

4.1 Significant and Unavoidable Environmental Impacts

Section 21100(b)(2)(A) of the California Environmental Quality Act (CEQA) requires that a draft environmental impact report (Draft EIR) identify any significant environmental effects that cannot be avoided if a project is implemented. Most impacts identified for the Middle Plaza at 500 El Camino Real Project (Project) in this Draft Infill Environmental Impact Report (Draft Infill EIR) would either be less than significant or could be mitigated to a less-than-significant level. However, the Project would result in some significant impacts that cannot be mitigated to less-than-significant levels. These impacts are listed below.

Section 15183.3 of the CEQA Guidelines states that the analysis in an Infill EIR need not address alternative locations, densities, or building intensities. There is no feasible alternative to the Project that would reduce impacts without looking at lower density and intensity, which is not required for an Infill EIR.

Project-Level Impacts

- **Impact TRA-1: Impacts on Intersections under Near-Term 2021 Plus Project Conditions.** Increases in traffic associated with the Project under Near-Term 2021 Plus Project would result in increased peak-hour delays at eight intersections. Intersection impacts at all eight intersections would remain significant and unavoidable because improvements would require obtaining additional rights-of-way, would violate existing City/town policies, or would be outside the City's jurisdiction.
- **Impact TRA-2: Impacts on Roadway Segments under Near-Term 2021 Plus Project Conditions.** Increases in traffic associated with the Project under Near-Term 2021 Plus Project conditions would result in increased ADT volumes on area roadway segments.
- **Impact TRA-3: Impacts on Routes of Regional Significance under Near-Term 2021 Plus Project Conditions.** Increases in traffic associated with the Project under Near-Term 2021 Plus Project conditions could result in significant impacts on several Routes of Regional Significance.
- **Impact TRA-9: Impacts on Ravenswood Avenue railroad crossings.** The Project would result in added traffic to railroad crossings.

Cumulative Impacts

- **Impact TRA-4: Impacts on Intersections under Cumulative 2040 Plus Project Conditions.** Increases in traffic associated with the Project under cumulative 2040 Plus Project conditions would result in increased peak-hour delays at 12 intersections. Intersection impacts at 11 of the intersections would be significant and unavoidable because improvements would require obtaining additional rights-of-way, would violate existing City/town policies, or would be outside the City's jurisdiction.

- **Impact TRA-5: Impacts on Roadway Segments under Cumulative 2040 Plus Project Conditions.** Increases in traffic associated with the Project under the Cumulative 2040 Plus Project conditions would result in increased daily traffic volumes on area roadway segments, resulting in a potentially significant impact.
- **Impact TRA-6: Impacts on Routes of Regional Significance under Cumulative 2040 Plus Project Conditions.** Increases in traffic associated with the Project under Cumulative 2040 Plus Project conditions could result in significant impacts on several Routes of Regional Significance.

4.2 Significant and Irreversible Environmental Changes

Stanford University (Project Sponsor) is proposing to redevelop six parcels of land along the east side of El Camino Real into a mixed-use development. Existing development at the project site includes vacant and occupied commercial buildings as well as surface parking lots. The Project would demolish the existing structures and construct up to 459,013 square feet (sf) of mixed uses at the Project site. Due to the increase of approximately 429,375 square feet in usable floor space, it can be reasonably assumed that the post-construction commitment of non-renewable resources would increase from current levels. The amount and rate of consumption of these resources would not result in the unnecessary, inefficient, or wasteful use of resources because the Project would follow LEED Silver performance standards and would meet Title 24 building code requirements, including CALGreen requirements (Part 11). Buildings that are LEED Silver certified are required to score 50 to 59 points on a 100 point checklist of sustainability topics, including sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. By constructing the Project according to LEED Silver performance standards, the Project Sponsor would ensure that water, energy, and materials are used efficiently and not wastefully. The Title 24 Building Code identify energy conservation standards that the Project would comply with and which would minimize the wasteful use of energy. It is also possible that new technologies or systems would emerge or would become more cost-effective or user-friendly and further reduce the reliance upon non-renewable natural resources during the lifetime of the Project. For example, according to the Lawrence Berkeley National Laboratory, the cost of installing solar energy systems followed a downward trajectory and reached record lows in 2015.¹ Thus, it is reasonable to assume that solar energy will continue to become more cost effective in the future and could contribute to the Project's increased efficiency in the use of non-renewable resources. Other technological or market developments in renewable energy in the future could also result in less non-renewable energy consumption, but it is speculative at this time to comment on such developments.

