URBAN CROSSROADS

QUALIFICATIONS PACKAGE

TRAFFIC, TRANSPORTATION PLANNING, MODELING, AIR QUALITY, ENERGY AND NOISE ANALYSIS

> URBAN CROSSROADS, INC.

ABOUT URBAN CROSSROADS

Founded in 2000, Urban Crossroads, Inc. is a California "S" Corporation and certified Small Business (SBE_#48585) and a leading provider of traffic, air and noise consulting services. We serve both public and private sector clients to provide forecasting, analysis and design for all modes of transportation. At Urban Crossroads we recognize the importance of delivering a timely work product that satisfies the regulatory requirements while communicating with our clients throughout the process.

TRANSPORTATION

Urban Crossroads provides a full range of traffic services that include traffic impact analysis, traffic engineering, travel demand modeling, simulations and many other traffic related services. In addition, to these services, we actively maintain our expertise with the latest analytical tools for long-range forecasting models, intersection level of service analysis methodologies and traffic simulation.

TRAFFIC IMPACT ANALYSIS

To accommodate the needs of our clients, Urban Crossroads offers traffic impact analysis services to support the environmental review process and CEQA requirements. While the traffic impact analysis services typically include a review evaluation of both existing conditions and the effects of future development upon infrastructure requirements, we provide services ranging from conceptual planning/feasibility studies to detailed traffic engineering recommendations. This includes site plan development and access, trip generation studies, vehicle miles travelled, traffic study reports, parking utilization/demand studies and traffic mitigation phasing strategies.

TRAFFIC ENGINEERING

Urban Crossroads provides a full range of traffic engineering design capabilities including traffic signal design, signal warrant studies, roundabout design, signing and striping, and traffic control plans for the maintenance and protection of traffic. Work products include concept plans, improvement plans, traffic safety recommendations, and evaluations of traffic control devices and other traffic related intersection and roadway design features.

MODELING & SIMULATIONS

Urban Crossroads, Inc. has always maintained in-house traffic modeling expertise. We actively develop, maintain and run a variety of locally recognized traffic forecasting models using tools such as TransCAD™, and CUBE. Our core staff has been together over fifteen years and has performed major modeling assignments for the cities of Newport Beach, Menifee, Moreno Valley, Hemet, Lake Elsinore, San Juan Capistrano, Irvine, Indian Wells, Indio, Palm Desert, Rancho Mirage, Banning, Beaumont, Coachella, Huntington Beach, and the towns of Mammoth Lakes and Apple Valley. To support these work efforts, we have developed expertise in land use, socio-economic datasets and network topology using ESRI® GIS software.

CIRCULATION PLANNING

Urban Crossroads, Inc. has performed general plan circulation element / citywide traffic studies for numerous local jurisdictions, including the recently completed General Plan Circulation traffic studies for the City of Menifee and Rancho Santa Margarita. Typical activities include evaluation of land use alternatives, circulation system planning, as well as the preparation of goals, policies, and implementation programs. Our outstanding work was recognized in 2008 in the form of a national award by the American Planning Association for our technical traffic analysis effort as part of the Newport Beach General Plan update process.

TRAFFIC CALMING

As the area wide traffic increases and cut-through or diverted traffic spreads to nearby neighborhoods, traffic calming studies are often conducted as a means to identify solution for traffic in these sensitive areas. Using professional engineering guidelines, Urban Crossroads will develop measures to satisfy local criteria.

COMPLETE STREETS

The increasingly inter-modal aspects of transportation are addressed by Urban Crossroads on an integrated basis. Urban Crossroads staff has prepared detailed studies of on-road and rail transit services (including corridors and stations), and developed community circulation plans which successfully incorporate pedestrian and bikeway networks. The Urban Crossroads multidisciplinary approach is responsive to AB 1356, the California Complete Streets Act of 2008. This law requires cities and counties to include complete streets policies in their general plans so that roadways are designed to safely accommodate all users, including bicyclists, pedestrians, transit riders, children, older people, and disabled people, as well as motorists. Sustainable transportation networks are designed to improve the balance between environmental goals, community objectives, and performance (mobility and safety). Urban Crossroads, Inc. provides context sensitive design guidance related to the integration of land use and transportation strategies that ensure the reduction of vehicle emissions by residents, employees and patrons.

AIR QUALITY

Urban Crossroads provides air quality, greenhouse gas and health risk assessment analysis services to meet national, state and various local compliance standard requirements. Services range from transportation and construction development projects to long-term stationary and mobile source emitters. In determining potential air quality impacts, Urban Crossroads utilizes industry-standard models to study the source-specific pollutant emissions. Urban Crossroads staff has extensive experience using United States Environmental Protection Agency (US EPA) Air Dispersion models, including ISCST3 and AERMOD; and air quality Models accepted for use in California including URBEMIS, EMFAC, CALINE4 and CAL3QHC.

