industries and certain businesses such as dry cleaners and chrome plating operations). Finally, the U.S. Environmental Protection Agency in its assessment of diesel engine exhaust reports that epidemiological studies suggest that occupational exposures to diesel exhaust particulates from diesel

¹² Telephone conversation with Suzanne Bourguignon, BAAQMD, December 1, 2004.

¹³ California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October, 2000.

engines built prior to the mid-1990s cause an increase in the risk of lung cancer, in the range of about 20-50 percent.¹⁴

Based on regional, state, and federal studies, there is a clear indication that diesel exhaust emissions result in a greater incidence of cancer cases. The question for scientists, regulatory agencies, and communities is what constitutes an acceptable level of exposure to diesel exhaust emissions, an issue that is discussed below.

Significance Thresholds. The U.S. federal regulatory agencies have typically adopted a “one-in-a-million” cancer risk as being of negligible concern in situations where large populations (e.g., 200 million people) are involuntarily exposed to suspected carcinogens. Other agencies recommend a range of standards when smaller populations are exposed (e.g., in occupational settings). For example, the theoretical cancer risk of up to 100 in a million has been considered acceptable. California regulations such as the Safe Drinking Water and Toxic Substances Control Act of 1986 (Proposition 65) and Air Toxics Hot Spots Act (AB 2588) cite a cancer risk of ten in a million as an acceptable risk in California. The BAAQMD CEQA Guidelines recommend the following threshold of significance: “Probability of contracting cancer for the Maximally Exposed Individual (MEI)¹⁵ exceeds 10 in one million.”¹⁶ Notably, the U.S. Environmental Protection Agency’s health assessment specifically of diesel engine exhaust concluded that no specific cancer unit risk estimate for diesel exhaust is recommended because the currently available data are considered unsuitable for a quantitative risk assessment.

EIR Analysis of Project-Related Emissions. Per the BAAQMD CEQA Guidelines, the Draft SEIR evaluates the PM₁₀ mobile and stationary source emissions for the project using CARB’s URBEMIS 2002 model. The original proposed project operations would generate 26.94 pounds of PM₁₀ emissions per day from the 500-space Measure C BART parking garage, the 97 residential units, and child care facility. The Residential Only Alternative would further reduce those emissions because, as stated in the Alternatives Analysis section of the Draft SEIR, this alternative would reduce the daily number of vehicle trips by 1,549 trips. Vehicle emissions as a result of this alternative would be further reduced and also considered less than significant. This means that new and existing residents on and nearby the project site would not be exposed to significant PM₁₀ emissions from project operations including traffic trips generated by the Residential Only Alternative.

The vehicle fleet associated with the project would consist mainly of automobiles used by residents and guests to the project site. These types of vehicles are mainly gasoline-fueled automobiles and light trucks that have little to no diesel exhaust emissions. The proposed use of the project site is not the type of facility such as a truck depot, bus terminal, or distribution center whose vehicle fleet consists

¹⁴ U.S. Environmental Protection Agency, Office of Research and Development's National Center for Environmental Assessment, Health Assessment Document for Diesel Engine Exhaust, EPA/600/8-90/057F, May 2002.

¹⁵ A hypothetical off-site person, usually at or near the site boundary, who would receive the maximum exposure from a facility’s operations.

¹⁶ BAAQMD, *BAAQMD CEQA Guidelines*, December 1999, page 17.

mainly of diesel-fueled vehicles. Furthermore, statewide emissions of diesel exhaust are expected to decrease in the future with implementation of the state's Risk Reduction Plan. As a result, it is not expected that the Residential Only Alternative would pose increased cancer risks above the BAAQMD's threshold of ten cancer cases in a million.

Health Impacts for Existing and Project-Related Sensitive Receptors. In response to comments on the Draft SEIR, EIP Associates has also examined whether project residents, children at the child care facility, and other nearby sensitive receptors would be exposed to substantial vehicle exhaust emissions that could subsequently pose a substantial health risk to these receptors. However, since the Measure C BART parking garage and the child care facility would no longer be implemented under the Residential Only Alternative, sensitive receptors related with the child care facility would no longer be exposed to vehicle exhaust emissions. As presented above, the Residential Only Alternative would reduce the total daily number of vehicles to and from the site by 1,549 trips. In addition, the vehicle fleet associated with the project would consist mainly of automobiles used by residents and guests to the project site. These types of vehicles are mainly gasoline-fueled automobiles and light trucks that have little to no diesel exhaust emissions. Consequently, the already anticipated less-than-significant impact related to exposure of sensitive receptors to vehicle exhaust as presented in the Draft SEIR would be further reduced under the Residential Only Alternative.