Accidents, such as the release of hazardous materials, may trigger irreversible environmental damage. Potential hazardous materials that could be used at the Project site could include cleaning products used for facility maintenance, liquids with polychlorinated biphenyls, mixed oil, and other organic solids. Exposure of site occupants to hazardous materials could occur in the following manner: improper handling or use of hazardous materials or hazardous wastes during occupancy of the Project site, transportation accident, environmentally unsound disposal methods, and/or emergencies such as fires and explosions. However, safety requirements and the goals and policies adopted by federal, state, and local governments would reduce the public health and safety risks to

¹ Lawrence Berkeley National Laboratory News Center. 2016. *Median Installed Price of Solar in the United States Fell by 5-12% in 2015*. Available: <<http://newscenter.lbl.gov/2016/08/24/median-installed-price-solar-united-states-fell-5-12-2015/>>.

reasonably prudent levels so that significant irreversible changes from accidental releases are not anticipated. Mitigation Measure HAZ-1 in the Specific Plan EIR would also ensure that the Project would not create a significant hazard to the public or the environment through the routine transport or disposal of hazardous materials during construction activities. Relevant mitigation measures are identified in the Infill Environmental Checklist included as Appendix 1-1 of this Draft Infill EIR.

4.3 Energy Conservation

Although the Project would use some non-renewable resources for both construction and operation, the Project's energy use would not be wasteful, inefficient, or unnecessary. Energy sources include fuels for trucks and construction equipment, and electricity and natural gas for operation of the residential and commercial land uses. The estimated annual fuel and other energy usage for the Project has been quantified using vehicle fuel efficiency values from the California Air Resource Board's EMFAC2014 model, estimated daily vehicle miles traveled for Project operations, and default energy intensity values for residential and commercial land use types from the CalEEMod model. The Project would consume approximately 4,147,000 annual kilowatt hours (much of which would be provided by renewable sources under the Renewable Portfolio Standard), approximately 55,198 annual therms, and approximately 210,527 gallons of gasoline and 8,402 gallons of diesel fuel annually during normal operations. The Project would also consume over 271,556 gallons of gasoline and 280,333 gallons of diesel fuel during construction.

During construction, every off-road equipment item would utilize Tier 4 compliant engines, which is the most stringent engine standard in terms of air quality emissions and fuel efficiency. Thus, the use of Tier 4 engines would be the least wasteful and least inefficient way to construct the Project because energy (i.e., diesel fuel) in construction equipment would be consumed as efficiently as is currently feasible. After construction, energy would be consumed for the ongoing operation of the Project site. As described above, the Project would follow LEED Silver performance standards and would adhere to the Title 24 Building Code. Both the LEED Silver standard and the Title 24 Building Code include energy saving requirements, and these energy saving requirements would result in considerable energy savings relative to many existing older buildings. Project vehicle trips during operation would, as discussed above, result in increased fuel consumption. While the Project cannot directly govern the vehicle choices of private citizens who travel to and from the Project site, fleet-wide fuel efficiency standards will likely increase in the future due to consumer demand and government regulatory action. Fleet-wide increases in the fuel economy of vehicles will result in a continual increase in efficiency in the use of vehicle fuel associated with the Project as Project users upgrade to newer vehicles. As described in detail in Section 1 of the Infill Environmental Checklist, the Project is eligible for CEQA streamlining under SB 226 and SB 743 largely due to its energy efficiency. Among other factors, the Project is a mixed-use residential infill project that is located within 0.5 mile of an existing major transit stop, and within a Priority Development Area and a Transit Priority Area. The Project also includes a comprehensive Transportation Demand Management (TDM) program.

For all of these reasons, the City finds no evidence that the Project's energy use would be wasteful, inefficient, or unnecessary.

4.4 Cumulative Impacts

CEQA Guidelines (Section 15355) define cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The combination of the Project with other foreseeable projects in the vicinity or region affected by the Project defines the cumulative scenario. The list of cumulative projects is included in Chapter 3.0, *Environmental Impact Analysis*, and the cumulative impacts and the Project’s contribution to the cumulative impacts are addressed in Sections 3.1 through 3.3 of this Draft Infill EIR. These resource sections identify feasible mitigation measures that would reduce the Project’s cumulatively considerable contributions to cumulative impacts to less-than-cumulatively-considerable levels. These sections also identify those cumulative impacts that would be significant and unavoidable even with the implementation of feasible mitigation measures.