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GREENHOUSE GAS

Urban Crossroads Inc. has been advising clients on greenhouse gas and climate change since the passage of the Global Warming Solutions Act of 2006 (AB 32). Our staff has been at the forefront working both collaboratively and tirelessly with local agencies and project proponents on how best to address greenhouse gases in CEQA documents due to the evolving nature and lack of technical guidance. Our staff is also actively involved in the development of Climate Action Plans (CAPs) for local jurisdictions.

HEALTH RISK ASSESSMENT

Whether a Project is adjacent to an existing freeway or a Project results in heavy-duty diesel trucks with the potential to emit air toxic and criteria pollutants, Urban Crossroads, Inc. staff has extensive experience with the analysis and mitigation of air toxic and criteria pollutants. Urban Crossroads Inc. has a strong technical background in the preparation of air toxic and criteria pollutant health risk assessments. Urban Crossroads Inc. prepares air toxic and criteria pollutant health risk assessments for both on-site and off-site sensitive land uses. A health risk assessment is typically prepared when either a Project is emitting toxic and criteria pollutants to the surrounding community or when a Project is subjected to toxic and criteria pollutants based on the existing environmental setting. Our staff utilizes industry-standard modeling methodology in order to accurately determine if potential health impacts may occur.

ENERGY ANALYSIS

An Energy Analysis Report is done to satisfy Appendix F (Energy Conservation) of the 2014 CEQA Statute and Guidelines and ensure that the energy implications of a proposed Project are considered through the quantification of anticipated energy usage associated with the construction and operation of a proposed Project, as well as a determination of whether the Project results in an efficient, typical, or wasteful use of energy. Appropriate mitigation measures, if necessary, are also identified for inclusion in the CEQA document. Appendix F requires an analysis of a Project's potential energy use including transportation-related energy, sources of energy supply, and ways to reduce energy demand, including the use of efficient transportation alternatives. CEQA Guidelines provide specific recommendations regarding factors to consider when analyzing a Project's energy impacts, such as transportation energy use, the effect of the project on local and regional energy supplies, and the types of energy that may be consumed during construction and operation of the proposed Project.

NOISE

Urban Crossroads provides the full spectrum of environmental noise measurement and analysis expertise. This may include a preliminary noise study to establish the barrier height requirements for tentative tract map approval, detailed building assembly requirements as part of a final noise study to satisfy the interior noise requirements, project operational stationary-source noise levels and potential short-term construction noise impacts. In addition, our noise group maintains a strong technical background in the application and development of noise prediction models.

NOISE LEVEL MEASUREMENTS

Urban Crossroads, Inc. provides both short and long-term noise level measurements to assess the existing noise environment and effectively analyze the contributions of a given project on future ambient noise levels. Noise level measurements provide an understanding of existing conditions as they relate to local regulations and the noise-sensitive land uses in a given study area. Our staff is experienced with collecting noise level measurements for a variety of projects from residential homes to commercial and warehouse developments, and use equipment which meets the latest American National Standards Institute (ANSI) standard specifications for sound level meters.

TRAFFIC NOISE PREDICTION

Urban Crossroads provides traffic noise impact analysis services to support tentative tract map approval and environmental documents based on CEQA requirements. Through the use of Federal Highway Administration (FHWA) Traffic Noise Prediction Model programs and procedures, our staff evaluates the existing noise environment and projects future noise impacts related to both the off-site traffic noise levels from a project, and the on-site traffic noise levels to a project. Based on detailed research and analysis, we provide thorough recommendations on exterior and interior noise level mitigation measures to satisfy applicable Federal, State, and Local transportation noise standards.

Stationary Source Noise

Through the use of reference noise level measurements, Urban Crossroads, Inc. analyzes the impacts of operational stationary-source noise impacts on future noise environments. Our staff maintains reference noise levels on a variety of noise sources and can provide additional measurements to meet the needs of our clients. Reference noise level measurements allow our staff to forecast the future noise levels of commercial, industrial, and warehouse projects, amongst others, and the potential impacts to noise-sensitive land uses in their vicinity. Our analysis services can be utilized for both day and night operations, as well as projects with multiple potential noise sources.

Construction Noise

Urban Crossroads, Inc. has prepared detailed studies for construction noise to meet a variety of local regulations, and addresses each project with the approach appropriate to meet the applicable noise standards. Our staff analyzes construction noise levels in a given study area by examining the existing environment and determining the best approach to reduce the noise levels from heavy machinery to nearby noise-sensitive land uses. Our experience includes the preparation of construction noise mitigation and monitoring plans, temporary construction barriers, and equipment staging analysis services.